



## Alternative Investment Management Association

Elizabeth M. Murphy  
Secretary  
U.S. Securities and Exchange Commission  
100 F Street, NE,  
Washington, DC 20549-1090  
USA

23 June 2011

Dear Ms Murphy,

File Number 4-627 - Short Sale Reporting Study Required by Dodd-Frank Act Section 417(a)(2)

The Alternative Investment Management Association<sup>1</sup> (AIMA) appreciates the invitation of the Securities and Exchange Commission (the SEC) to provide comments on the studies required by the Dodd-Frank Wall Street Reform and Consumer Protection Act (the Dodd-Frank Act) on the feasibility, benefits, and costs of requiring reporting of short sale positions of publicly listed securities and a pilot program for having short sales marked and reported through the Consolidated Tape (the Release).

### AIMA's summary of comments

In our detailed response below, we make the following key points:

1. short selling is accepted as being a legitimate investment technique which brings a number of benefits to the efficiency and operation of the market;
2. there is little or no evidence (certainly not in the public domain) that short selling is, of itself, any more or less likely to be the vehicle for market abuse than any other investment technique;
3. should a new reporting regime be considered by the SEC, this should be subject to a rigorous Cost Benefit Analysis, since its introduction will have an impact not only on those who engage in trading, but also on the capital markets themselves;
4. we believe that the SEC has sufficient powers already to require the provision of data from regulated firms where the SEC has grounds for such a request;
5. AIMA believes that its members have no problem at all in making available to regulators, such as the SEC, any appropriate data which would assist in providing regulatory oversight. If a reporting regime were to be introduced (and we do not feel that a case has been made that one should) we would have no issue with such private disclosure of short positions, provided it is proportionate in terms of minimum thresholds and frequency and shows symmetry with the reporting requirement in respect of long positions;
6. public disclosure, on the other hand, is a more difficult issue. We have seen no compelling evidence to date which argues in favour of the introduction of such a regime and would note that, in the jurisdictions where such public disclosure has been required (without a clear policy rationale having been given), the result has been a decrease in market liquidity and an increase in the cost of raising capital for small and medium sized enterprises;

---

<sup>1</sup> AIMA is the trade body for the hedge fund industry globally; our membership represents all constituencies within the sector - including hedge fund managers, fund of hedge funds managers, prime brokers, fund administrators, accountants and lawyers. Our membership comprises over 1,100 corporate bodies in over 40 countries, with 11% based in the US and over 30% of AIMA members' total assets under management (AUM) managed by US investment advisers.



## Alternative Investment Management Association

7. we also fail to see that the perceived benefit of such information being made available to the wider market (and to the public) in such a way that it identifies the short position holder would outweigh the potential of that information being used or misused to the detriment of:
  - o market participants (whose investment strategies can be reverse engineered, or who can be subjected to retribution by the companies in which they are seen to have a short position);
  - o the market (since firms will often adapt their trading specifically to remain below a given threshold to avoid being named, regardless of their preferred investment strategy, thereby impacting liquidity and price efficiency for all investors); and
  - o those seeking to use the information for their own advantage. (We note below the dangers of unsophisticated investors drawing erroneous conclusions as to the reason behind a stock being shorted, and the danger that partly informed investment decisions will lead to copy cat trading or herding);
8. AIMA would, therefore, strongly oppose anything other than aggregated and anonymised public disclosure and would wish to see publication of data subject to an appropriate delay to help mitigate the potential damage which we consider could be caused. The only rigorous study of the effects of the public disclosure regimes introduced in the EU (the Oliver Wyman Report, referred to within the body of our response below) found that the identification of position holders has resulted in decreased market liquidity and increased costs of raising capital. We would note that the European Parliament has recently adopted a Report in relation to the EU's proposed Short Selling regulation, which would require anonymised, rather than named, public disclosure;
9. generally, we are not supportive of a marking regime as we feel that the benefits it is perceived to bring are not sufficiently great as to warrant the costs involved;
10. any 'real time' reporting will be technically difficult overly burdensome and costly to both regulators and market participants;
11. the method of calculating short positions should be considered carefully and should exclude short positions gained via, for example, indices, baskets and Exchange Traded Funds (ETFs); and
12. we are concerned that the analysis of a large amount of data, most of which will inevitably be 'background noise', would require the SEC to devote considerable human and time resources which would be better employed on more targeted market surveillance.

### Conclusion

We thank you for this opportunity to comment on the SEC's Release. We hope that our comments make a positive contribution to the SEC's forthcoming Report. We would also welcome it if the SEC Report were to contain an analysis of the short selling data already provided to the SEC by the market pursuant to the Form SH requirements, as well as information regarding the use to which this data was put in assisting the SEC in its statutory tasks. Such an analysis will, we feel, assist in clarifying the usefulness of the collection of this data in providing the SEC a meaningful picture of potential issues in the market.

We are, of course, very happy to discuss with you in greater detail any of our comments.

Yours sincerely,

Jiří Król  
Director of Government & Regulatory Affairs

The Alternative Investment Management Association Limited  
2<sup>nd</sup> Floor, 167 Fleet Street, London, EC4A 2EA

Tel: +44 (0)20 7822 8380 Fax: +44 (0)20 7822 8381 E-mail: [info@aima.org](mailto:info@aima.org) Internet: <http://www.aima.org>



## Alternative Investment Management Association

Q1.

- How are currently available data used by issuers, market participants, and others (such as SROs, data vendors, media, analysts, and academics) today?
- How widely distributed are currently available data? Do costs or other factors limit access to currently available data?
- Are there other important sources of information as to short sales and short sale positions in addition to those mentioned above?

A number of jurisdictions outside the US have introduced public disclosure regimes and we consider that these should be another important source of data for the SEC.

As for other data which is available on subscription, a number of exchanges, such as NASDAQ, sell information derived from shorting activity on each particular exchange.

Q2.

The Division understands that equity market makers rely on short selling to facilitate customer buy orders and to ensure that they can maintain two-sided markets without carrying large risky positions. The Division also understands that option market makers frequently sell short to hedge positions taken in the course of market making activities.

- Why else might market makers sell short? How much of all short selling is accounted for by bona fide market making?
- Do market makers sell short for purposes other than bona fide market making?
- Are there ways in which short sales by market makers and other market participants performing similar roles or functions (but that are not subject to some or all of the requirements applicable to market makers) could be viewed as problematic?

We believe the SEC should permit an exemption for market makers when acting in that capacity or else the reporting regime would risk damaging one of the most significant means of providing liquidity. We would point out that, in jurisdictions where public disclosure has been brought in, market makers have been allowed an exemption when acting in that capacity. Otherwise, AIMA has no comments on question 2.

Q3.

- The Commission requests comment on the ways and the extent to which, if any, commenters believe that short selling has been associated with abusive market practices, such as “bear raids” where an equity security is sold short in an effort to drive down the security’s price by creating an imbalance of sell-side interest?
- In addition, the Commission requests comment on the ways and extent to which, if any, commenters believe trade-based manipulation (i.e., manipulating without a corporate action or spreading false information) using short sales is possible?
- Would greater transparency of short positions or short sale transactions help to better deter or prevent such abuses, or assist in additional appropriate actions to prevent them? If so, what new disclosures should be required?

We believe that the key issue in guiding the SEC’s approach should be that, across many jurisdictions, there



## Alternative Investment Management Association

is, in fact, little actual evidence that short selling is associated with abusive market practices to any significant degree and, certainly, no more so than other investment techniques.

On the contrary, rather than being associated with abusive market practices, it is widely agreed and evidenced that short selling plays an important function in the equity markets through:

- increased market liquidity and depth;
- more efficient price discovery; and
- the reduction of transaction costs and occurrences of price bubbles / crashes.

We are not complacent about the dangers of market abuse, where and however it may come about. In respect of concerns regarding the possibility of 'bear raids', we would refer the SEC to an independent paper commissioned by AIMA and authored by Oliver Wyman, "The effects of short selling public disclosure of individual positions on equity markets", February 2011 (the Oliver Wyman Report). This study provides what we believe to be the first qualitative and quantitative data arising from public disclosure of short selling positions. The Oliver Wyman Report concludes that public disclosure which requires the identity of the short position holder to be made known (so called 'naming and shaming') can actually lead to abusive market practices such as bear squeezes, copy cat trades, herding and short squeezes (see response to Q6). In addition, 'naming and shaming' is demonstrated to reduce short seller participation in the markets resulting in decreasing trading volumes, reduced liquidity, widening of bid-ask spreads and less efficient price discovery.

Another charge which has been made in respect of short selling in the past is that the technique could be used to manipulate the market through for example rumour spreading. Again, we would draw the SEC's attention to the lack of evidence that this in fact occurs - in March 2008, when the UK's FSA was concerned that rumour spreading may have played a part in the sharp fall in the share price of the bank, HBOS, it initiated a survey into trading in the relevant shares. In its report in August 2008, (<http://www.fsa.gov.uk/pages/Library/Communication/PR/2008/086.shtml>) the FSA noted that "[d]espite the likelihood that the rumours contributed to the fall in the share price, the FSA has not uncovered evidence that they were spread as part of a concerted attempt by individuals to profit by manipulating the share price".

In terms of whether greater transparency would help to better detect or prevent short selling abuses, we reiterate that such abuse is not common. Whilst some would argue that greater transparency brings benefits, it is also widely acknowledged that it is a finely balanced argument as to whether the supposed benefits of a short selling disclosure regime outweigh the costs of potential reduced liquidity, market efficiency and the risks of herding effects.

As such, it is generally agreed that, if a short selling disclosure obligation is required, for it to be effective, it is imperative that such obligation is set in the right form and at the right level. To this end, we would like to more fully understand the concerns Congress is seeking to address through its consideration of a short selling disclosure regime and we would welcome further dialogue in this regard.

In response to this consultation, we would however like to make it clear that whilst we have no objection to reporting short selling positions to the SEC, we would strongly oppose this information being made public for the reasons set out below.

Q4.

- Would real time reporting of the short positions of all investors, intermediaries, and market participants be feasible, and if so, in what ways would it be beneficial?
- What problems would it address?
- What would be any reasons, in terms of benefits and costs, for treating short sale position reporting

The Alternative Investment Management Association Limited  
2<sup>nd</sup> Floor, 167 Fleet Street, London, EC4A 2EA

Tel: +44 (0)20 7822 8380 Fax: +44 (0)20 7822 8381 E-mail: [info@aima.org](mailto:info@aima.org) Internet: <http://www.aima.org>

Registered in England as a Company Limited by Guarantee, No. 4437037. VAT registration no: 577 5913 90. Registered Office as above



## Alternative Investment Management Association

differently than long position reporting?

- Would “real time” reporting be necessary to achieve these benefits, or is “prompt” updating for material changes in the short position (such as Schedule 13D updating requirements) sufficient?
- If real time reporting would be beneficial, should “real time” be defined as “continuously updated as soon as practicable,” or as frequent “snapshots” of short positions throughout the trading day?
- Should “as soon as practicable” be defined and, if so, how?
- If frequent short sale position reporting of some kind would be beneficial, how frequently should such reports be made in order to realize those benefits?
- Would real time data be more or less accurate than data reported on a delay? Please explain why or why not.

It is unclear what purported problems the SEC would be seeking to address and how reporting of any kind (real-time or subject to a delay) would remedy any identified issues. Given the burden imposed by requiring reporting, and the potentially harmful consequences with no clearly defined benefits, it remains unclear why such a regime would be appropriate.

Real-time position reporting would not be feasible. Investors may at any given time have hundreds (or thousands) of positions on their books, and requiring the real-time monitoring of such positions would, at best, place an enormous burden on firms with no identifiable benefit that would justify such extraordinary costs. Such a system of real-time monitoring would be prone to error due to the scope and scale, so would be of questionable utility.

Requiring such reporting might, in addition, make it impossible to continue to trade in certain instruments, such as baskets or indices.

The Form SH requirements under Rule 10a-3T (which went into effect on October 18, 2008 and were lifted as of August 1, 2009) required managers to file positions on a weekly basis with the SEC. Positions were not reported in real-time, and yet this reporting requirement created huge expenses for investors in the form of compliance time and resources required to create and monitor the reports, and it remains unclear what benefits the reporting conferred during this period. In addition these reports were presumably not easy for the SEC to aggregate, process, or utilize for analysis. (AIMA notes the SEC’s press release on July 27, 2009, announcing its intention to focus on more aggregate, SRO-level public reporting - <http://www.sec.gov/news/press/2009/2009-172.htm>). We consider that the factors which led to such a decision are still relevant and we note that the costs burden of Form SH fell not only on the industry but also on the SEC, in collating and analysing the data.

Long reporting differs from short reporting in that it serves to inform the public on voting rights, which could impact a host of corporate governance issues. Short reporting does not.

Q5.

- Who would be likely to use real time short position data, and how?
- Would the short sale position data be too voluminous to be used directly by investors?
- Could such data help to detect more easily, better deter, or better prevent short selling abuses?
- Would market commentators and others use real time short position data to help the public better understand the U.S. securities markets?
- Would users of real time short position data be able to derive reasonably clear interpretations of the data in real time, and, to the extent they could not, how would the costs and benefits of any reporting regime be affected?
- Would real time data on short positions help or hinder long-term investors in making “efficient investments?”



## Alternative Investment Management Association

It is difficult to say who would be likely to use real time short position data and exactly how it would be used. However, we believe it would be used by a number of market participants, including short sellers, funds, pension funds and investors (including unsophisticated investors). There are certainly ways in which that data may legitimately be used. However, there is also the danger that the data may be used to manipulate the market through short squeezes or to create disorderly markets through herding, which could ultimately cause an institution to collapse through prophecies of failure becoming 'self fulfilling'.

Public short sale disclosure regimes reduce short selling activities with associated consequences to market liquidity and efficiency of price discovery and also create the potential for increased market opacity as participants seek to deal below the threshold to avoid reporting obligations. Those individuals who are intent on committing market abuse could simply fail to comply with any disclosure regime.

Whether or not market commentators or other users of real time short position data would be able to derive reasonably clear interpretations of the information is subjective and would depend on their ability to integrate all of the information. We do not believe short position data on its own is sufficient to interpret the full picture of any participant's position. For example, it would not necessarily disclose where short selling had taken place to hedge a long position by that participant or an affiliate.

In terms of whether real time data on short positions would help or hinder long-term investors in making 'efficient investments', again this would depend on the nature of disclosure. Evidence indicates that public disclosure could lead to less, rather than more, efficient investments as price discovery becomes less efficient and markets less liquid. There would also be implications for long term investors, such as pension funds, who would be constrained in their ability to lend stock with a resulting increase in costs to investors.

Q6.

- How would real time data on short positions affect the behavior of short sellers and other investors?
- Would it affect abusive short selling, in particular?
- To what extent, if any, would such data deter non-abusive short selling? For example, would such data reveal the trading strategies of non-abusive short sellers?
- Could the availability of such data create new opportunities for unfair or otherwise abusive market practices, such as bear raids or short squeezes?
- Could real time data on short positions lead to copycat trading?
- How would real time data on short positions affect investor confidence?

We believe public data on short positions would affect the behaviour of short sellers and other investors in a number of ways:

- short sellers would seek to reduce their positions below reporting thresholds to avoid regulatory burden;
- funds would move assets to less restrictive jurisdictions;
- pension funds in particular would be less able to engage in securities lending which would impact market liquidity and increase trading costs - ultimately impacting the end investor;
- there would be an increase in systemic risk through copy cat trading;
- less sophisticated investors may try to engage in copy cat trading without understanding the complete strategy or risks;
- short sellers would be unable to gain corporate management access which would reduce data reliability and market confidence.

There is evidence that public disclosure increases the likelihood of copy cat trades and short squeezes. The Oliver Wyman Report referred to in our response to Q3 above, for example, stated that 60% of funds surveyed were concerned that copy cat trades would increase under the EU short selling disclosure proposals. Portfolio



## Alternative Investment Management Association

managers understand that, once their positions have been publicly disclosed, there could be many investors looking to simulate their positions and exploit their research. Like short squeezes, copy cat trades create situations where a security's market price does not equal the fair value of the security, so it is possible that the security is traded at a manipulated premium. In addition, the likelihood of copy cat trades and short squeezes is amplified in certain markets. Although the business impacts of copy cat trades may not be as severe as those of short squeezes, fund managers would have to be more vigilant when trading in a disclosure regime. Less sophisticated investors will have access to all types of information and will actively work to piece together strategies based on the short positions of large, well known managers.

There is concern when an investor trades on short selling information gathered through disclosure without knowing the full components of a trade. Disclosure proposals could lead to less sophisticated investors trying to formulate correlations between multiple parameters and trading on those assumptions, thereby decreasing efficiency and distorting markets. Market distortions could become more commonplace if retail investors were to approach their mutual fund managers complaining that a hedge fund has a large short position in a particular equity security and ask why the mutual fund manager is long that stock. Long only managers will receive mixed signals and might not be aware of long convertible positions as a significantly meaningful part of a trade. The abundance of information in the market will be fragmented such that the whole story is not apparent to unsophisticated investors. Most copy cat traders do not have the ability to fully link positions or fundamental stances and consequently decrease the integrity of the market.

