

REPORT ON TRANSPARENCY OF SHORT SELLING



**Report of the Technical Committee of the
International Organization of Securities Commissions**

June 2003

Background and mandate

Short selling, broadly defined as the sale of securities that the seller does not own (see page 3), has long been a practice on which there have been sharply differing views. Some consider it a practice that adds to market efficiency; others see it as a practice that benefits markets but which also calls for controls; yet others consider that, on balance, it is a practice more likely to damage markets than enhance them. As a result, different jurisdictions have developed different regulatory approaches to short selling. While all the jurisdictions of the IOSCO Technical Committee Standing Committee on the Regulation of Secondary Markets ('SC2') members¹ permit short selling, about half regulate what may be sold short and/or the way in which short sales are conducted.

Some jurisdictions also have arrangements to bring a degree of transparency to short sales. They consider it important that market users have as much information on current trading dynamics as possible. While IOSCO has not recommended full transparency of short sales, the *IOSCO Objectives and Principles of Securities Regulation* state that: 'Disclosure of short sales and securities lending (or at least their reporting to the regulator) is a tool for the further reduction of risk.'² In addition, the IOSCO Emerging Markets Committee ('EMC'), in a discussion paper published in May 1997, concluded that: 'In order to prevent short selling from potentially being used for manipulative purposes, regulators should provide as much transparency as possible by regularly disclosing to the public the level of short selling activity in the market, so that its effect can be anticipated and any resulting change in market condition can be fully understood. The information is also a useful input for market participants in making their trading decisions.'³

Since that report, there has been continuing evolution of trading strategies employing short selling. Through the recent bear market, there has also been renewed public concern in some countries over the role of short selling in exacerbating market declines and increasing short-term volatility. In light of this, the Technical Committee requested that SC2 prepare a report examining the role that greater transparency of short selling might play in securities markets and the forms such transparency might take.

The report's aim is to assist regulators in assessing:

- the benefits and drawbacks attaching to transparency of short sales;
- the ways in which transparency regimes can be structured and implemented;
- any issues that might arise in respect of different transparency regimes being applied to short selling of the same instrument by different market operators and/or in different jurisdictions.

Scope and structure of paper

The Technical Committee recognises that the case for the regulation of short selling varies from jurisdiction to jurisdiction, depending on a range of domestic factors. This paper does not therefore offer views on whether short selling should, in general, be regulated. However, it does provide background on the role of short selling in today's markets, on the risks that may arise to market

¹ A list of SC2 members can be found at the end of this report.

² *IOSCO Objectives and Principles of Securities Regulation*, 13.11.3, IOSCO Report, September 1998

³ *Short Selling and Securities Lending: Issues for Consideration*, IOSCO Emerging Markets Committee Report, May 1997

orderliness and investor protection, and the principal tools currently used to mitigate those risks. This provides context to help regulators in considering the role that transparency of short selling might play in their markets. In particular, it may assist them in considering the potential usefulness of transparency as an incremental ‘tool’ in support of more direct controls, or as a stand-alone measure that they might wish to deploy in substitution for other measures.

The rest of the paper is structured as follows:

- I. Introduction

- A. Definition of short selling
- B. Market role and benefits of short selling
- C. Extent of short selling

- II. General regulatory issues

- A. Regulatory concerns
- B. Regulatory approaches and tools

- III. Transparency issues

- A. Potential benefits of transparency
- B. Potential drawbacks of transparency
- C. Symmetry between long and short disclosure
- D. Transparency to regulators

- IV. Implementation issues when introducing a transparency regime

- V. Conclusions and recommendations

In addition, appendices cover:

- 1. Uses of short selling;
- 2. Short selling and stock lending data
- 3. A review of economic literature
- 4. The role of stock lending

In preparing the paper, SC2 has conducted a survey of member jurisdictions’ general approach to short selling. Responses form an annexe to this report. It has also reviewed academic work in this area and taken soundings of current views in the industry, in particular through consultation with the IOSCO Consultative Committee.