Regulators should also be aware of the recent growth in websites that combine hedge fund data with their own analysis to allow investors to trade in 'smart money' hedge funds. They should be concerned with the possibility of unsophisticated investors gaining knowledge of large hedge funds' short positions and aggressively copying these trades which could distort the fair market value of securities. This could have a dramatic effect during times of financial crisis, especially for those institutions dependent on market confidence.

Some market participants believe short selling disclosure affects retail investors as well. While not fully conclusive, research suggests that end investors are impacted by illiquidity and market efficiencies associated with the implementation of such proposals, for example pension funds. Because pension funds do not assume directional short positions, public disclosure of short positions does not pose the same threat as it does to funds that rely upon corporate access. However, as large participants in European markets, pension funds' daily trading activities and longer-term strategic asset allocations are undoubtedly subject to a measure of equity market efficiency and performance. In its research, Oliver Wyman found that the EU short selling public disclosure regimes which were introduced resulted in a number of impacts on the retail investor because:

- long only revenues decrease - stock lending revenues decrease and trading costs increase,
- pension funds follow the alternative space out of the EU - Europe is a less efficient market for trading and long money follows smart money. Any impairment of market liquidity and efficiency that results from short selling disclosure regimes that discourages pensions' equity market participation and accelerates pension reallocation could have a significant impact on the function of domestic equity markets.

In addition, pension funds engage in securities lending programs to help offset administrative costs and generate consistent, low risk revenue streams. Institutional investors typically maintain significant long positions in equities for extended periods and are, thus, well suited for participation in stock borrow / loan programs. However, because short selling is a source of primary demand for stock borrowing, the ability of pensions to realise meaningful returns on their lending programs is highly correlated to the amount of short selling activity in a given equity market. While depressed levels of short selling activity poses a threat to beneficial owners' lending fees, decreased levels of stock lending consequently hinder market efficiency.

The loss of stock lending revenue as low risk alpha may contribute to decreased equity returns, which could limit future pension participation. Decreases in stock lending programs are likely to impact market liquidity and trading costs as well.

The Alternative Investment Management Association Limited  
2<sup>nd</sup> Floor, 167 Fleet Street, London, EC4A 2EA

Tel: +44 (0)20 7822 8380 Fax: +44 (0)20 7822 8381 E-mail: [info@aima.org](mailto:info@aima.org) Internet: <http://www.aima.org>

Registered in England as a Company Limited by Guarantee, No. 4437037. VAT registration no: 577 5913 90. Registered Office as above



## Alternative Investment Management Association

The Oliver Wyman Report further notes that, if pensions are deterred from making equity allocations, then they could direct a higher proportion of capital to domestic corporate and high yield debt. Increased demand for credit could lead to large scale bond buying that pushes yields lower. Although returns on pensions' bond portfolios would be positive, problems could arise from the referencing of investment grade corporate bond yields for internal discount rates, such as occurs in the UK. Therefore, given the inverse relationship between the funds' discount rates and future liabilities, low yielding risk-free investment grade credits increase unfunded liabilities and could threaten the ability of pensions to fund future obligations. Consequently, the search for yield may take pension funds outside national markets in favour of growing allocations to foreign equities, emerging market debt, and alternative assets such as foreign real estate as has occurred in the UK.

Rather than deter short selling, the consequence of the reporting regimes introduced within EU jurisdictions has been to make Europe a less attractive investment opportunity. Fund managers recognise, in addition, that current short selling disclosure proposals within the EU contribute to decreases in efficient equity trading in Europe and have begun moving capital elsewhere. As hedge fund liquidity departs the region, pension fund assets are likely to follow. There is anecdotal evidence that these types of proposals might discourage capital investments in the region. Pension funds are net long entities with certain short strategies, and if short strategies affect pension funds (just like hedge funds) such that they cannot pursue their strategy in Europe, they will have to entertain pulling their shorts and longs and following hedge funds out of the region. Pension funds and insurance companies would trail off into other geographies or follow the hedge funds to more liquid markets. We believe this would have a detrimental knock on effect to investor confidence in the financial services sector.

Q7.

- How would real time data on short positions affect liquidity, volatility, price efficiency, competition, and capital formation?
- Would real time short position reporting affect equity related securities markets, such as option or other derivative markets, convertible bond or other debt markets? If so, in what ways?

As previously stated, any short selling disclosure has negative impacts on liquidity and price efficiency. Whilst the following relates to a study of European securities, we are not aware of any reason why the consequences should differ in the US context were similar disclosure obligations to be introduced.

### Liquidity

Research shows that liquidity is impaired in markets which are subject to public short sales disclosure regimes due to the combined effects of both a lack of willingness of investors to disclose short positions and a reduction in market capacity to support short selling. The Oliver Wyman Report found that liquidity in securities subject to a public short selling regime contracted by 25% in comparison to markets without such regimes, and that beneficial owners reduced the lendable equity supply, which in turn reduced market capacity for stock lending.

### Price efficiency

Research shows that under short selling disclosure regimes, bid/ask spreads greatly widen<sup>2</sup>. A widening of bid/ask spreads of the magnitude found in the test group surveyed by Oliver Wyman indicates a significant increase in transaction costs that will be incurred by all market participants, not just short sellers.

In addition, the research also found that two metrics of price discovery efficiency, co-movement and

<sup>2</sup> The Oliver Wyman 2010 survey found that bid-ask spreads for the UK test group widened by over 45% in comparison with control groups.



## Alternative Investment Management Association

abnormal returns, indicated that stocks of the European test group subject to public disclosure requirements performed significantly worse than the comparative control group. A material decrease in the efficiency of the price discovery process has the impact of increasing the likelihood that investors are not paying 'fair value' for securities.

### Volatility

Research indicates that intra-day volatility also increased in regimes subject to short selling disclosure. Like less efficient price discovery, increased volatility increases the likelihood that market participants are not paying 'fair value' when investing in equity securities. Additionally, as prices move more quickly, it becomes increasingly difficult for investors to execute trades at a desired price.

### Competition

The primary reason that regulatory action can have a potentially negative impact on short-selling liquidity is a decrease in investor willingness to participate in short-selling markets. Research shows that investors indicated that they would reduce their short-selling activity in the presence of over-burdensome regimes due to a variety of concerns:

- loss of proprietary intellectual capital;
- risk of other investors herding resulting in crowded trades;
- increased exposures of investors to short squeezes;
- reduced willingness of corporate managements to cooperate with analysts who are known to have short positions in the company's equity;
- headline risk associated with taking publicly or politically unpopular short positions;
- significant operational challenges for fund managers with substantial equity exposures.

All of these factors have a significant impact on competition and there is concern that increasingly prohibitive and intrusive short selling legislation could incite large market participants and liquidity providers to rethink European equity investments, and potentially pave the way for increased systemic risks. In addition, opportunity costs in the form of foregone profits resulting from reduced market activity could be a major side effect of the introduction of a disclosure regime. It will also carry disproportionate operational costs for smaller firms which may make such businesses unviable. We have already seen competition impacts in the UK as assets flow out to less restrictive regimes.

### Impact on equity related securities markets

It is important to note the relationship between restrictions upon short selling and the debt issuance process. One expected consequence will be to increase the cost of issuing such debt in the future: it will make it harder for market participants to manage risk effectively; furthermore, the subsequent negative effects upon liquidity and efficient price formation in the markets will see investors requiring higher returns before they are prepared to buy such debt. Whilst this is not unique to debt markets, it is important to recognise that restricting the market now may lead to increased costs for all market participants issuing debt in the future. Whether or not this is a price worth paying is a question that has not, to date, been answered.

Q8.

- How should "position" be defined to help ensure any short sale position reports would be useful in detecting and deterring abusive short sale practices?
- Should "position" be defined differently to accomplish another purpose? If so, how, and what purpose would such a definition help accomplish?
- Would there be a trade-off between minimizing incremental implementation costs, above the cost of



## Alternative Investment Management Association

existing short reporting systems and procedures, in the context of a short position reporting regime and its utility?

- For maximum utility, should short positions be reported gross, or net of long positions, or in both ways?
- Should short positions include derivatives and index components?
- Should short positions be the net economic exposure to a stock across all instruments?
- Should short positions be defined as in former Rule 10a3-T, in which “the Form SH short position is of broker-dealers, should position reporting be based on existing Regulation SHO aggregation units within broker-dealers, for the broker-dealer taken as a whole, or for its holding company?”
- Please describe the feasibility of any incremental changes to the existing short sale reporting systems that would be necessary to report short sale “positions.” Would any potential definitions of short positions be infeasible in real time?

Massive selling can drive down the price of any financial instrument (just as massive buying can drive the price up). This market impact is not different for sales which relate to entering into a short position or for sales which relate to the liquidation of an existing long position.

We note that, under the current UK FSA short selling regime, a “position” includes, for example, options and CFDs giving rise to an exposure to the issued share capital of a particular company. We feel that there may be a benefit in an alignment of calculation methodologies between the US and EU in order to keep the costs of differential reporting to a minimum. However, we strongly object to including indirect exposure (through indices or baskets) in the definition of “position”.

Narrow-based indices (NBI) through futures, options, swaps or ETFs, or other instruments should only be included when the risk of avoiding short selling regulations through these instruments is deemed large enough, and only when their composition is publicly known and weightings are published frequently. For example, such inclusion would be feasible in the case of a stock index whose market value is concentrated among a few of the constituents (e.g., a single constituent forms more than 20% of the value of the index). If this is not the case, the argument that an investor could sell the index short and buy the components as an alternative to shorting the stock outright would not carry any weight, as the uncertainty regarding composition and weights would make such an approach prohibitively difficult. Furthermore, including NBI in determining the net “position” will significantly complicate the calculation of “position” on an intraday basis.

Broad-based indices (BBI) through futures, options, swaps or ETF’s should not be included at all for determining the net position. Although short positions in BBI instruments create an economic short exposure to all underlying components, BBI cannot be used in a practical sense to avoid short selling disclosure or position limits.

In addition, we believe that having to administer weightings, changes in weightings and composition, and implied economic exposure through an NBI and BBI on an intraday basis is very difficult and error-prone. Also, the cost of effectively monitoring actual exposure to all underlying stocks, particularly on an intraday basis, is prohibitively large.

Economic exposure in an underlying name can be acquired through investments in funds that are actively managed such as mutual funds, commodity pools, actively managed ETF’s, pension schemes, or other vehicles. It is hard, if not impossible, for an investor in these kinds of funds to accurately estimate the economic exposure to a single name that is gathered through the investment in the fund. Managers of these funds are, for entirely legitimate reasons, not willing to make public their day-to-day positions in the underlying names.



## Alternative Investment Management Association

Q9.

- What would be the benefits and costs of short position reporting if “position” was defined to mean short interest, which would be the aggregate number of shares short in each stock?
- Would real time public reporting of aggregate short interest be feasible? If so, what problems would it address, and how (and by whom) would this data be used?
- Should the position reporting to be examined in the Division’s study be more comprehensive than the current bi-monthly short interest reporting? For example, “arranged financing” (which would include borrowing from a foreign bank or affiliate to cover short positions) is not currently included in short interest.
- What would be the impact of including arranged financing in a definition of short position?

The public disclosure of an anonymised and aggregated position for each stock would address the concerns surrounding the naming of individual position holders. However, it still fails to address the question of what information the market as a whole (and relatively unsophisticated observers of the market, in particular) can accurately draw from such disclosure. As set out elsewhere in this response, a key concern of ours is that there are many different reasons why a manager might wish to take a short position in a given stock. It is certainly not always the case that such a position reflects a negative sentiment about the company in question. Yet, without knowledge of the purpose of the hedge it would be easy for observers to see certain stock being shorted and regard the company as clearly being in trouble.

For this reason, and since we do not consider that real time reporting is feasible for the reasons set out above, we would oppose a move to introduce public disclosure on this basis.

As for private reporting to the Division, we would not wish to see a regime which imposes a more comprehensive reporting regime than is currently the case without there being a clear explanation of the concerns which are to be addressed and a full assessment of the costs which would accrue (both to market participants and to the SEC, in terms of the cost of analysis of data acquired) as a result.

Q10.

- What would be the feasibility, benefits, and costs of real time short position reporting to regulators only, and not to the public?
- What would the benefits and costs be if this real time reporting information were to be made public on a delayed basis?
- What length of delay might best balance any benefits and costs?

As mentioned above, we do not consider it to be feasible for real time short positions to be reported to the regulator or the public. We would again ask what demonstrated harms disclosure of short position is intended to address and how the SEC would intend to make use of short position disclosure information.

We question the value of short position disclosure by itself as it needs to be viewed within the wider context, for example a short position may be held to hedge against a long position in the same or a related security. Real time short reporting on its own would, therefore, not present an accurate picture of the activities of the market and may lead to a distorted view. The FSA shares this view and accordingly the UK regime requires net position reporting only.

Costs that would be incurred through real time short position reporting include:

- costs for firms that need to monitor and / or disclose changes in short positions. The FSA’s survey, for



## Alternative Investment Management Association

example, estimated that the implementation of its threshold reporting regime would incur monthly compliance costs of £2.4 million (US\$3.9 million) for affected firms;

- indirect costs for firms with short positions and other market participants. The risk of margin squeeze and the costs of closing out short positions can increase as market participants become aware of their existence. Therefore any disclosure obligation may reduce a firm's willingness to hold short positions;
- indirect costs arising from over-reactions by market participants to the information provided, a risk which is heightened in times of severe market stress. This may lead to an increase of short selling due to herding behaviour, resulting in excessive sales of shares and price declines following disclosures of short positions to the market.

There would of course also be costs incurred by the SEC in monitoring the short positions reported, the extent of which would depend on how the SEC would intend to use the short selling data it receives.

Consideration should also be given to the impact of short selling disclosure requirements on smaller managers who are not as sophisticated and institutionalised as their larger peers. According to the Oliver Wyman Report, most of the funds interviewed were in excess of \$5bn AuM and believed that smaller hedge funds would be primarily affected by the operational requirements resulting from the implementation of the EU short selling disclosure proposals. Smaller funds cannot afford the advanced technology that larger funds have in place and they also lack personnel resources in operations and compliance departments. Funds that are less automated will likely have the greatest operational burden to prepare for increased regulatory reporting. In addition, systematic funds with high turnover face operational reporting challenges as a result of trading in and out of positions in thousands of names daily. These funds are critical to liquidity providers to the market, but they are also likely to reach threshold limits frequently due to their daily high-turnover trading and may be faced with an increased operational burden.

We reiterate that we have no issue with private disclosure to the regulator but strongly oppose public disclosure of short selling positions for the aforementioned reasons. Should public disclosure be mandated, however, we believe it should be combined with a sufficient reporting threshold and an appropriate period of delay. In our opinion, a delay of three months at a minimum would somewhat mitigate damage caused to market participants by named disclosure whilst retaining the ability for the public to observe what shorting activity has been taking place in respect of specific stocks.

Q11.

- Who would be in a position to report short positions in real time?
- Would broker-dealers be able to accurately report customer short positions in real time?
- Would anyone else be better suited?
- Would short sellers themselves be equipped to report their own short positions in real time?
- Would anyone but the short seller be in a position to report the short seller's short position, whether or not the short position was defined as the short seller's economic position including derivatives?
- What would be the feasibility of adapting the technology infrastructure that supports existing reporting requirements to support real time short position reporting?

We believe that, were a real time reporting regime to be required, brokers would be better positioned to report customer short positions (though they would likely also incur increased costs as a result). As noted, it is unrealistic for managers to report their positions in real time due to the complications and costs of setting up such a system.

We would refer the SEC to the rules governing public disclosure under the UK FSA's regime, whereby, in



## Alternative Investment Management Association

respect of discretionary fund managers:

“The disclosure obligation applies at the level of both the beneficial holder of the net short position and at the level of the investment manager or authorised fund manager. The investment manager or authorised fund manager may make a net short position disclosure on behalf of its client. In respect of itself, the investment manager or authorised fund manager is required to disclose its aggregate net short position across all of the funds it manages on a discretionary basis.

Where a disclosure by an investment manager or authorised fund manager is the same as that being made for its client/fund/sub-fund, it is permitted to make a single disclosure provided that the disclosure makes it clear that it applies to both parties.”

(see Q.12 of the FSA Short Selling (No. 5) Instrument 2009 - FAQs Version 2 - Issued 19 January 2009 - [http://www.fsa.gov.uk/pubs/other/Short\\_selling\\_FAQs\\_V2.pdf](http://www.fsa.gov.uk/pubs/other/Short_selling_FAQs_V2.pdf))

Q12.

- Who would be in a position to collect and disseminate short positions in real time?
- Would it be feasible for listing exchanges to collect and disseminate this information?
- Would a consolidator be better suited to collect this information?
- What would be the feasibility of adapting the technology infrastructure supporting existing reporting requirements to support real time short position collection and dissemination?
- Would short position data developed from existing systems be less meaningful than data from a new system designed for this purpose? Why or why not?

We strongly prefer private reporting to the SEC, since this will permit appropriate regulatory oversight while allaying the industry’s concerns regarding copycat trading, herding, market distortion and adverse effects on price discovery and liquidity brought about by public disclosure.

Equally, whilst new technology and software can be created to comply with any regulatory requirement, this would involve an additional cost, one which would disproportionately impact smaller fund managers.

Q13.