I. Introduction

A. Definition of short selling

In the jurisdiction of many SC2 members, the term ‘short sale’ is not specifically defined in primary legislation and has no formal legal status. Yet most regulators and market users have a common view as to what a short sale is. The term is therefore used in this report to describe a transaction in

which, in broad terms, a person sells securities which they do not own⁴ and which, at the point of sale, they have not entered into an agreement to purchase.⁵

Short sellers therefore need to make arrangements to cover their delivery obligations before they fall due.⁶ They normally do this in one of two ways:

- by making a matching purchase at some point following the sale but before delivery falls due (in which case the short position may sometimes last no longer than just a few moments);⁷
- by borrowing an equivalent amount of securities before delivery falls due, either before they enter into the sale or at some time between making the sale and when required to make delivery.⁸

However, in some instances short sellers make no delivery arrangements, either before or following the normal settlement date, and leave the open position to run so long as market rules allow or until the market or settlement system takes action to close the position out.⁹

Where stock has been borrowed or is known to be available at the time of sale, the transaction is commonly viewed as a ‘covered’ short. Other transactions are commonly referred to as ‘naked’ shorts. Different jurisdictions use the term ‘naked’ in slightly different ways, though the common regulatory concern attaching to the concept is that a seller does not own the stock he is selling and has made no provision to borrow or otherwise provide for delivery of stock to the purchaser by the settlement date.

In any event, clarity of definition is a core issue when establishing effective trading controls and reporting and disclosure requirements for short selling. This is addressed more fully in part IV.

Classifying short sales	
Deliverability at point of sale	Classification
Seller has purchased but not yet received	Not normally considered to be a short sale (though

⁴ In most jurisdictions a borrower of securities acquires legal ownership, because he needs to deliver legal ownership to the buyer. Even so, a sale completed with borrowed stock is normally considered a short sale.

⁵ This is generally only a starting point. Occasionally, the owner of a long position may sell shares but deliver using borrowed stock rather than using stock held in his inventory, possibly for strategic or fiscal reasons. At the other end of the spectrum, some would view a sale of stock that a seller legally owns but is unable to deliver – for instance, because delivery to him was delayed - as a ‘technical’ short.

⁶ The concept of the need to cover is also captured in the definition of short selling adopted in the IOSCO/CPSS report ‘Securities Lending Transactions: Market Development and Implications’ (July 1999). This defines short selling as ‘a sale of securities which the seller does not own and thus must be covered by the time of delivery; a technique used (1) to take advantage of an anticipated decline in the price or (2) to protect a profit on a long position.’

⁷ Even where a short seller makes a matching purchase before settlement falls due, he may still need to borrow stock to meet his delivery obligations in respect of the sale unless he can accelerate settlement of the covering purchase.

⁸ Most short sellers have arrangements in place to enable them to deliver the securities they sell, whether or not they have possession of those securities at the moment they enter the sale. The borrowing process is described in footnote 17 on page 6.

⁹ In many markets, the position will be closed out under exchange or clearing house ‘buying-in’ rules. Broadly, these rules generally provide a process under which undelivered securities can be acquired and delivered to the purchaser, with the costs of the exercise charged to the party that has failed to deliver.

securities.	it might be considered a technical short if delivery is deferred beyond the intended settlement date).
Seller has exercised an option, warrant, conversion or other contractual right that would lead to delivery.	Not normally considered to be a short sale.
Seller has rights to exercise an option, warrant, conversion or other contractual right but has not exercised such rights.	Normally considered a short sale.
Seller has borrowed securities.	Normally considered a short sale.
Seller has agreement to borrow securities.	Normally considered a short sale.
Seller has made no arrangements to borrow securities at the point of sale, or otherwise prior to settlement date.	Normally considered a (naked) short sale.

B. Market role and benefits of short selling

Short sales are used both by investors and market participants and serve many purposes. Many short sales continue to be made for the primary purpose of selling ‘high’ and buying back ‘low’. But in today’s markets, that is far from the only purpose. Increasingly, trading strategies also involve short sales where the direction of price is irrelevant. In some of these cases, the investor’s profit depends solely on the under-performance of the securities sold short relative to the performance of the securities (or some related instrument) in which the investor has taken a long position. Whether the prices of those positions rise or fall is immaterial: all that matters is that the short position should perform less well than the long one.