- What would be the direct, quantifiable costs of short position reporting for those compiling, reporting, collecting, or disseminating the data? Please differentiate implementation costs from ongoing costs and include opportunity costs.
- How feasible would it be for brokers, exchanges, and others to create or modify a reporting and dissemination system?
- What would be the particular technological challenges faced in creating or modifying a reporting and dissemination system? Responses based on the costs of implementing the 2007 modifications to short interest reporting or the 2008 implementation of Form SH 32 are particularly requested.

AIMA is not able to provide cost data for this question but we believe that, should the SEC recommend a short position reporting regime, a full Cost Benefit Analysis should be conducted prior to any implementation.

Q14.

- How would the establishment of a significant reporting threshold, which would limit short position



## Alternative Investment Management Association

reporting requirements to holders of significant net short positions, affect costs and the utility of the short position information?

- If reporting thresholds would be useful, would thresholds at the 5% level used under Section 13(g) of the Exchange Act or the 0.25% level used in former Form SH be appropriate, or would a lower threshold, such as that used in the U.K. model, be preferable? Or would a higher threshold be appropriate? Please explain why or why not.
- Would thresholds (computed on a net basis) at U.K. levels (or the lower levels being contemplated by the E.U.) capture ordinary course, bona fide market maker positions, or would they tend generally to capture only the positions of investors taking a view as to the stock's future price direction?
- Would a general exemption from position reporting (or public position reporting) for market makers be appropriate? Why or why not?

First, there has been no justification of which we are aware that supports the public disclosure of short selling positions based on market efficiency or systemic risk. We would, therefore, ask what concerns the Congress is specifically seeking to address and what evidence there is that a public short sale disclosure regime would serve to address these concerns.

Second, empirical evidence suggests that a regulatory approach based on the disclosure of net short positions above a specified threshold is not an effective way in which to meet the needs of the public, industry participants or regulators. Funds nimbly adjust trading strategies to reflect changes in market infrastructure and regulatory practices. As a result of the EU short selling public disclosure proposals, many funds are already altering trading habits. For instance, when limited in number of potential short positions, funds curtail their long positions in tandem. Managers design optimal trading strategies without considering threshold limits and then adjust the actual implemented strategy to trade around the thresholds (e.g., trading just below the threshold).

Therefore, such thresholds result in more market opacity as fund managers seek to limit their positions to avoid reporting requirements or move assets out of the regulatory remit to lesser restrictive jurisdictions - neither of which is a desirable result.

Moreover, a key question to be addressed is how the reportable position would be calculated. Would the restriction apply to equities only? Or to derivatives? Would it be a net or a gross position? If thresholds were to be introduced, we prefer an alignment between short positions and long positions at 5% - a misalignment may lead to investor behaviour being skewed by a relative excess of reporting of smaller short positions

If ultimately, thresholds are enacted, they should be set at a level that reflects meaningful ownership interest to avoid the market distortion, market inefficiency and potential for 'herding' that arise from thresholds being set too low. In addition, consideration should be given to thresholds (and the information to be reported at those thresholds) that give rise to reporting to regulators versus those that require reporting to the public recognising their differing needs and motivations in the using the data.

We have no comments in relation to market makers but consideration should be given to initial public offerings and rights issues.

Q15.

- How should experiences with short sale position reporting regimes in foreign jurisdictions inform the analysis of feasibility, benefits, and costs?
- How relevant are any analyses of other reporting regimes to the Division's study? The Commission requests information on any relevant studies not cited in this request for comment.



## Alternative Investment Management Association

We believe that there is much to be learned from the experiences with short sales position reporting regimes in foreign jurisdictions.

Research indicates that the Hong Kong regulator, the SFC, and multiple prime brokers in Asia expressed the sentiment that European regulatory bodies have ‘handcuffed funds’ with overly onerous regulations and that this has led to a migration out of the EU. Asian regulators, and more specifically those in Hong Kong, have been less involved at the manager level in terms of short selling. In addition, the model of private disclosure to the regulators has worked well. Not surprisingly, fund managers of all types trading under the Hong Kong regulatory approach have flourished, and Hong Kong has seen assets grow in the region because they believe it is becoming a region that is conducive to their business models. It is not uncommon for regulators to promote their own domestic financial markets, but large dealers in Hong Kong and the rest of Asia have recently increased headcount and continue building out capacities as assets continue to grow in the region and the dealers recognise that funds have decreased interest in operating within the European framework that seems to constantly target the alternative community.

In the UK, the effect of short selling public disclosure on UK financial equities is a decrease in traded volumes (relative to the pre-ban period). The UK policy measures limit short selling participants which, in turn, decreases market volumes and liquidity. The drop in market volumes is representative of assets moving out of the UK and towards regions with more relaxed disclosure requirements, currently such as the United States and Hong Kong. Volumes in Hong Kong have largely remained unchanged perhaps due to the fact that this smaller market never instituted a disclosure ban.

Similarly, in respect of stock lending (often regarded as a useable proxy of shorting activity in the market, the Oliver Wyman Report showed that the quantity of shares on loan remained largely constant in the United States control group between pre and post short selling ban periods. However, in the UK, the test group representing equities subject to disclosure requirements experienced a larger decrease in stock borrowing activity.

The Oliver Wyman Report concludes that ‘for Europe, the most complete approach is a regulatory framework in line with other financial jurisdictions such as the United States and Hong Kong, where private disclosure to regulators and aggregated anonymous public disclosure of short interest, has proven to be the most balanced solution’. We would strongly urge the SEC to consider the findings of this Report.

In conclusion, we believe analyses of other regimes are extremely relevant to the Division’s study, particularly in understanding the effects that disclosure regimes have had on markets where they are already implemented. It is also important that any approach to be taken is first considered from a global perspective to avoid market participants having to cope with a multiplicity of regimes which would be inefficient and costly.

### Q16.

- What benefits, costs, or unintended consequences would flow from adding these transaction marks to the Consolidated Tape?
- Who would use these marks, and how?
- Would data from the Consolidated Tape be accessible to the market participants who are most interested in short selling information?
- Would the Consolidated Tape data be too voluminous to be used directly by interested market participants?
- How would the Consolidated Tape marks affect the behavior of short sellers and other investors?
- Would Consolidated Tape marks help or hinder long-term investors in making “efficient investments?”
- Would market commentators and others use Consolidated Tape marks to help the public better understand markets?



## Alternative Investment Management Association

- Could such marks help to better detect, deter, or prevent identified short selling abuses? Alternatively, could such marks themselves present opportunities for alleged unfair or otherwise abusive market practices, such as bear raids or short squeezes?
- Would real time Consolidated Tape marks lead to copycat trading?
- How would Consolidated Tape marks affect investor confidence?

AIMA, in general, believes that introducing marking of transactions on the Consolidated Tape as “short sale,” “market maker short,” or “buy-to cover” would be costly to develop and would not necessarily deliver sufficiently meaningful information to the Commission or market participants to justify this cost. As stated above, it would be useful to have further guidance from Congress as to what issues it believes marking short sales on the Consolidated Tape would fix.

We are concerned that marking single transactions in this way may provide an incomplete and potentially misleading picture of the strategies that investors are following and the positions they are taking. For example, a short sale may be used on its own as a speculative trade, or it may be one of a number of trades and used to hedge a long position in that stock. A further example is that a transaction may be a short sale or it may be a sale of securities that reduces a long position - this distinction may be difficult for brokers to identify and convey to the Consolidated Tape. If the picture is incomplete, then it may give confusing price signals to the market and negatively impact efficient price discovery.

Unsophisticated investors may additionally misunderstand the justification for a short trade and how it fits within a wider, balanced investment strategy and may believe that a series of transactions marked ‘short’ may indicate with certainty a short-term future deterioration in the value of the stock. Without understanding the reasons for the trade, it is likely that copycat trading will occur, further depressing stock prices and leading to overshoots in price discovery.

Reporting to the market in this way will also not provide the market with a complete picture, in that it only includes trades conducted on those markets which report to the Consolidated Tape. Although stock trading is limited in the over-the-counter (OTC) markets, a large portion of the US derivative markets are conducted OTC which may include trades entered into for the purposes of creating long or short positions in certain stocks (e.g., equity swaps and futures). Again, the absence of this data from the Consolidated Tape (which is unavoidable) could create a misleading picture for market participants, leading to misunderstandings and possible copycat trading. Further, certain parties entering into short sale transactions may be concerned about the impact that their reporting may have on the value of a stock or other stocks and, therefore, may find it beneficial not to have the short sale reported on the Consolidated Tape. This may particularly be the case for large short sale transactions in certain stock where, for whatever reason, it becomes obvious to the market which party has taken that position. In this example, those parties will likely wish to avoid revealing their investment strategy and would seek to avoid reporting on the Consolidated Tape. Other than not conducting the trade or failing to report it (discussed below), the only option open to an investor would be to conduct the trade outside of a trading platform that reports to the Consolidated Tape. Introducing marking of short sale transactions would likely move a share of the exchange traded market to the OTC markets. This move would be to the detriment of transparency and efficient price discovery.

Even if short sale data was, in theory, useful for the market, we have concerns about data accuracy and the enforceability of the requirements. Should a short sale transaction be inaccurately marked on the Consolidated Tape, this may be immediately noticed by the market place and traded on before a correction can be made or before the error can be further investigated. As the Consolidated Tape reports to the market in real time, this a particular concern. The problem is compounded by the fact that there is no way for the market to verify the information it receives and has to take it in good faith that all information provided is accurate. Alongside misreporting of short sale transactions is the risk that certain trades may not be reported or not reported in real time. There is a risk that short sale trades missing from the Consolidated Tape will,



## Alternative Investment Management Association

again, lead to a further confused picture of the market in the given stock. Failure to report to the market may be wilful or it may be accidental. We question whether the SEC has any effective method by which it can enforce compliance with reporting to the Consolidated Tape in a prompt and accurate manner.

Q17.

- Please discuss the feasibility, benefits, and costs related to the “short sale,” “market maker short,” and “buy-to cover” marks specifically, and the effects of any choices that would be made when defining such terms. Would there be a trade-off between defining the trades that would be subject to these marks for maximum utility and accuracy to investors, and minimizing implementation costs by building on existing definitions and order marking infrastructure?
- If so, how should the tension between these goals be best resolved?
- Would there be any other potential issues associated with the accuracy or clarity of Consolidated Tape marks? Would the Consolidated Tape marks present possibilities for misinterpretation of the data that could impact any benefits and costs?

As discussed above, the benefits of improved transparency in the market will likely be diminished by the inaccuracies of the data and the piecemeal method by which it is communicated to the market. The cost of implementing a marking regime is likely to be borne by the Consolidated Tape operator, who will need to update its systems, operations and processes, and broker-dealers who will need to implement new procedures for reporting to the Consolidated Tape. We are unable to quantify these costs but we believe that they may be significant and would outweigh any benefit gained from the transparency provided. That said, if Congress mandates the use of a marking regime, we see no reason in practice why the Consolidated Tape could not be adapted to include the new ‘marks’. However, it is unclear what concern the marking regime would resolve and, in light of this, we stress the failure, in our opinion, of the proposal to pass a cost-benefit analysis test.

Q18.

- How would any additions to Consolidated Tape marks affect liquidity, volatility, price efficiency, competition, and capital formation?
- To what extent, if any, would such data deter short selling activity not associated with abusive market practices, but that enhances market quality, for example, by revealing trading strategies?
- What are the consequences of such deterrence?
- Would any additions to Consolidated Tape marks have consequences (including benefits or costs) for equity related securities markets, such as options or other derivative markets, convertible bond or other debt markets? If so, please explain.
- What would the feasibility, benefits, and costs be if this real time reporting information were to be made public on a delayed basis?
- What length of delay might best balance any benefits and costs?

In and of itself, reporting to the Consolidated Tape is unlikely to have a significant effect on market liquidity, volatility and price efficiency, competition, and capital formation. A possible effect may be felt if investors consider that the benefits of making a trade are off-set by the cost or the negative impact felt as a result of having to publicise their trade. It is more likely, however, that some trading will move off exchanges that report to the Consolidated Tape or will move out of the US jurisdiction to overseas markets. This effect would impact liquidity, volatility and price discovery in the US, if volumes of trades decrease.

Q19.

- What would be the direct, quantifiable costs of adding the additional fields to the Consolidated Tape to



## Alternative Investment Management Association

support new marks? Please differentiate implementation costs from ongoing costs and include opportunity costs.

- How feasible would it be for brokers, exchanges, and others to modify order management systems, or other systems, for these marks?
- What would be the potential technological challenges faced in implementing these marks?
- Would the Consolidated Tape bear significant implementation or ongoing costs? For example, would capacity requirements be significantly higher?
- Would vendors and others who receive feeds from the Consolidated Tape bear significant implementation or ongoing costs? Responses based on the costs of implementing Regulation SHO Rule 201, Regulation NMS, and Form SH are particularly requested.

AIMA is not able to provide cost data for this question.

Q20.

- What would be the benefits and costs (including the direct, quantifiable costs) of conducting a pilot for the Consolidated Tape marking?
- Would a pilot for Consolidated Tape marking be feasible?
- Would the direct, quantifiable costs of implementing and maintaining a pilot be any less, or more, than those of implementing and maintaining Consolidated Tape marking on all listed issuers?
- Would market participants be likely to behave differently during a pilot, for example by hesitating to develop new trading strategies?

Although we would encourage the SEC wherever possible to conduct pilot regimes on any new major market proposal to test the effects it may have, we do not believe this pilot for the Consolidated Tape marking is likely to be useful or effective. We would anticipate that the SEC would not find sufficient volunteers to fully test the program, while testing a pilot program on only a small number of shares would not provide a representative picture of how the effects will be felt across the market if short sale marking were mandated. Further, only making a small number of stocks as “short” could lead to large scale herding by unsophisticated investors in those stocks, as there would be greater information about that stock and marking would provide further confidence to back up their investment decision for those stocks, when compared to unmarked stocks.

Q21.

- What would be the benefits and costs of the voluntary component of the pilot?
- What types of issuers would likely volunteer to participate in a pilot?
- How would this self-selection affect the usefulness of any data derived from a pilot?
- Are there other consequences from a voluntary pilot?
- To maximize the utility of any pilot, should the pilot be designed to limit participation in a way that facilitates comparisons of trading in pilot companies and trading in nonpilot companies? If participation should be limited, how should the Commission determine which volunteers to include or exclude from the pilot?

We are unaware of any participants who would be willing to volunteer to have their stocks marked as “short” on a pilot basis. As discussed above, this may lead to herding and exaggerated reduction in stock value (i.e., price volatility). It is unclear what, if any, benefit could be derived from having a company’s stock marked short on a voluntary basis.



## Alternative Investment Management Association

Q22.

- How should experiences with transaction marking regimes in foreign jurisdictions inform analysis of the feasibility, benefits, and costs?
- Are there any analyses of transaction marking regimes that are relevant to the Division's study?

In an international market, where traders have a choice of which markets to trade in, it is important that the SEC consider the experiences and practice of transaction marking in other jurisdictions. We would recommend that the SEC consult with the European Union authorities who have recently considered and rejected a similar short marking regime for Europe, as well as the Securities and Futures Commission in Hong Kong which currently operates a marking regime.

Q23.

- To what extent would Consolidated Tape marks be a substitute or compliment to real time short position reporting?
- How would the benefits and costs of any Consolidated Tape marks be impacted if real time position reporting existed and vice versa?

Reporting of net short positions to regulators would be preferable, with, if necessary, aggregated public data published by the regulator. If this reporting regime is taken up, the introduction of a marking regime would not complement such reporting, but would lead to confusing signals being provided to the market. The reporting would be duplicative, expensive and would likely create more information than could be properly analysed in real time. Further real time reporting would substantially increase the operational burden on firms that report to the Consolidated Tape and, thus, increase costs and the number of inaccurate reports made.

# **The effects of short selling public disclosure of individual positions on equity markets**

February 2011

The attached report (the “Report”) reflects the results of the project regarding short-selling (the “Study”) which was conducted by Oliver Wyman, Inc. (“Oliver Wyman”) at the request of the Alternative Investment Management Association (“AIMA”). The following terms govern the preparation, use and distribution of the Report. Any distribution or reproduction of all or any portion of the Report shall include the following terms (without modification).

#### **Preparation of Report Results**

The data for the Study was collected by Oliver Wyman from certain data providers (the “Data Sources”). The data was then aggregated and analyzed by Oliver Wyman. The results of Oliver Wyman’s analysis are set forth in the Report.

#### **Use of Report Results**

The Report contains “blind information” presented in a manner such that a reasonable person could not attribute the information, finding, data point or observation to any particular Data Source. With respect to such blind information, recipients of the Report should not attempt, by correlation of data or otherwise, to ascertain the identity of any Data Source. If such identification is inadvertently made, it must be kept confidential and not used for any purpose whatsoever.

The Report may not be used for marketing purposes or for purposes of pegging, increasing, stabilizing, or decreasing prices, costs or expenses, or making any investment decision.

The Report may not be used as a means for competing companies or firms to reach any understanding, express or implied, which restricts competition or in any way impairs the ability of any person to exercise independent business judgment regarding matters affecting competition.

#### **No Warranties**

The Report is based solely upon the data provided by the Data Sources. No representation or warranty is made as to the accuracy or completeness of such data and the Report is being provided “as is” without warranty of any kind, express or implied. Oliver Wyman will not be liable to any person for any action taken or omitted to be taken by it under or in connection with the Study or the Report.

#### **Note on Independence of Oliver Wyman’s Work**

Oliver Wyman prepared this particular report as part of its continuing work focusing on short selling disclosure which was initiated in 2009 at the request of its clients and sponsored by the Managed Funds Association. This year’s report, requested by AIMA and sponsored by Deutsche Bank, sought to update the earlier findings and better understand whether a public disclosure requirement for short selling would have any effects on trading activity in securities markets. Oliver Wyman performed this work entirely independently. Oliver Wyman designed the study methodology and identified the types of data gathered for the Study. Oliver Wyman obtained data for the Report from the independent Data Sources. Oliver Wyman analyzed this data and reached its own, independent conclusions. No one at AIMA, its members or Deutsche Bank influenced the analytical processes or conclusions that Oliver Wyman drew from its analysis, and no one at these parties has endorsed or otherwise approved Oliver Wyman’s analysis or conclusions.

# Contents

Executive summary	5
1. Background	10
1.1. Introduction	10
1.2. Interview methodology and scope	12
1.3. Data methodology	13
1.3.1. Defining the test and control groups	13
1.3.2. Defining the time periods	14
1.4. Theoretical disclaimer	14
2. Impacts of short selling regulations	15
2.1. Introduction	15
2.2. Institutional money segment	16
2.2.1. Equity market liquidity – interview findings	16
2.2.2. Equity bid-ask spreads – interview findings	17
2.2.3. Volatility – interview findings	18
2.2.4. Hedging instruments – interview findings	20
2.2.5. Short squeezes – interview findings	21
2.3. Macro trends	23
2.3.1. European asset allocation – interview findings	23
2.3.2. Case study: Systemic risks	25
2.4. Market efficiency impacts	26
2.4.1. Impact on corporate access – interview findings	26
2.4.2. Copy cat trades – interview findings	29
2.5. Infrastructure impacts	30
2.5.1. Operational burden of reporting – interview findings	31
2.6. Liquidity impact	32
2.6.1. Equity trading volumes – market data	32
2.6.2. Stock borrow volumes	33
2.6.3. Lendable quantity of equities	34
2.6.4. Equity bid-ask spreads – market data	35
2.6.5. Equity inter-day volatility – market data	36
2.7. Retail investor segment	37
2.7.1. Case study: Pension industry impact	37
3. Conclusions and recommendations	42
Appendix	46
Bibliography	50



## Executive summary

A year ago, Oliver Wyman Financial Services published a study relating to the forthcoming regulatory initiatives on short selling disclosure of individual positions breaching certain thresholds in the EU. These requirements have been enacted in parts of the EU and are proposed for broader implementation. The previous study and the current report both present arguments about short selling disclosure of individual positions. The report does not address any issues in relation to anonymous aggregated position disclosure or regulatory reporting to supervisory authorities. In the previous report, we hypothesized that the public nature of these requirements would negatively impact the equity investors' inclination to engage in short selling and that the subsequent withdrawal of liquidity would have detrimental impacts on equity markets. The results of the study were reviewed with numerous market participants and regulators who were both interested and concerned about the approaches employed during and after the period of market turmoil. The methods and results were discussed fully in order to prompt spirited debate and to ensure the chance for a global dialogue.

At the outset of 2011, these proposals are now far more concrete. The European Commission put forward a Regulation on Short Selling and certain aspects of Credit Default Swaps {COM(2010) 482 final} which proposes that a natural or legal person who has a net short position in relation to the issued share capital of a company that has shares admitted to trading on an EU trading venue must disclose to the public details of the position whenever the position reaches or falls below 0.5% of the value of the issued share capital of the company concerned and each 0.1% above that.

This proposal is now under discussion in the European Council and the European Parliament who are charged with negotiating amendments to the Commission text. It is therefore of utmost importance that the debate in these legislative bodies is based on available empirical evidence.

Based on the industry's interest in understanding how the markets have evolved, we have therefore revisited our 2010 study to answer two sets of questions:

1. Have the conclusions from the data analysis changed one year later?

2. Have institutional and retail participants in equity markets observed the impacts anticipated?

During the course of our ongoing discussions with the market over the past three months through Q1 2011, we spoke with dozens of participants globally, including asset managers, pension funds, the alternative community, dealers, regulators and independent third parties to obtain their feedback on this topic. We worked extensively with independent data providers to validate these conclusions. To properly gauge reaction, our discussions ranged from small hedge funds to the largest traditional asset managers in the world. So the mixture of interactions was both broad and global.

This year's study focused on three topics:

- Institutional money (institutional investors whose primary client base consists of professional investors)
- Macro trends (as evidenced through systematic capital flows)
- Retail investors (institutional investors whose primary client base consists of retail investors, with the management of assets via pension funds and insurers)

Within each topic, the impacts on markets fall into three categories:

- Market efficiency
- Infrastructure
- Liquidity

## **Institutional money segment**

Fund managers noted a variety of concerns that they have initially experienced due to the disclosure proposals. Broadly, they have seen liquidity decrease as a result of disclosure proposals and have seen a consequent widening in bid-ask spreads. Certain strategies have identified a pronounced fear of short squeezes in the market, and most participants noted that access to working with corporate management has decreased.

## Macro trends

Our research has identified several undesirable asset allocation issues associated with the broader implementation of these proposals. First, investors are already choosing to divert a portion of their alternative investments dedicated to Europe to other geographies rather than accommodate the new proposals. Individuals associated with research, technology, and operations also shift with these investments. Second, traditional equity investments are now beginning to follow those flows. Finally, those with discretionary investments have validated that they are choosing to place their capital elsewhere, where the regulatory environment will allow them the discretion to invest without similar restrictions. In sum, we have seen the beginning in 2010 and continuing in 2011 of investors voting more with their 'feet' which we see on balance as an undesirable result of the current rules and which will only be exacerbated if the Commission proposal on short selling disclosures is adopted by the legislators.

## Market efficiency impacts

Fund managers expressed concerns that public disclosure of individual short positions would limit corporate management access, which is a key investment decision input for investors. Managers had already experienced such challenges in jurisdictions that had implemented the proposals in the EU to date. In addition, they expected that unsophisticated investors would mimic trades in the market without a full understanding of the strategy. This has occurred already and would become more prevalent as a result of the disclosure proposals. Broadly, investors of all types reiterated their views from last year's project that there were superior public policy responses to the disclosure dilemma. Market participants were universal in their belief that a compelling case had not been made for **public disclosure of individual positions above specific thresholds, but instead argued that they would cooperate with any of a series of approaches involving private disclosure to regulators or an aggregated approach to the public.**

## Infrastructure impacts

Additional disclosure requirements in the Commission proposal will create an increasingly and unwieldy large amount of new data

available to the investing and non investing public, but fund managers doubted that the data would be distilled into anything valuable, timely and understandable. Funds are unlikely to develop new trade ideas from public disclosure filings, as they tend to rely on quality and timely in-house research. Managers believed that funds would need to increase resources to handle additional reporting, but that they were generally well-equipped for the operational burden.

## Liquidity impacts

Analysis of market data showed evidence of decreased liquidity, as the research revealed a smaller decrease in bid-ask spreads for equity securities subject to disclosure requirements. For these securities, trading volumes decreased, indicating asset flows into more favorable regimes. In addition, there was a relative decrease in stock borrow volumes and lendable quantity of equities for securities impacted by the guidelines for all types of investors.

## Retail investor segment

Some market participants believe that there is an effect on retail investors as well. In this section, we examine the impact to the “man on the street” bearing a potential burden. While not fully conclusive, the research suggests that end investors are impacted by liquidity and market inefficiencies associated with the implementation of these proposals. Using the pension industry as a case study, long only revenues decrease due to loss of stock lending revenues and increased investment costs. In addition, pension investments will likely follow the flow of alternative investment dollars out of Europe.

## Conclusions

We develop a series of recommendations for the regulatory community:

- The disclosure policy proposals are complicated and will have a substantial and wide ranging impact. Regulators should consider those implications fully as part of the decision-making process
- The regulatory approach which is based on the disclosure of individual net short positions above a specified threshold is not effective in meeting the needs of the public, industry participants or regulators
- If thresholds are enacted, they should be raised to reflect meaningful ownership interest because public disclosure at low thresholds distorts markets
- Public vs. private disclosure and “hot lists” should be considered on a trial basis
- For Europe, the most complete approach is a regulatory framework in line with other financial jurisdictions such as the United States and Hong Kong, where private disclosure to regulators and aggregated anonymous public disclosure of, for example, short interest, has proven to be the most balanced solution

The European Commission proposal states in its preamble to the short selling proposal: “The requirements to be imposed should address the identified risks without unduly detracting from the benefits that short selling provides to the quality and efficiency of markets.”

This study will hopefully provide the legislators and decision makers with ample evidence of the dangers the individual position disclosure regime poses to the fulfillment of the stated policy objectives. Market transparency on short positions is desirable and can be achieved more effectively than the current proposals by one of three approaches: anonymous disclosure, aggregated disclosure or raised thresholds.

# 1. Background

## 1.1. Introduction

More than two years after the onset of the crisis that brought global financial systems and the world's largest economies to their knees, regulators and politicians are still attempting to identify culprits responsible for the chaos. European law-making bodies appear more determined than ever to implement drastic short selling policy measures originally recommended over 18 months ago at the time when panic led many to consider simple and intuitively appealing solutions to alleviate the distress observed in the markets. Short sellers, hedge funds and 'speculators' of all kinds found themselves squarely in the crosshairs. However, our findings caution against the widespread implementation of such regulatory initiatives in the absence of evidence supporting the belief that short sellers precipitated or exacerbated the financial crisis.

Interestingly, a 2008 study by Credit Suisse was one of several in the industry that demonstrated that hedge funds were net buyers of financial equities in the weeks leading up to the bankruptcy of Lehman Brothers.<sup>1</sup> Similarly, while hedge fund short selling of credit default swaps was nearly unanimously thought responsible for perpetuating the Greek/European sovereign debt crisis of 2010, it was later shown that CDS spreads were not leading indicators of sovereign bond yields and that the funds were not responsible after all.<sup>2</sup>

Short sellers will be required under current EU proposals<sup>3</sup> to divulge highly sensitive data and information related to their trading activities to the public and their competitors. A fund's only source of revenue is generating returns for investors through the creation of intellectual capital, which as the primary revenue producing asset of the business is not easily protected. Funds cannot rely upon copyright protection. The intellectual capital that funds depend on is much more ephemeral. Current and proposed regulatory compliance place at risk funds' ability and willingness to conduct business in a domicile where investment strategies are made public and reverse engineered by their counterparts. It is our fear that increasingly prohibitive and intrusive short selling legislation could incite large market participants and

1 Credit Suisse. (2008, November 12). The Blame Game: What Caused Spreads to Widen. AES Analysis.

2 European Commission. (2010, December 6). Report on Sovereign CDS.

3 European Commission. (2010, September 15). Proposal for a regulation of the European Parliament and of the Council on Short Selling and certain aspects of Credit Default Swaps. [http://ec.europa.eu/internal\\_market/securities/docs/short\\_selling/20100915\\_proposal\\_en.pdf](http://ec.europa.eu/internal_market/securities/docs/short_selling/20100915_proposal_en.pdf)

liquidity providers to rethink European equity investments, and potentially pave the way for increased systemic risks.

The contributions of short selling to market efficiency in the form of liquidity, bid-ask spreads and volatility have been well documented and recognized by regulators, market participants, and independent third parties including academic research.<sup>4</sup>

In Q1 2010 Oliver Wyman Financial Services released the findings of a study that was commissioned by the Managed Funds Association. The report examined the behavior of equity markets both in the presence and absence of what most managers believed to be burdensome disclosure requirements. Metrics measuring both the relative level of short selling activity and the quality of markets were examined to determine whether regulatory efforts impaired markets. The Oliver Wyman Financial Services analysis was complemented by a parallel process conducted by Deutsche Bank examining the same variables but using separate methodologies and control/test groups. Both studies reached similar conclusions, namely that short selling regulation, specifically in the form of public disclosure requirements, could reduce investors' willingness to execute short orders and in turn could result in a decrease in market quality for the affected securities.

Individual short selling disclosure results in a decrease in the volumes of short orders as a relative proportion of overall orders (both long and short). Specifically, the reports found material impacts in the following areas:

1. The reduction in the heterogeneity of positions that results from less short order execution leads to wider bid-ask spreads in the equity securities for which disclosure of short interest is required
2. Similarly, other metrics of market quality and efficiency, such as short-term (i.e. intraday) volatility are also negatively impacted as short sellers withdraw their liquidity from markets

The Oliver Wyman Financial Services study concluded the following:

1. Short selling liquidity in securities subject to short selling public disclosure regimes decreased by 25%, whereas control groups showed a symmetric 25% increase in liquidity
2. A UK test group subject to a public disclosure regime experienced a 13% decrease in trading volumes, while the United States and UK control groups both showed increases in volumes

<sup>4</sup> Marsh, I. and Niemer, N. (2008, November 30). The Impact of Short Sales Restrictions; Clifton, M. and Snape, M. (2008, December 19). *The Effect of Short-selling Restrictions on Liquidity: Evidence from the London Stock Exchange*; Beber, A. and Pagano, M. (2009). *Short-Selling Bans around the World: Evidence from the 2007-09 Crisis*.

3. Bid-ask spreads for a UK test group widened by 46%, whereas the UK control group widened by only 2%
4. Intraday price volatility for a test group of European stocks showed a relative increase twice that experienced by a control group of European equities

These results of our prior work were shared with central bank officials throughout the world in both individual and group settings. The studies were widely shared as part of a process to assist regulators in their deliberative considerations related to their work on this important topic. It is our hope that the research associated with this document will once again serve the vital purpose of prompting spirited debate amongst public policymakers and allow industry participants the chance to join that discussion to ensure that policy is based mainly on available empirical evidence so that the stated policy objectives may be achieved.

## 1.2. Interview methodology and scope<sup>5</sup>

As part of our ongoing responsibilities we are in consistent dialogue with managers, investors, regulators, dealers and third parties that are actively engaged in the issues that surround this topic. For this initiative we prepared a series of questions that were posed to all of the above market participants to better understand the impact of short selling disclosure requirements as a follow-on to our prior work completed in 2010. The data for this report included interviews conducted with 35 market participants globally which include managers sampling a range of size and strategy:

- 50% of managers domiciled in Europe, 50% in the United States
- 70% of managers with a minimum of 25% of asset allocation to Europe, and 30% with an allocation of greater than 50% to Europe
- Participants included asset managers, pension funds and hedge funds
- Hedge fund assets under management (AuM) ranged from \$1 BN to \$25 BN
- Managers and investors see strategies that range from fundamental long-short strategies to systematic high-turnover trading strategies and also include credit, convertible and multi-strategy

<sup>5</sup> Additional information on interview participants included in the Appendix

## 1.3. Data methodology

In addition to the interviews with market participants, we analyzed market data through the end of 2010 in order to revisit the analysis presented in the 2010 Oliver Wyman Financial Services study. Test and control groups of equity securities across different markets were examined for the pre-ban and post-ban time periods.

### 1.3.1. Defining the test and control groups<sup>6</sup>

In order to account for a number of variables, we established control groups of financial equities across a number of markets that we feel would have responded to market conditions/variables similarly over the analyzed time period.

For the Datastream and Data Explorers data outputs we created three control groups – UK, United States and Hong Kong – and one UK test group. The control groups are of similar size and included equity securities issued by companies in the financial services and banking sectors with comparable market capitalizations and trading liquidity in late 2010. The UK control group included securities that are constituents of the FTSE 250, but are not currently subject to the requirements of the disclosure regime. The UK test group consists of 20 UK financial services equity securities that are presently subject to the short selling public disclosure regime. Some UK equities subject to disclosure were excluded to better reflect the number of equities in the control groups as well as the market capitalizations and liquidity of the selected equities.

<sup>6</sup> Additional information on equity securities analyzed included in the Appendix

### 1.3.2. Defining the time periods

To evaluate the impact of public disclosure, we set timeframes over which to conduct the analysis. To maintain consistency, we chose to define the pre-disclosure, ban and disclosure periods in the same manner for all of the securities in the study regardless of jurisdiction. Periods are based on the regulatory regime in the UK because the public disclosure regime for UK financials remains today and the EU Commission has proposed a similar pan-European disclosure regime:

- Pre-disclosure/ban period: 1/1/2008-9/17/2008
- Ban period: 9/18/2008-1/16/2009
- Disclosure period: 9/18/2008-present
- Post-ban period: 1/17/2009-present

Time series data from Datastream and Data Explorers concludes on 12/31/2010.

## 1.4. Theoretical disclaimer

For some of the arguments presented in this report, it would be difficult if not impossible to measure the magnitude of the impacts without sustained periods of increased regulatory obligations for short sellers from which to sample statistically significant sets of data. However, all of the potential scenarios are well grounded in the fundamentals of equity markets and short selling mechanics. Furthermore, they have been informed by our conversations with fund managers, their sell-side counterparty institutions and their investors. We believe that a healthy appreciation of the potential negative impacts on markets, both measurable and immeasurable, should form a central role in the current public discourse among the regulatory community and proponents of limiting the activities of short sellers.