Even where regulators consider that some aspects of short selling require regulation, they normally recognise that short selling can contribute to market efficiency. The potential benefits include:

- helping to maintain efficient pricing by reversing, or containing, excessive valuations placed on security prices;¹⁰
- facilitating dealer liquidity provision, particularly where that service guarantees liquidity on a continuous basis;¹¹
- providing a risk management tool for those needing to offset ‘long’ exposures;¹²
- keeping related prices properly aligned (through arbitrage);
- assisting, within approved dealing and stabilisation rules, with facilitating new issues;

¹⁰ Market users aiming specifically to profit from price corrections can play an important role in the market that many longer-term holders of those securities may have less incentive to play. Index funds, for example, an increasingly significant force in many markets, are interested solely in matching index performance and have no interest in forming judgements as to whether securities are fundamentally over or under-valued. Pension and insurance funds too normally continue to hold their securities, or at least the major part of their holdings, even when those securities become temporarily over-valued (though, increasingly, they may also contemplate using derivatives to give themselves downside protection, and the counterparty selling that protection may in turn hedge its risk in the cash market, thus generating a short sale indirectly).

¹¹ By going short, a market maker or dealer can meet a customer buy order when it does not hold the relevant securities in inventory, thus facilitating liquidity and continuous trading.

¹² For instance, where a dealer has entered into an agreement to purchase securities at a future date, it may hedge the market risk by short selling the securities.

- facilitating the development of more complex and more sophisticated trading strategies (e.g. statistical arbitrage, pairs trading);
- adding to overall liquidity and trading capacity.

Appendix 1 provides additional background on short selling and some examples of strategies using short sales.

C. Extent of short selling

Both regulatory and public knowledge of the extent of short selling vary considerably from country to country. Clearly, jurisdictions in which there are reporting and disclosure requirements are likely to be better informed about the extent of short selling activity than jurisdictions where there are no such requirements. However, even where there are no formal controls on short selling, regulators can often obtain some approximate idea of short selling activity from good market intelligence or by monitoring short selling proxies such as stock lending data.¹³

Figures for the short position on the New York Stock Exchange indicate an average outstanding short position of around 1.5% of market value.¹⁴ In the UK, where there is no regulation of short sales, stock lending, which supports a number of activities in addition to short sales, has often run at around 2% (or more) of market value. While these figures suggest that overall short positions are not large in the context of the total market value of issued securities, they obviously vary considerably among individual issues.

More significantly, perhaps, the size of short positions becomes far more material when assessed against daily trading volumes. This is why regular users of short selling for strategic purposes normally take a close interest in the liquidity characteristics of the stocks they wish to sell short, particularly the relationship between the proposed size of their short position and the time, on the basis of average daily turnover, in which they could (normally) close out the position without market impact. For example, in a security in which annual trading volume (over, say, 250 trading days) approximates to the total number of shares in issue, an outstanding short position of 1% equates to 2.5 days' average turnover.¹⁵

II General regulatory issues

Short selling has been a subject of ongoing public debate for a long time. This largely reflects popular perceptions of, and concerns about, short selling as an essentially speculative activity with the ability to drive prices lower than they would otherwise be and to destabilise markets in individual securities or as a whole.

¹³ To the extent that short sales are settled by use of borrowed stock (and stock borrowing is identifiable in a centralised settlement system), stock lending figures may be a useful proxy measure of short selling. This is discussed in more depth in part IV and appendix 4.

¹⁴ Figure derived from New York Stock Exchange Fact Book.

¹⁵ The NASDAQ Stock Market's monthly publication of open short interest positions includes a calculation of the number of days' share volume represented by the short position. For example, the total short interest in National Market securities at mid-March this year equated to 3.39 days' average daily share volume in those stocks. Short interest in NASDAQ SmallCap Market securities represented 1.78 days' average daily volume in those stocks. (See NASDAQ monthly press releases on short interest.)