## 2. Impacts of short selling regulations

### 2.1. Introduction

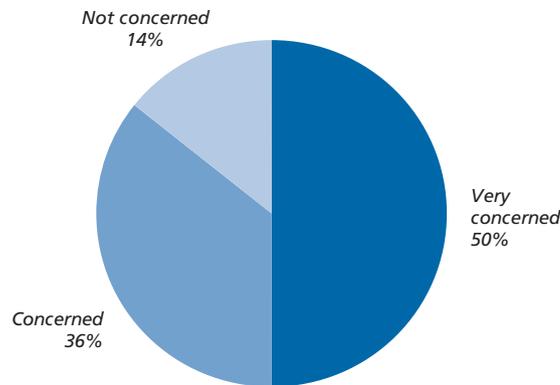
Our examination of the impacts of short selling regulations on equity markets will be structured around three primary topics: liquidity, market efficiency and infrastructure. The analysis presented draws from both publicly available data sources as well as a number of discussions conducted during Q4 2010/Q1 2011 with major industry participants.

As noted above, one of the difficulties in positing arguments defending the interests of short sellers is that regulators, legislators and policy makers often fail to appreciate how the degradation in market quality caused by reduced participation from short sellers translates into material impacts for other investors and market participants that they are charged with protecting. To that end, our report includes case studies hypothesizing the tangible impact of increased trading costs on buy-side investors such as pension funds, as well as the potential for systemic risks rippling through the global economy. Our bottom line conclusion is that these restrictions are at this point (a) unnecessary; (b) ineffective; and (c) deleterious and potentially quite damaging to the real economy.

## 2.2. Institutional money segment

### 2.2.1. Equity market liquidity – interview findings

Exhibit 1: Are you concerned about liquidity drying up?<sup>7</sup>



Regulators contend that short selling disclosure requirements are instituted with the aim of increasing liquidity in the marketplace among the numerous reasons identified. In our 2010 study, we noted the liquidity issue based on analysis of market data. This year we wanted to revisit the liquidity question, knowing that regulators and policy makers believe this to be a pre-eminent issue. Both qualitative and quantitative data indicate that market liquidity has decreased over the time period that the disclosure requirements have been in place. The majority of funds interviewed are concerned about liquidity being reduced as a direct result of the disclosure proposals.

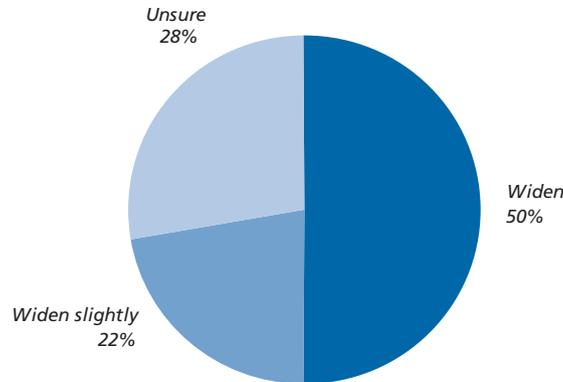
The loss of liquidity affects price discovery and efficiently functioning markets, with an effect on institutional funds. As noted by one manager, the requirements “clearly have a marginal impact on liquidity and to certain institutional revenues.” There is a tangible impact on the retail investor segment as well, as described by one fund: “Liquidity issues can be more burdensome for retail or less sophisticated investors because they do not have access to the tools or the intellectual capital that funds are able to regularly employ.” Another fund noted the impact of liquidity losses on bid-ask spreads, funds leaving the region and general market sentiment for investors: “If funds aren’t getting information they need and they leave the region, there will be less liquidity and spreads will widen. It is never a good thing when major players exit the market and the regulators’ goal should be to bring liquidity to market because it is

<sup>7</sup> Oliver Wyman Financial Services interviews with fund managers

that liquidity that lessens oscillation and dampens the distress that all investors feel.”

## 2.2.2. Equity bid-ask spreads – interview findings

**Exhibit 2: How would you anticipate that bid-ask spreads will change?<sup>8</sup>**



Over 70% of funds believe that bid-ask spreads would widen to some extent, which is consistent with the findings of the 2010 study that showed negative market liquidity effects in the presence of short selling disclosure requirements. Funds highlighted the increased costs for the general public: “If spreads widen it will become more expensive to trade. It really should change what an investor will pay based on fundamental fair prices. Widening of spreads is bad for investing public and generally good for brokers as long as the market doesn’t completely blow up.” Market participants noted on a number of occasions the impact on average investors, as noted by one fund: “I don’t necessarily know if widening spreads is so risky for us as a hedge fund, but it’s probably the type of thing that’s not optimal for the average investor or large institutions. It creates inefficiencies and these types of investors usually find it harder to turn around inefficiencies in the market.”

The degree of spread widening and liquidity reduction varies with the requirement stringency as well as the market capitalization and “normal” liquidity of the affected securities. Larger, more liquid equities are in general less impacted than smaller, less liquid securities. This makes intuitive sense as it takes fewer dollars invested to create a disclosure-required position if a manager invests in a small-cap company as opposed to a large-cap equity (assuming symmetric percentage of market cap thresholds for both securities). The Commission has proposed rules to raise financing costs for SMEs while at the same time aiming to lower those costs by creating “a

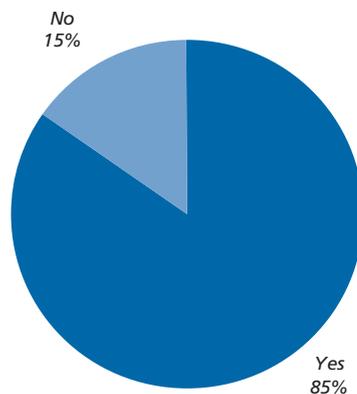
<sup>8</sup> Oliver Wyman Financial Services interviews with fund managers

platform to raise capital both through initial offerings and ongoing fund raisings.”<sup>9</sup> One hypothesis is that, rather than creating special trading venues, a more optimal solution would entail refraining from introducing measures which have been shown to have a detrimental effect on liquidity and thus the cost of capital.

Interestingly, unlike an increase in bid-ask spreads which would impact market participants equally, a decrease in liquidity would most significantly impact large institutional investors that hold large concentrated positions in equity securities. Most of the funds we spoke with indicated that, while a loss of liquidity may impact their ability to additionally invest in certain securities, it would not materially impact their businesses as they are highly diversified across single names, sectors and markets. Funds will not necessarily shift their trading if bid-ask spreads widen. Instead, they will assume smaller profit margins and understand that brokers are making a bit more money from them. If bid-ask spreads widen significantly and funds pull out of the market and trade less, then that has the distinct effect of diminishing liquidity. While funds may not feel an immediate effect from widening bid-ask spreads, institutional investors such as public and private pension funds do not have the luxury of maintaining relatively small position sizes. They would experience significantly greater difficulties, including material mark-to-market losses, than their hedge fund peers.

### 2.2.3. Volatility – interview findings

**Exhibit 3: Does your strategy act as a mitigant of volatility?**<sup>10</sup>



Funds promote their strategy to investors as a way to combat market volatility and ensure optimal returns. The vast majority of funds in the study believe that short selling is used in their strategy as a mitigant

<sup>9</sup> European Commission. (2010, December 8). Public Consultation. Review of the Markets in Financial Instruments Directive (MIFID). [http://ec.europa.eu/internal\\_market/consultations/docs/2010/mifid/consultation\\_paper\\_en.pdf](http://ec.europa.eu/internal_market/consultations/docs/2010/mifid/consultation_paper_en.pdf)

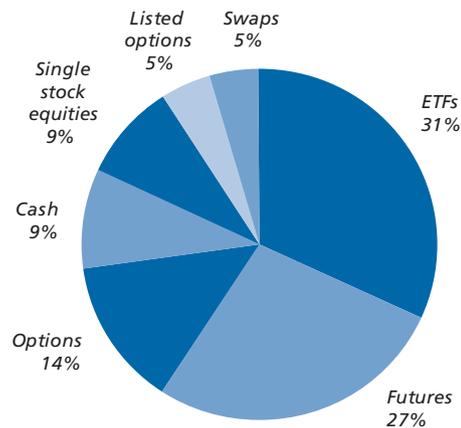
<sup>10</sup> Oliver Wyman Financial Services interviews with fund managers

of the fund portfolio's volatility. One large fund explained this strategy in the following manner: "We put short positions on to manage risk, and risk effectively means volatility. Our shorts are used to neutralize risks that we don't want to participate in. I do think you need shorting in the market or you end up with a one way market and if you reduce the ability to short, stock by stock, you can only assume an increase in volatility." If the fund's strategy or ability to go short is materially impacted by the disclosure proposals, then the ability to mitigate volatility will be hampered as well. Funds underscored the importance of volatility mitigation to shield the public from investment losses: "Increased volatility means less quantifiable downside protection and this is something that affects every single person with a single dollar invested in the global economy." Most strategies operate by using a strategy that acts as a mitigant to volatility, with the exception of market neutral and distressed strategies which usually go with the volatility in the market. Within a particular strategy, funds offer multiple products to investors that can be used to manage volatility, but the breadth of these products may be diminished if liquidity dries up as a result of disclosure proposals.

Funds constantly evaluate both long and short positions as balanced forces and must monitor position size relative to turnover and risk management discipline on a continuous basis. If stressed circumstances result in decreased liquidity, then most funds will react in a defensive manner. Funds rely upon abundant liquidity for risk and volatility management, so if liquidity dries up funds will be less capable of executing strategies and monitoring volatility. Markets have generally accepted shorting as a way to hedge and manage risk. If investors become more sensitive due to regulatory changes in the shorting landscape, funds will either have to factor extra fees into their models to compensate for appropriately managing risk or simply concede to their investors that they will have to take on more volatility and risk.

## 2.2.4. Hedging instruments – interview findings

Exhibit 4: What instruments do you use for hedging?<sup>11</sup>



Funds in the study expressed concern that liquidity reduction as a result of the disclosure proposals will hamper the instruments used for hedging and facilitate short squeezes. Market data also mirrors these sentiments, as evidenced by market volumes, bid-ask spreads and volatility. These risks associated with a dearth of liquidity can materially impact the positions of investors trading in the near future, corporates who rely upon their funding and other market participants.

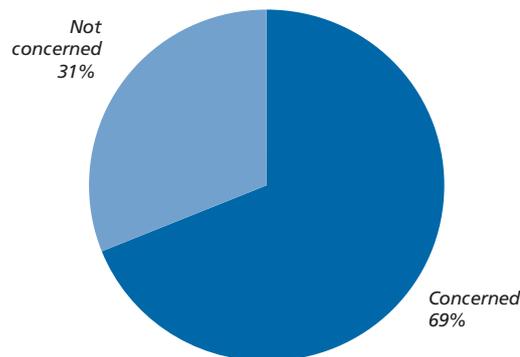
Although funds have specific hedging strategies set forth in their investment mandates, investors have a wide array of instruments for hedging risks. Liquidity in the market is critical to provide traders with a choice of financial instruments from which they can select in order to hedge portfolios. For instance, funds in the study indicated that ETFs and futures were the most common instruments used in hedging. They noted that, if liquidity decreased as a result of disclosure proposals, the ability to use these instruments could be substantially diminished and they could be forced to abandon certain products. Many of the funds believed that they were well-diversified across their hedging products, although they anticipated that a decrease in liquidity across the board could pose a substantial problem. According to one fund, “Analysts go through the book and see how each position is correlated to certain factors – they put a short on to hedge each and every one of those factors. If liquidity is diminished, it will be much more difficult to find appropriate hedges for each of the necessary factors.”

11 Oliver Wyman Financial Services interviews with fund managers

Many fail to realize that the long side of the portfolio will also be affected if funds feel constrained in the instruments that they can use for hedging. It will be very difficult for funds to take the same kind of long positions if their hedging practices are altered due to an inability to sufficiently manage risk in the long positions as they had done previously. It is clear that the perceived confidence in long positions is directly affected by confidence levels in hedging offsets that are maintained by well thought-out short positions. One global hedge fund offered, “If we need to alter our hedging instruments based on liquidity concerns, our ability to go long changes because we can’t hold the long position for as long as we would like.” Another fund moved a step further, pushing the argument outside the theoretical realm by saying, “I won’t buy unless I can sell or short and by definition, as soon as restrictive rules or legislation are foisted upon me, I am going to buy less. If I can’t short, I can’t buy long. Definitionally we will have to take long positions down and we have already reacted this way in the UK, France, and Spain.” It is clear from these findings that as short selling disclosure rules affect fund confidence in the short book, the long book will suffer in turn. As a result, investment opportunities will diminish as portfolio managers grow less convinced that they will be able to hedge specific risks.

## 2.2.5. Short squeezes – interview findings

**Exhibit 5: How concerned are you that short squeezes will intensify?<sup>12</sup>**



So, what is a short squeeze? Participants in the market describe it as an instance when the market trades on momentum and public disclosure leads to a change in price drivers and other investors exploit this opportunity to create a squeeze on liquidity. If some participants know of others’ short positions, they will be more likely to acquire a stock knowing that covering of the short position will need to take place and thus further raise the stock price, which potentially facilitates a squeeze on liquidity. One fund manager in the study described it in the following manner: “If we have to

<sup>12</sup> Oliver Wyman Financial Services interviews with fund managers

publicly disclose individual positions we are concerned about market manipulation that facilitates short squeezes. Liquidity can be tight and there may only be one lender who is willing to lend to three or four prime brokers. These prime brokers will inevitably raise their rates as we try and cover our positions, and we end up at the mercy of pricing pressures because someone else controls the necessary flow.” Put another way, when individual positions are disclosed, changing price drivers are amplified and decreased liquidity occurs. The combination of these two effects creates markets where it is significantly more difficult to trade. Short squeezes are an important concern for fund managers, as nearly 70% of managers expressed concern that they could fall victim to short squeezes from decreased liquidity due to short selling disclosure proposals.

Funds expressed material concerns about short squeezes: “These proposals could create situations where the market acts strangely. Short squeezes will become more prevalent in less extraordinary situations and if there was a big short squeeze and we want to get out of it the price is going to go up and liquidity is not going to be there. Therefore it starts to affect our long side and really distorts the market.” Looking back on the 2007-2008 period, several of the interviewed funds were on the wrong side of short squeezes. The impact was severe as they had no way to turn positions around and incurred significant losses. In particular, the VW short squeeze of 2008 is still on the minds of many funds, and they realize that there could be an increased probability of experiencing a similar market event going forward. The concern is that disclosure proposals will increase the amount of data available to the market without providing funds increased protection against outside investors who are now able to see the position and want to manipulate the market. When large short interests are easily observed publicly, pressurized buying becomes easier. The buy side has articulated that short squeezes are a legitimate concern, and it appears that this will be an increasingly thorny market event to be managed going forward.

## 2.3. Macro trends

### 2.3.1. European asset allocation – interview findings

Exhibit 6: What is your asset allocation percentage to Europe?<sup>13</sup>

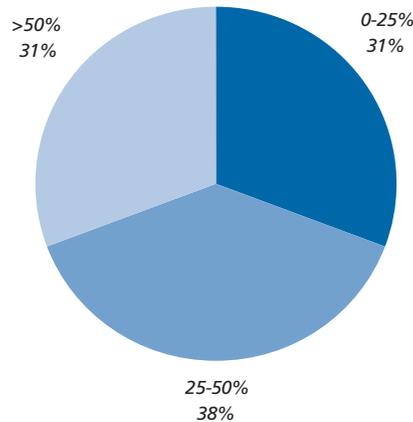
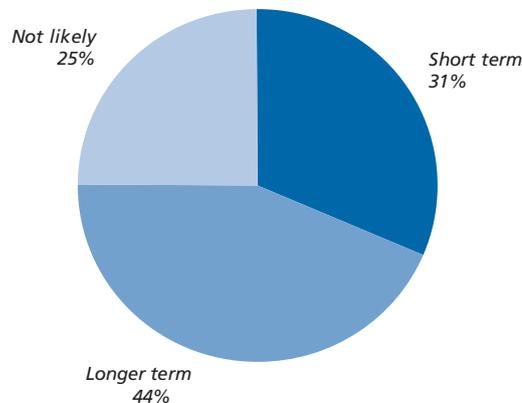


Exhibit 7: Do you believe that equity capital will leave Europe as a result of short selling disclosure guidelines and over what period of time?<sup>14</sup>



A large proportion of the funds (70%) had at least a quarter of their portfolio allocated to Europe, and roughly one-third had greater than 50% of assets currently so allocated. Although Europe was previously an area of focus for funds, there has been a global asset flow into more friendly regulatory landscapes, as funds move away from holding exposure to EU risk assets. Three-quarters of the funds believed that equity capital will leave Europe as a result of the guidelines, with over 30% expecting to see outflows in the short term. One fundamental firm stated vehemently, “We will absolutely be pulling assets out of Europe and shifting them elsewhere. We cannot run the risk of a disclosure

<sup>13</sup> Oliver Wyman Financial Services interviews with fund managers

<sup>14</sup> Oliver Wyman Financial Services interviews with fund managers

situation, so places like Asia immediately become more appealing because we know there are fewer risks.” Global regulators have used the relative state of disarray in Europe to actively seek funds to shift trading operations elsewhere. Funds have indicated that in the following: “It will be increasingly hard to ignore Hong Kong as it seems to beckon alternative funds especially with its sensitive and sensible approach to short selling.” Many funds that have not already shifted assets are preparing to do so as a result of the decreased market efficiency from short selling disclosure proposals. However, there are funds who doubt that the impact will be significant enough that asset outflows will follow, as noted: “My suspicion from a long only perspective is that I wouldn’t have thought that these proposals would do enough damage to the capital markets in terms of liquidity and ability to trade to push long only players out of the EU.”

Hong Kong regulators (SFC) and multiple global prime brokers in Asia expressed the sentiment that European regulatory bodies have handcuffed funds and are forcing a monumental migration. Asian regulators, and more specifically those in Hong Kong, have been less involved at the manager level in terms of short selling. In addition, the Hong Kong model of private disclosure to the regulators has worked well. The head of the SFC, Martin Wheatley, noted: “There is always a problem when regulation is politicized. You get an odd outcome then. Regulation should be pragmatic. Regulators are really technocrats who take account of predictable outcomes. When they have to respond to political pressure, you get a different result.”<sup>15</sup> Not surprisingly, fund managers of all types trading under the Hong Kong regulatory approach have flourished, and Hong Kong has seen assets grow in the region because they believe it is becoming a region that is conducive to their business models. “The SFC’s stance on issues such as shorting, coupled with its pragmatic approach to regulation will be seen by managers as two more plus points for moving to Hong Kong. It was the only jurisdiction that did not ban shorting at any time throughout the financial crisis.”<sup>16</sup> It is not uncommon for regulators to promote their own domestic financial markets, but large dealers in Hong Kong and the rest of Asia have recently increased headcount and continue building out capabilities as assets continue to grow in the region and the dealers recognize that funds have decreased interest in operating within the European framework that seems to constantly target the alternative community.

15 Margie Lindsay, Hong Kong regulator predicts continued success in attracting hedge fund managers, <http://www.hedgefundsreview.com/hedge-funds-review/news/1929653/hong-kong-regulator-predicts-continued-success-attracting-hedge-fund-managers> (December 2010)

16 Margie Lindsay, Hong Kong regulator predicts continued success in attracting hedge fund managers, <http://www.hedgefundsreview.com/hedge-funds-review/news/1929653/hong-kong-regulator-predicts-continued-success-attracting-hedge-fund-managers> (December 2010)

### 2.3.2. Case study: Systemic risks

There is a benefit of short selling in preventing bubbles. The former SEC Chairman Christopher Cox noted in a July 2008 interview: “There should be some parity between going long and going short. We need the shorts in our market in order to balance so we don’t have bubbles.” Short selling not only helps to keep asset valuations in check through facilitating price discovery, but – when viewed as a component of efficiently functioning markets – it also maintains investor confidence and fosters liquidity.

On the other hand, there is a role for short selling in creating bubbles. As referenced above, a noticeable loss of efficiency in domestic equity markets – via higher volatility and increased trading costs – may encourage institutional and levered investment funds to redirect allocations to other asset classes within Europe, potentially fuelling bubbles in other markets, such as fixed income or commodities.

However, a more damaging outcome for the EU would be policy arbitrage, or the widespread shift of local capital away from member countries to markets with more accommodative regulatory frameworks. Thus, it is important to understand the concerns of market participants and the potential for unintended consequences of overly burdensome disclosure requirements.

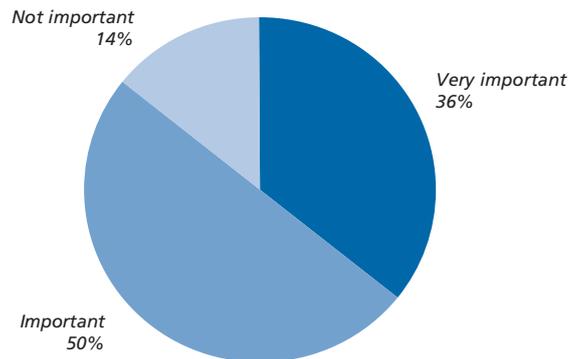
While some institutional investors are relatively inflexible given the infrequency of investment strategy revisions (often annually or biannually) and regional investment mandates, many large sophisticated investors have nimble strategies to efficiently reallocate capital to locations where risk/reward is deemed most favorable. If market inefficiencies and regulatory burdens deter managers from allocating to domestic equities, then there exists the potential for a large-scale migration of investment capital from domestic or European enterprises to regions offering higher risk-adjusted returns. In a worst-case scenario, corporations listed locally would experience increased difficulty and costs in equity raising initiatives, further decreasing investor confidence and increasing the likelihood of broad-based equity outflows. If such a state were to persist for an extended period of time, a negative feedback loop could take shape whereby an inability to generate returns or raise capital hurts not only domestic industry but also sovereign finances and GDP. Similar prohibitive regulatory involvement in markets has helped similar events to transpire in certain developing economies.

## 2.4. Market efficiency impacts

Regulators have instituted short selling disclosure requirements with the goal of creating more efficient markets. However, our interview findings reveal that funds perceive markets to be less efficient.

### 2.4.1. Impact on corporate access – interview findings

**Exhibit 8: How important is corporate access?<sup>17</sup>**



Hedge funds have cited increased difficulties in light of short selling disclosure requirements in accessing corporate management of the names they trade. Over 85% of the funds indicated that corporate access was either an important or very important component of their investment process. Impairing the manager’s access to corporate management diminishes the ability to efficiently invest investor capital. There is a biased impact on markets due to the heterogeneity of beliefs because decreased corporate access only impacts managers investing in certain styles.

While corporate access is important to nearly all funds, the deep fundamental managers are affected the most. Fundamental long-short managers require unfettered access to corporate management whereas funds trading based on technical indicators or systematic models do not need the same level of access. Fundamental players rely heavily on primary research that could be shut down if the company recognized the fund’s short position through disclosure. One firm described their research operations as follows: “Our whole long/short strategy is based on fundamental analysis where we make multiple visits to corporates we are investing in. These visits are key determinants in our decision making and as soon as you visibly break trust with a corporate that takes out one of the potential companies

<sup>17</sup> Oliver Wyman Financial Services interviews with fund managers

you are going to cover.” Funds revealed that they have already seen access severely limited once a company learned of the fund’s short position. One fund described this extreme example: “We made a public disclosure filing and corporate access immediately went to zero. They shut the doors on us and we saw that happening in real time.” Based on these interview findings, public disclosure proposals limit the ability to engage in fundamental research, as companies are only willing to grant access to management based on trustful relationships built up over an extended period of time. Short selling disclosure proposals can undermine the relationships that funds have cultivated, and once a company shuts down the access pipeline that corporate name is no longer a potential investment opportunity for investors. One potential implication of decreased corporate access is that the short selling disclosure proposals could lead to research oriented funds leaving the market while increasing the proportion of systematic traders who typically have a much shorter holding period.

Funds believed that disclosure proposals could particularly impact burgeoning relationships with small-cap firms where current relationships are the most fragile and the effects of a large short position could be felt most directly. Fundamental firms would have to take dramatic short positions based on serious and deleterious events such as fraud, accounting problems, or irregularities at the management level. One fund supported this argument: “Because corporate access means less dialogue, we will have to take a more spectacular view of the investment idea. Many times companies we are short we don’t think are horrible, but now if we don’t have communication, our views are going to be harsher.” Realizing this, the market would perceive a firm being shorted as truly in trouble and potentially on the brink of a catastrophic event. This potential mindset shift could lead to increased volatility and decreased price efficiency. As a result, funds would have to adjust price targets and expected returns, and the confidence level in their positions would be lower.

Disclosure guidelines not only diminish corporate access in equity portfolios, but also affect credit and convertible bond books at multi strategy funds. Managers that rely on arbitraging debt and equity have indicated that disclosing shorts would severely affect their ability to hedge. In looking at the components of a convertible bond deal, it is difficult for a fund to make sure the equity leg hedge is appropriate if corporate access has been diminished. One fund provided this example: “One corporate didn’t realize that in facilitating a convertible deal we were short the equity, but had a net long position in the firm because of our convertible bond holdings. They failed to see the trade holistically and that certainly strained the relationship.” This situation is not uncommon, as funds with short positions in a company often

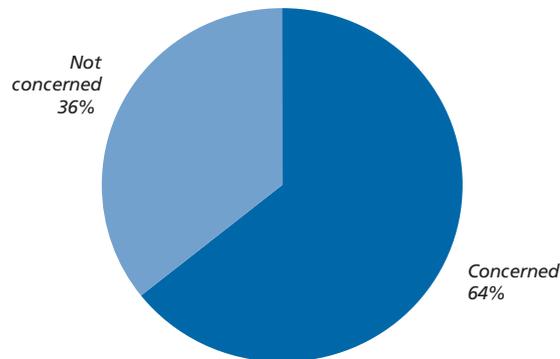
have a significant long position as well, resulting in a net long position. If short selling disclosure guidelines affect convertible relationships, corporate financing could be hindered as funds will be reluctant to risk diminished access.

Over a multi-year period, funds are likely to go short many names, and these corporate names have long, acute memories. Once the relationship with a corporate name turns sour, there is no guarantee that the fund will receive the prior level of access and they may be denied the ability to make the most informed investment decision. Regulators and policy makers may be taking a short sighted approach by dissuading funds from sending negative signals about companies. Markets cannot function properly when funds are afraid to express themselves fully due to fear of losing access to information. Shuttering corporate access for certain investment vehicles runs contrary to the regulatory aims of market equality, and corporates have the powerful ability to discriminate on the basis of information uncovered through disclosure filings.

Diminished corporate access leads to fewer European investment opportunities for funds that will then have to look outside of the region for more appealing places to invest. Because corporate access is an essential part of most of these funds' strategies, there will be significant changes in the handling of company valuation and investment decision making. One fund noted: "If short selling disclosure guidelines affect our corporate access, we won't be able to make the same type of smart decisions we once did, and that is unacceptable. We will have to look elsewhere to preserve our research capabilities, and ultimately our decision making edge." The disclosure guidelines currently in place in Europe will lead to adjusted price targets and rates of return. Funds will be challenged to expect similar rates of return on investments if they lack confidence in their supplemental research and subsequent views. As disclosure proposals are implemented in more geographies throughout Europe, funds may lose access to more companies, leading to a visible change in the region's fundamental research dynamic.

## 2.4.2. Copy cat trades – interview findings

**Exhibit 9: How concerned are you that copy cat trades will intensify?<sup>18</sup>**



Over 60% of funds were concerned that copy cat trades would increase under short selling disclosure proposals. Portfolio managers understand that, once their positions have been publicly disclosed, there could be many investors looking to simulate their positions and exploit their research.

Like short squeezes, copy cat trades create situations where a security's market price does not equal the fair value of a security, so it is possible that the security is trading at a manipulated premium. In addition, the likelihood of copy cat trades and short squeezes is amplified in certain markets. Although the business impacts of copy cat trades may not be as severe as those of short squeezes, fund managers would have to be more vigilant when trading in a disclosure regime. Less sophisticated investors will have access to all types of information and will actively work to piece together strategies based on the short positions of large, well-known managers.

There is concern when investors trade on short selling information gathered through disclosure without knowing the full components of a trade. Disclosure proposals could lead to less sophisticated investors trying to formulate correlations between multiple parameters and trading on these assumptions, thereby decreasing efficiency and distorting markets. One fund described the problem as “giving people information, but only giving them half of the story. Regular investors won't be able to link technology and this will create increased headline risk and position uncertainty.” Market distortions could become more commonplace if retail investors approach their mutual fund managers complaining that a hedge fund has a large short position in a particular equity security and question why the mutual fund manager is long that stock. Long only managers will

<sup>18</sup> Oliver Wyman Financial Services interviews with fund managers

receive mixed signals and might not be aware of long convertible positions as a significantly meaningful part of a trade. The abundance of information in the market will be fragmented such that the whole story is not apparent to unsophisticated investors. Most copy cat traders lack the ability to fully link positions or fundamental stances and consequently decrease the integrity of the market.

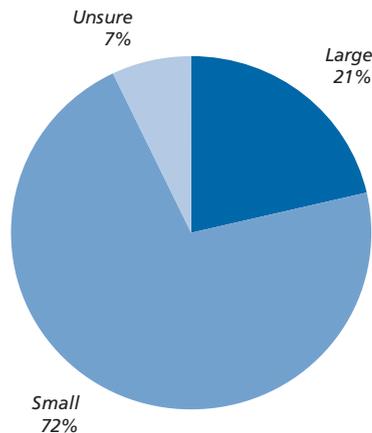
Funds that are concerned about copy cat trades often reference the “Warren Buffett effect,” where regular investors mimic trading strategies using public hedge fund information. There has been a recent growth in websites that combine public hedge fund data with their own analysis to allow investors to trade like “smart money” hedge funds. Regulators and policy makers should be concerned with the proliferation of these websites as well as the prospect of disclosure requirements providing them more information. If unsophisticated investors gain knowledge of large hedge funds’ short positions, they could aggressively copy these trades and distort the fair market value of securities. This could have a dramatic effect during times of financial peril, especially for financial institutions dependent on market confidence.

## **2.5. Infrastructure impacts**

A goal of short selling disclosure requirements is increased transparency of information available to market participants. There will be some operational reporting burden for fund managers.

## 2.5.1. Operational burden of reporting – interview findings

**Exhibit 10: How much additional burden will reporting of net short positions cause for you?<sup>19</sup>**



Regulators are currently shifting responsibilities to central counterparties (e.g. clearing and reporting of OTC contracts), but the responsibility of short selling disclosure falls to the individual funds, natural persons and potentially many unregulated entities. There are a number of operational challenges which will disproportionately impact smaller managers who are not as sophisticated and institutionalized as their larger peers. However, nearly one-quarter of the interviewed managers (most with AuM > \$5 BN) believed that their fund would have a large burden reporting net short positions to comply with short selling disclosure requirements.

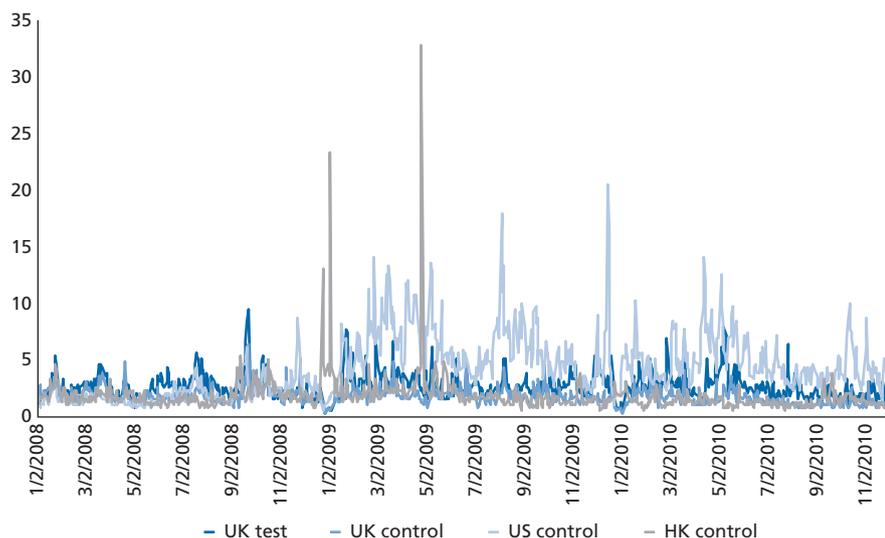
Most of the interviewed funds were in excess of \$5 BN AuM and believed that smaller hedge funds would be primarily affected by the operational requirements. Smaller funds typically cannot afford the advanced technology that larger funds have in place, and they also lack personnel resources in operations and compliance departments. Funds that are less automated will likely have the greatest operational burden to prepare for increased regulatory reporting. In addition, systematic funds with high turnover face operational reporting challenges as a result of trading in and out of positions in thousands of names daily. These funds are critical liquidity providers to the market, but they are also likely to reach threshold limits frequently due to their daily high-turnover trading and may be faced with increased operational burden.

<sup>19</sup> Oliver Wyman Financial Services interviews with fund managers

## 2.6. Liquidity impact

### 2.6.1. Equity trading volumes – market data

**Exhibit 11: Average daily volumes (normalized to 1/2/2008 = 1.0)<sup>20</sup>**



Note: Chart represents daily trading volumes averaged across each group from 1/2/2008 through 12/31/2010

Source: Datastream

**Table 1: Average daily volumes (normalized to 1/2/2008 = 1.0)<sup>21</sup>**

	Pre-ban	Post-ban	Δ Pre-ban
UK test group	2.81	2.77	-1%
UK control group	1.94	1.73	-10%
US control group	1.80	5.49	205%
HK control group	1.72	1.66	-3%

The effect of short selling public disclosure on UK financial equities is a decrease in traded volumes (relative to the pre-ban period). The UK policy measures limit short selling participants, which decreases market volumes and liquidity. The drop in market volumes is representative of assets moving out of the UK towards regimes with relaxed disclosure requirements, such as the United States and Hong Kong. Volumes in Hong Kong remained largely unchanged in contrast to those in the United States, perhaps due to the fact that this smaller market never instituted a disclosure ban. The 2010 Oliver Wyman Financial Services study using data through 2009 showed similar results, with the UK test group decreasing slightly,

<sup>20</sup> Datastream

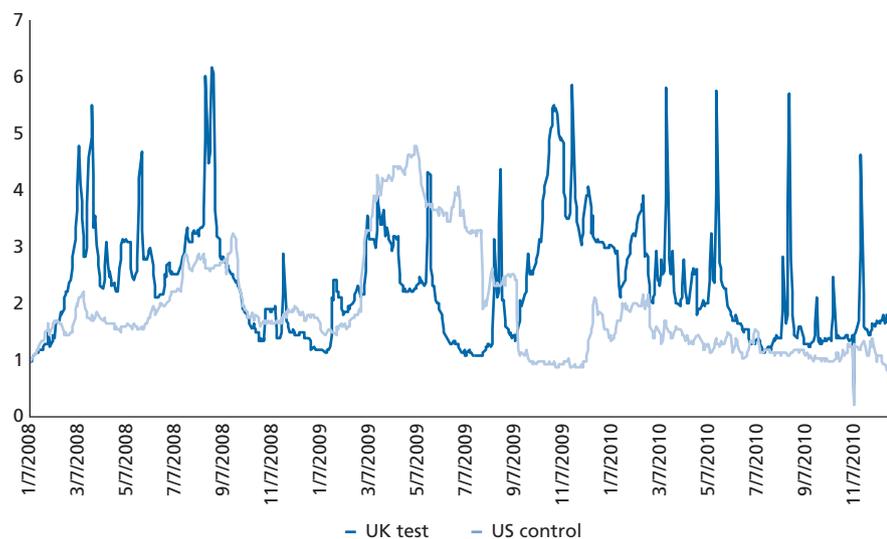
<sup>21</sup> Datastream

the UK control group unchanged and the United States control group increasing significantly.

To examine the impact of disclosure requirements on stock borrowing and stock lending programs, we updated analysis previously presented in the 2010 Oliver Wyman Financial Services study using data from Data Explorers. The aim was to see how the trends had changed when including data from a time period of reduced leverage. The 2010 study using data through 2009 showed that the stock borrow metric decreased for the UK test group but increased for the United States control group.

## 2.6.2. Stock borrow volumes

**Exhibit 12: Stock borrow in US and UK financial equities (normalized to 1/7/2008 = 1.0)<sup>22</sup>**



Note: Chart represents quantity of shares on loan averaged across each group from 1/7/2008 through 12/31/2010

Source: Data Explorers

**Table 2: Stock borrow in US and UK financial equities (normalized to 1/7/2008 = 1.0)<sup>23</sup>**

	Pre-ban	Post-ban	Δ Pre-ban
UK test group	2.75	2.30	-17%
US control group	1.96	1.90	-3%

The quantity of shares on loan remained relatively constant in the United States control group between the pre-ban and post-ban periods. However, the UK test group representing equities subject

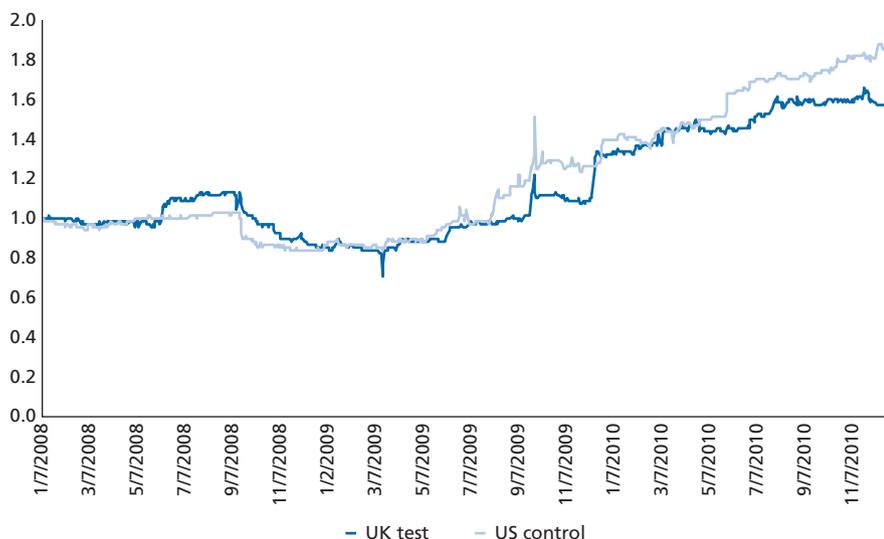
<sup>22</sup> Data Explorers

<sup>23</sup> Data Explorers

to disclosure requirements experienced a larger decrease in stock borrowing activity. This difference was smaller than in the 2010 study.

### 2.6.3. Lendable quantity of equities

**Exhibit 13: Lendable quantity of ban/disclosure-required equities (normalized to 1/7/2008 = 1.0)<sup>24</sup>**



Note: Chart represents lendable quantity of shares averaged across each group from 1/7/2008 through 12/31/2010

Source: Data Explorers

**Table 3: Lendable quantity of ban/disclosure-required equities (normalized to 1/7/2008 = 1.0)<sup>25</sup>**

	Pre-ban	Post-ban	Δ Pre-ban
UK test group	1.03	1.25	21%
US control group	0.99	1.35	36%

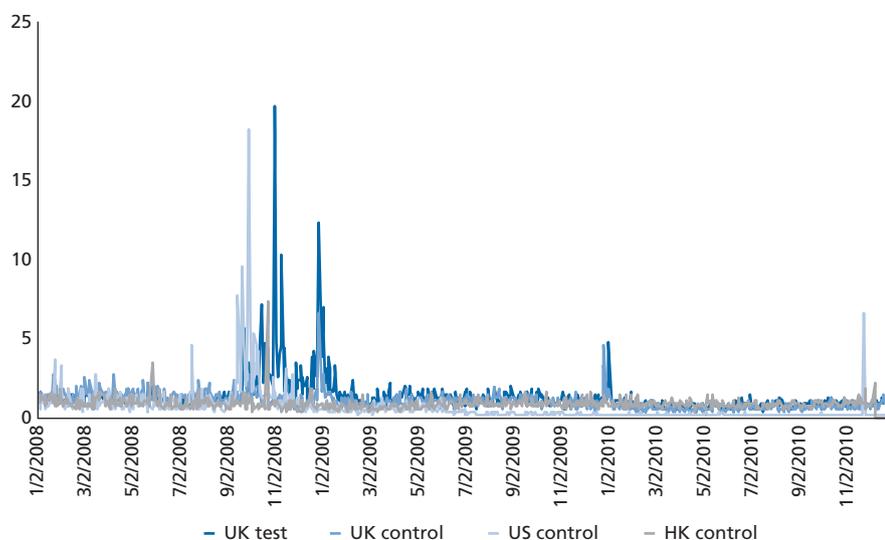
The lendable quantity of shares increased 36% for equities in the United States control group between the pre-ban and post-ban periods. However, the UK test group representing equities subject to disclosure requirements only increased 21%, representing decreased availability of lendable securities. The 2010 Oliver Wyman Financial Services study using data through 2009 noted that the United States securities lending market remained stable after the bans were removed, but the available quantity for loan decreased further in the UK test group.

<sup>24</sup> Data Explorers

<sup>25</sup> Data Explorers

## 2.6.4. Equity bid-ask spreads – market data

**Exhibit 14: Average bid-ask spread (normalized to 1/2/2008 = 1.0)<sup>26</sup>**



Note: Chart represents daily bid-ask spreads at market close averaged across each group from 1/2/2008 through 12/31/2010

Source: Datastream

**Table 4: Average bid-ask spread (normalized to 1/2/2008 = 1.0)<sup>27</sup>**

	Pre-ban	Post-ban	Δ Pre-ban
UK test group	1.16	1.04	-11%
UK control group	1.42	0.85	-40%
US control group	1.08	0.30	-72%
HK control group	0.98	0.83	-16%

The effect of short selling public disclosure on UK financial equities is a smaller decrease in bid-ask spreads (relative to the pre-ban period). An increase in spreads results from decreased market liquidity due to lack of short seller participation. For the UK test group, bid-ask spread decreased by the smallest amount between the pre-ban and post-ban time periods.

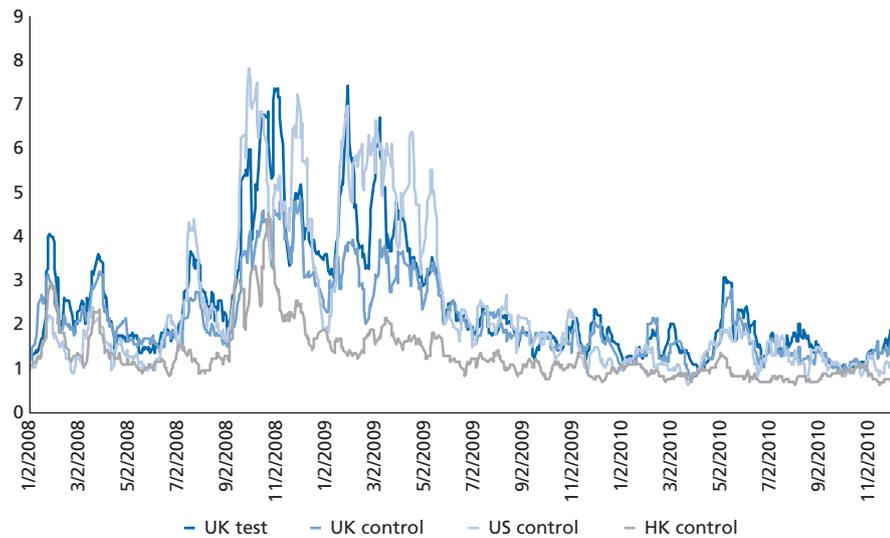
In the 2010 Oliver Wyman Financial Services study using data through 2009, bid-ask spreads increased roughly 50% for the UK test group but were unchanged for the UK control group. Bid-ask spreads for the United States control group decreased slightly.

<sup>26</sup> Datastream

<sup>27</sup> Datastream

## 2.6.5. Equity inter-day volatility – market data

**Exhibit 15: Average inter-day volatility (normalized to 1/2/2008 = 1.0)<sup>28</sup>**



Note: Chart represents daily, 10-day historical volatilities averaged across each group from 1/2/2008 through 12/31/2010

Source: Datastream

**Table 5: Average inter-day volatility (normalized to 1/2/2008 = 1.0)<sup>29</sup>**

	Pre-ban	Post-ban	Δ Pre-ban
UK test group	2.25	2.11	-6%
UK control group	2.01	1.83	-9%
US control group	1.85	2.13	15%
HK control group	1.40	1.04	-26%

Given the decreased volumes and increased bid-ask spreads resulting from short selling public disclosure, it would be expected that inter-day volatility would increase as a sign of poor market liquidity. Volatility decreased for the UK test group but the decrease is smaller than for the UK and Hong Kong control groups. The United States control group shows greater volatility during the post-ban period, perhaps due to volatile movements near the end of the financial crisis. The data series through the end of 2010 shows only a modest effect.

The 2010 Oliver Wyman Financial Services study showed little correlation between public disclosure and increased inter-day volatility. Based on data through 2009, there was not a significant effect on inter-day volatility, with both the UK test and control groups

<sup>28</sup> Datastream

<sup>29</sup> Datastream

increasing by a similar amount, while the increase for the United States control group was larger.

## 2.7. Retail investor segment

### 2.7.1. Case study: Pension industry impact

#### 2.7.1.1. Impact to “man on the street”

Some market participants believe that these proposals have an effect on retail investors as well. While not fully conclusive, the research suggests that end investors are impacted by liquidity and market efficiencies associated with the implementation of these proposals. We examine the pension industry in this section as an illustration of potential impacts on equity market participants.

Because pension funds do not assume directional short positions, public disclosure of short positions does not pose the same threat as it does to funds that rely upon corporate access. However, as large participants in European markets, pension funds’ daily trading activities and longer-term strategic asset allocations are undoubtedly subject to measures of equity market efficiency and performance.

We hypothesize that short selling public disclosure proposals tangibly impact the “man on the street,” i.e. retail investors in the general public. The arguments fall into two categories:

1. Long only revenues decrease – stock lending revenues decrease and trading costs increase
2. Pension investments follow the alternative space out of the EU – Europe is a less efficient market for trading, and long money follows “smart money”

#### 2.7.1.2. Background – global pension industry

The global pension industry has faced a challenging investment environment over the last decade. The OECD and IFSL Research estimate that global pension assets increased 14% from \$25.9 TN at year-end 2008 to \$29.5 TN at year-end 2009 (following a drop of 18% during 2008).<sup>30</sup> However, aging populations and the financial crisis have further strained managers’ ability to fund liabilities and unfunded obligations have grown.

<sup>30</sup> IFSL Research. (2010). Pension Markets 2010.

### 2.7.1.3. Background – UK pension industry

Given its maturity, size, asset allocation trends and substantial participation in a domestic market with short selling disclosure requirements, the UK pension industry represents a useful subject for further examination of the potential, unintended consequences of UK disclosure provisions currently in place, as well as the EC proposals. The UK pension market – the second largest by assets behind the United States – is today confronted with a variety of headwinds to financing outstanding obligations. According to IFSL Research, “the real return on UK pension funds reached 15% in 2009 but the average real return of 1% over the past decade is depressed by four years of negative returns.”<sup>31</sup> This prolonged substandard market performance has only further compounded the unfunded pension liabilities of an aging demographic.

Despite UK pension managers’ gradual reallocation out of equities over the last decade, equities as a percentage of pension assets increased in 2009 (largely due to strong asset class performance) and accounted for approximately 60% of assets (29% in domestic securities and 32% foreign).<sup>32</sup> Any impairment of market liquidity and efficiency that discourages pensions’ equity market participation and accelerates pension reallocation could have a significant impact on the functioning of domestic equity markets.

### 2.7.1.4. Long only revenues decrease – stock lending revenues and trading costs

Pension funds engage in securities lending programs to help offset administrative costs and generate consistent, low-risk revenue streams. According to Roel de Groot, Head of Treasury, KAS Bank, “when combined with an adequate collateral strategy, securities lending has a substantially lower risk profile than any other method of alpha generation.”<sup>33</sup> Institutional investors typically maintain significant long positions in equities for extended periods and are thus well suited for participation in stock borrow/loan programs. However, because short selling is a source of primary demand for stock borrowing, the ability of pensions to realize meaningful returns on their lending programs is highly correlated to the amount of short selling activity in a given equity market. While depressed levels of short selling activity poses a threat to beneficial owners’ lending fees, decreased levels of stock lending consequently hinders market efficiency. For example, ISLA notes: “Market Makers, for example, will

<sup>31</sup> IFSL Research. (2010). Pension Markets 2010.

<sup>32</sup> Towers Watson. (2010). 2010 Global Pension Asset Study. Watson Wyatt Worldwide.

<sup>33</sup> International Securities Lending Association. (2009, March 27). Securities lending: Your questions answered. ISLA.

enter into short positions to hedge long positions taken when they buy shares from clients. Their ability to provide liquidity to clients relies on a well-functioning share borrowing market.”<sup>34</sup> During the financial crisis, many pension funds – wary of lending securities to financial institutions with uncertain futures – ceased lending altogether for fear of losses in cash collateral programs. In early 2009, Chris Hitchin, Chairman of the National Association of Pension Funds, urged UK funds: “Don’t abandon your securities lending programs. Re-starting stock lending programs will help provide the markets with much needed liquidity. Having stock to lend and borrow is crucial for efficient markets.”<sup>35</sup>

In August/September 2009, Data Explorers surveyed the top 50 UK pension funds on their stock borrow/loan activity.<sup>36</sup> According to the survey, 68% of respondents participate in a lending program and, of these, 53% generate at least £1 MM annually (post split with agent) in fees. Given that these funds represent some of the largest pensions in the UK – some with liabilities in excess of £10 BN – any revenue lost due to diminishing short selling activity is meaningful. In an environment of growing unfunded liabilities and decreased reliance on equities for generating returns, lending activities offer a low-risk, predictable means of liability and expense reduction. Public UK pension fund reform has created an increased need for managers to rein in service costs, which the Public Sector Pensions Commission estimates at £35 BN for 2010-2011.<sup>37</sup> The London Stock Exchange Group notes that “given the statutory requirement that the personal accounts schemes be low cost schemes,” securities lending may allow funds to finance scheme expenses.<sup>38</sup>

We examined 2008-2010 pension fund stock lending revenue data in four countries with large pension industries and varying equity market regulatory approaches – the UK, United States, Hong Kong and Japan.

34 International Securities Lending Association. (2009, March 27). Securities lending: Your questions answered. ISLA.

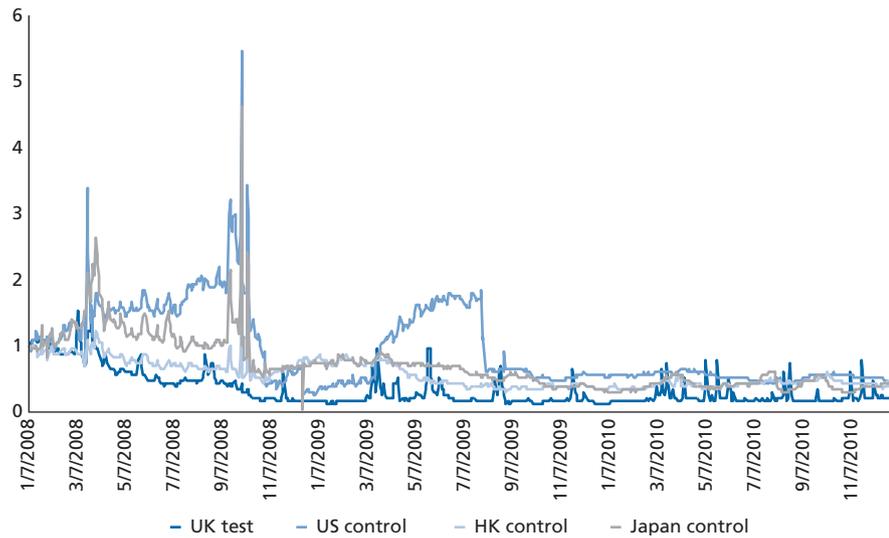
35 International Securities Lending Association. (2009, March 27). Securities lending: Your questions answered. ISLA.

36 Data Explorers. (2009). UK pension fund securities lending survey results.

37 Public Sector Pensions Commission. (2010). Reforming public sector pensions: Solutions to a growing challenge. Institute of Directors.

38 London Stock Exchange Group. (2009, August 14). London Stock Exchange Group response to the Personal Accounts Delivery Authority: Designing an investment approach discussion paper.

**Exhibit 16: Stock lending revenues (normalized to 1/7/2008 = 1.0)<sup>39</sup>**



Note: Chart represents global pensions' stock lending revenues from equities across different equity markets from 1/7/2008 through 12/31/2010. The volatility in the UK data is attributable to stock borrowing due to purposes other than short selling (e.g. scrip hedging)

Source: Data Explorers

**Table 6: Stock lending revenues (normalized to 1/7/2008 = 1.0)<sup>40</sup>**

	Pre-ban	Post-ban	Δ Pre-ban
UK test group	0.71	0.23	-67%
US control group	1.58	0.73	-54%
HK control group	0.82	0.47	-43%
Japan control group	1.25	0.51	-59%

The decrease in pension lending revenues is greater than 40% between the pre-ban and post-ban periods in each market, with the largest decrease in the UK. Revenue declines are attributed in part to global deleveraging given reduced risk appetite after the financial crisis. The loss of stock lending revenue as low-risk alpha may contribute to decreased equity returns, which could limit future pension participation. Decreases in stock lending programs likely impact market liquidity and trading costs as well.

It is challenging to quantify the broader costs to the pension industry and the full impact of decreased pension involvement in domestic equity markets. However, we hypothesize that if pensions are deterred from making equity allocations, then they could direct a higher proportion of capital to domestic corporate and high yield debt. Increased demand for credit could lead to large scale bond buying that pushes yields lower. Although returns on pensions' bond portfolios would be positive, problems could arise because many UK pensions

<sup>39</sup> Data Explorers

<sup>40</sup> Data Explorers

reference investment grade corporate bond yields for internal discount rates. Therefore, given the inverse relationship between funds' discount rates and future liabilities, low yielding risk-free and investment grade credits increase unfunded liabilities and could threaten pensions' ability to fund future obligations. Consequently, pensions' search for yield may take them outside UK markets to favor already growing allocations to foreign equities, emerging market debt, and alternative assets such as foreign real estate.

#### **2.7.1.5. Pension investments follow the alternative space out of Europe<sup>41</sup>**

The second impact to pension funds is the loss of Europe as a viable investment opportunity. Fund managers recognize that short selling disclosure proposals contribute to decreases in efficient equity trading in Europe and have begun moving capital elsewhere. As hedge fund liquidity departs the region, pension fund assets are likely to follow. One fund manager noted: "Regulators need to understand that these types of proposals might discourage capital investments in the region. Pension funds are net long entities with certain short strategies, and if short strategies are affected, pensions (just like hedge funds) can't pursue their strategy in Europe. They will have to entertain pulling their shorts and longs and following hedge funds out of the region." A global fund highlighted a similar linkage: "If hedge funds leave the markets then long only investors like pension funds or insurance companies will follow because funds are a provider of liquidity and these type of long only funds have a history of following 'smarter money.' Pensions and insurance companies would trail off into other geographies or follow the funds to more liquid markets."

41 Oliver Wyman Financial Services interviews with fund managers

## 3. Conclusions and recommendations

Based on data analysis and interviews with fund managers and market participants, we have developed a series of recommendations for consideration by the European regulatory community.

### 3.1. The disclosure policy proposals are complicated and will have a substantial and wide ranging impact. Regulators should consider those implications fully as part of the decision-making process

Regulators and policy makers have numerous challenges before them as they consider these and other potential policies that might redress this topic. The ramifications of those decisions can be far ranging as we note in our study. Those required policy approaches might vary significantly depending on the outcome of this assessment. Key areas for further analysis include systemic stability, market integrity and investor protection. It is also important to determine whether regulatory instruments proposed in this context might have negative implications. Such a full analysis of each issue with representation from all parties will help regulators to develop practical solutions with an understanding of potential ramifications.

### 3.2. The regulatory approach which is based on the disclosure of individual net short positions above a specified threshold is not effective in meeting the needs of the public, industry participants or regulators

Funds nimbly adjust trading strategies to reflect changes in market infrastructure and regulatory practices. As a result of short selling public disclosure proposals, many funds are already altering trading habits. Extending the public disclosure rules to the entire EU will accelerate this process. For instance, when limited in the number of potential short positions, funds curtail their long positions in tandem. Funds tend not to think in terms of thresholds. Managers

design optimal trading strategies without considering threshold limits and then adjust the actual implemented strategy to trade around the thresholds (e.g. trading just below the threshold). As a result, markets may become more opaque and regulators may find it more challenging to understand what is happening in the market. Hence, we believe that at its face this approach fails at several levels. First, it is operationally burdensome to funds, regulators and policy makers. Second, funds will and have traded ‘around’ whatever arbitrary figure has been established. The approach we believe has left most funds either trading under the guideline or shifting assets out of Europe – neither of which is desirable.

### **3.3. If thresholds are enacted, they should be raised to reflect meaningful ownership interest because public disclosure at low thresholds distorts markets**

Public disclosure of short selling positions is rife with concerns for the alternative industry including operational challenges in reporting for funds as well as regulators and policy makers. There has been no justification shown for public disclosure from a market efficiency or systemic stability perspective. On the contrary, the negative effects include decreased market efficiency and a higher risk of disorderly markets as a result of “herding.” When reputable large funds enter publicly visible short positions, other funds flock to similar positions, leading to increased volatility. As a result of these considerations, public disclosure thresholds should be raised to reflect significant levels. Hypothetically, the current 0.2% threshold could be raised to 1.0%, and the current 0.5% threshold could be increased to 3.0% or even higher thresholds.

### **3.4. Public vs. private disclosure and “hot lists” should be considered on a trial basis**

Potential solutions for short selling disclosure include differentiated thresholds for public vs. private disclosure as well as the use of the private sector to compile “hot lists” of short positions, i.e. lists of securities whose aggregate short position has reached a certain threshold level. These proposals have gained traction with funds, and trial implementation across the industry would help to gauge actual effects in the market.

Funds in the study have argued against attribution of short positions. The data that the market requires currently exists in a proxy form through third-party sources such as Data Explorers. Managers have stated that, if a proxy is insufficient, then they would be agreeable to disclosure to regulators. All of the funds interviewed have indicated that they would support aggregated public disclosure. As noted above, the risks of misinterpretation and short squeezes may increase in the event that full public disclosure is broadly enacted. The trial proposal would establish different thresholds for public vs. private disclosure (e.g. public disclosure at 1.5% and private disclosure at 0.75%) with the ability to adjust threshold levels after the trial period, as an illustration.

For the second proposal, private sector data sources such as prime brokers and exchanges would compile “hot lists” of short positions and present these to regulators at regular intervals. Prime brokers would aggregate data to determine the total market short position in each equity security, which would trigger posting to the “hot list” for regulators at a certain threshold level. This proposal would shift the operational burden away from individual funds, thereby leveling the playing field for small funds with fewer reporting resources available. This system would also allow private sector entities with robust data infrastructure already in place to provide operational support to regulators.

### **3.5. For Europe, the most complete approach is a regulatory framework in line with other financial jurisdictions such as the United States and Hong Kong, where private disclosure to regulators and aggregated anonymous public disclosure of, for example, short interest, has proven to be the most balanced solution**

Numerous G20 communiqués have underlined the need to maintain a high level of international regulatory consistency. However, as a response to the crisis, the European Member States applied stricter rules relative to other important financial jurisdictions such as the United States or Hong Kong. During the last two years, the framework implemented in the United States and Hong Kong has delivered significantly improved levels of market transparency

without the negative impacts of disclosure of individual positions. These approaches work in tandem with other regulatory controls in place such as market circuit breakers. Private disclosure has worked successfully for Hong Kong regulators. As a result, Asian countries have seen funds migrate away from the European regulatory environment that some have characterized as overbearing and many in our project noted will deter them from further or expansive investing in the future. Adopting regulatory practices consistent with the international practice will be key if European markets wish to compete for alternative as well as more traditional institutional capital.

# Appendix

## Data on interview participants

We interviewed a broad variety of market participants to gather quantitative data and qualitative insight from hedge funds, institutional managers and dealers. The diversity of information was large as many of these players crossed strategy, asset class and region.

### Characteristics of buy-side entities

<b>AuM</b>	< \$10 BN = 39% \$10-20 BN = 39% > \$20 BN = 22%
<b>Strategy</b>	Multi strategy = 65% Long short = 22% Distressed = 4% Systematic = 4% Fixed income = 4%
<b>Region</b>	US = 23% EU = 35% Global: 42%
<b>Horizon</b>	Short = 50% Medium = 23% Long = 23% Varies = 4%
<b>Alternative vs. long book</b>	Both = 69% Alternative = 31%

## Characteristics of hedge funds

<b>AuM</b>	< \$10 BN = 41% \$10-20 BN = 41% > \$20 BN = 18%
<b>Strategy</b>	Multi strategy = 59% Long short = 29% Distressed = 6% Systematic = 6%
<b>Region</b>	US = 28% EU = 22% Global: 50%
<b>Horizon</b>	Short = 61% Medium = 28% Long = 11%
<b>Alternative vs. long book</b>	Both = 56% Alternative = 44%

## Characteristics of institutional managers

<b>AuM</b>	< \$10 BN = 33% \$10-20 BN = 33% > \$20 BN = 33%
<b>Strategy</b>	Multi strategy = 83% Fixed income = 17%
<b>Region</b>	US = 13% EU = 63% Global: 25%
<b>Horizon</b>	Short = 25% Medium = 13% Long = 50% Varies = 13%
<b>Alternative vs. long book</b>	Both = 100%

## Equity securities analyzed

### Datastream data for daily volumes, bid-ask spreads and inter-day volatility

UK test group	UK control group	US control group	HK control group
Aberdeen Asset	3i Group PLC	American Interna	Bank Of China-H
Admiral Group	Amlin PLC	Bank Of America	Bank Of Commun-H
Aviva PLC	Ashmore Group PLC	BB&T Corp	Bank East Asia
Barclays PLC	Catlin Group Ltd	Citigroup Inc	Boc Hong Kong Ho
Brit Insurance	Gartmore Group	Fifth Third Banc	China Citic Bk-H
Close Bros Grp	Henderson Group	Genworth Financial	China Const Ba-H
F&C Asset Manage	ICAP PLC	Hartford Finl Sv	China Ever Ltd
Hsbc Hldgs PLC	IG Group Holding	Hudson City Bncp	China Life Ins-H
Investec PLC	Intermediate Cap	Huntington Banc	China Taiping In
Legal & Gen Grp	International Pe	JP Morgan Chase	Dah Sing Banking
Lloyds Banking	London Stock Ex	Keycorp	Guotai Junan
Old Mutual PLC	Man Group PLC	Metlife Inc	Hang Seng Bk
Provident Fin	Paragon Grp Cos	PNC Financial Se	Hong Kong Exchn
Prudential PLC	Resolution	Prudentl Finl	Picc Property &
Royal Bk Scotland	Tullett Prebon P	Regions Financia	Ping An Insura-H
RSA Insurance G		Suntrust Banks	Rexlot Holdings
Schroders PLC		US Bancorp	Sun Hung Kai Co
St James's Place		Wells Fargo & Co	Value Partners
Standard Charter			
Standard Life			

### Data Explorers data for stock borrow volumes and lendable quantity of equities

UK test group	US control group
Aberdeen Asset Management Plc	American International Group Inc
Admiral Group Plc	Bank Of America Corp
Aviva Plc	Bb&T Corporation
Barclays Plc	Citigroup Inc
Brit Insurance Holdings NV	Fifth Third Bancorp
Close Brothers Group Plc	Genworth Financial Inc
F And C Asset Management Plc	Hartford Financial Services Group Inc
Hsbc Holdings Plc	Hudson City Bancorp Inc
Investec Plc	Huntington Bancshares Incorporated
Legal And General Group Plc	Jpmorgan Chase & Co
Lloyds Banking Group Plc	Keycorp
Old Mutual Plc	Metlife Inc
Provident Financial Plc	The Pnc Financial Services Group Inc
Prudential Plc	Prudential Financial Inc
Royal Bank Of Scotland Group Plc	Regions Financial Corp
Rsa Insurance Group Plc	Suntrust Banks Incorporated
Schroders Plc	Us Bancorp
St.James's Place Plc	Wells Fargo & Company
Standard Chartered Plc	
Standard Life Plc	



# Bibliography

Beber, A. and Pagano, M. (2009). Short-Selling Bans around the World: Evidence from the 2007-09 Crisis.

BNY Mellon Asset Servicing. (2010). European pension funds. Issue 1 2010.

Clifton, M. and Snape, M. (2008, December 19). The Effect of Short-selling Restrictions on Liquidity: Evidence from the London Stock Exchange.

Credit Suisse. (2008, November 12). The Blame Game: What Caused Spreads to Widen. AES Analysis.

Data Explorers. (2009). UK pension fund securities lending survey results.

European Commission. (2010, September 15). Proposal for a regulation of the European Parliament and of the Council on Short Selling and certain aspects of Credit Default Swaps. [http://ec.europa.eu/internal\\_market/securities/docs/short\\_selling/20100915\\_proposal\\_en.pdf](http://ec.europa.eu/internal_market/securities/docs/short_selling/20100915_proposal_en.pdf)

European Commission. (2010, December 6). Report on Sovereign CDS.

European Commission. (2010, December 8). Public Consultation. Review of the Markets in Financial Instruments Directive (MIFID). [http://ec.europa.eu/internal\\_market/consultations/docs/2010/mifid/consultation\\_paper\\_en.pdf](http://ec.europa.eu/internal_market/consultations/docs/2010/mifid/consultation_paper_en.pdf)

IFSL Research. (2010). Pension Markets 2010.

International Securities Lending Association. (2009, March 27). Securities lending: Your questions answered. ISLA.

London Stock Exchange Group. (2009, August 14). London Stock Exchange Group response to the Personal Accounts Delivery Authority: Designing an investment approach discussion paper.

Margie Lindsay, Hong Kong regulator predicts continued success in attracting hedge fund managers, <http://www.hedgefundsreview.com/hedge-funds-review/news/1929653/hong-kong-regulator-predicts-continued-success-attracting-hedge-fund-managers> (December 2010)

Marsh, I. and Niemer, N. (2008, November 30). The Impact of Short Sales Restrictions.

Oliver Wyman. (2010). The effects of short-selling public disclosure regimes on equity markets: A comparative analysis of US and European markets.

Public Sector Pensions Commission. (2010). Reforming public sector pensions: Solutions to a growing challenge. Institute of Directors.

Towers Watson. (2010). 2010 Global Pension Asset Study. Watson Wyatt Worldwide.

Oliver Wyman is an international management consulting firm that combines deep industry knowledge with specialized expertise in strategy, operations, risk management, organizational transformation, and leadership development.

## About the authors

**Bradley P. Ziff** is a Partner in Oliver Wyman's Finance & Risk and Corporate and Institutional Banking Practices.

**Carey Hsu** is an Engagement Manager in Oliver Wyman's Corporate and Institutional Banking Practice.

For more information please contact the marketing department by email at [info-FS@oliverwyman.com](mailto:info-FS@oliverwyman.com) or by phone at one of the following locations:

North America

+1 212 541 8100

EMEA

+44 20 7333 8333

Asia Pacific

+65 6510 9700

Copyright © 2011 Oliver Wyman. All rights reserved. This report may not be reproduced or redistributed, in whole or in part, without the written permission of Oliver Wyman and Oliver Wyman accepts no liability whatsoever for the actions of third parties in this respect.

The information and opinions in this report were prepared by Oliver Wyman.

This report is not a substitute for tailored professional advice on how a specific financial institution should execute its strategy. This report is not investment advice and should not be relied on for such advice or as a substitute for consultation with professional accountants, tax, legal or financial advisers.

Oliver Wyman has made every effort to use reliable, up-to-date and comprehensive information and analysis, but all information is provided without warranty of any kind, express or implied. Oliver Wyman disclaims any responsibility to update the information or conclusions in this report. Oliver Wyman accepts no liability for any loss arising from any action taken or refrained from as a result of information contained in this report or any reports or sources of information referred to herein, or for any consequential, special or similar damages even if advised of the possibility of such damages.

This report may not be sold without the written consent of Oliver Wyman.