While short selling undoubtedly presents issues for markets and regulators, as discussed in the rest of this section, it is worth stressing at the outset that short selling is frequently demonised on the basis of misconceptions. For instance, the common perception of short selling as costless speculation is largely inaccurate. Over the very short-term – usually the trading day – it may be possible in some markets to go short on an uncovered basis, offsetting or closing the position before trading ends and settlement obligations lock in. Additionally, some countries are more relaxed than others in permitting naked short sales to remain unsettled for considerable periods.¹⁶

Generally, going short both involves short sellers in significant cost and exposes them to significant risk. In particular, they will normally be required to borrow stock to deliver to the purchaser on the other side of the trade. Borrowing in most jurisdictions effectively equates to purchasing stock from a lender. That means paying the full market price, plus margin and fees, in either cash or securities.¹⁷ Moreover, a person who shorts a stock is exposed to potentially substantial additional costs – theoretically, an unlimited loss - if the price of the shorted security rises rather than falls.¹⁸

A. Regulatory concerns

Most concerns about short selling flow from the special capacity of short selling to add an incremental, arguably artificial, weight of selling to the more natural weight of ‘long’ sales.¹⁹ This raises questions as to the potential for this incremental flow of stock to:

- bring about disorderly markets;
- facilitate market abuse.

In addition, market regulators may also be concerned about the potential for short selling, particularly ‘naked’ short selling, to create settlement disruption.

Short selling does, of course, also raise a wider set of issues. These include suitability for private investors and appropriate protections²⁰, together with the financial exposures of firms undertaking short selling or involved in stock lending or borrowing. These risks are not a focus of this paper.

¹⁶ This will not necessarily be costless if there are significant margin requirements for open positions and significant penalties when buy-in ultimately occurs (e.g., when the market moves against the short seller and the purchaser is entitled to have the securities ‘bought in’ at the current market price and charge the seller the excess cost over the original purchase price).

¹⁷ Stock borrowing normally involves the ‘borrower’ acquiring securities from the ‘lender’ (with an agreement to resell an equivalent number of the same securities at the same price at some future time) because the short seller’s counterparty will want legal title to the shares he buys. The short seller normally collateralises this ‘loan’ by delivering cash or other securities. This collateral is returned when the borrowing is unwound - or retained if the borrower defaults. In some jurisdictions, borrowing may be carried out by the dealer executing the short sale, often using the pool of customer margined securities or its own inventory, but also by making arrangements with another institution.

¹⁸ The stock required for settlement is, in any event, not always available to borrow. Some stockholders may be reluctant, particularly in a period of share price weakness, to lend their shares to support a sale that is likely to lower the market value of their investment. That said, many long-term institutions do increasingly view stock lending fees as a useful way of enhancing returns on their holdings, and in many markets those selling short can access significant amounts of securities.

¹⁹ For the purposes of this paper, sales of securities which the seller owns and has not needed to borrow.

²⁰ In respect of investor protection, regulators may be particularly concerned about a short seller’s exposure if the market moves up rather than down. In these cases, the investor is exposed to a loss that will be uncapped so long as the position stays open. Regulators generally address this by requiring intermediaries to consider the suitability of the transaction for the particular client, by appropriate risk warnings and by establishing margin requirements sufficiently

a. Disorderly markets

Paradoxically, the perceived major benefit of short selling – the more rapid repricing of over-valued securities than would otherwise be the case – may also be its Achilles heel. This is because the extent and speed of these ‘corrections’ may themselves create disorder.

For instance, short sales may occur so rapidly that a price goes into significant decline before other market users have an opportunity to step in with fresh buying orders. Alternatively, the speed and/or weight of selling may cause potential buyers to stand back from the market because they are uncertain exactly what is occurring. In some cases, a precipitous decline caused by short selling may even panic ‘long’ holders of stock into selling.

Concerns may therefore be twofold. First, that the process of decline may itself be disorderly. Second, that the outcome of any decline may be an ‘overshoot’ on the downside great enough to trigger undesirable secondary consequences. These could include, for example, problems for an issuer (resulting, perhaps, from customers or lenders inferring concerns about its commercial prospects from the share price decline), further forced selling by institutions needing to meet regulatory solvency ratios, or even pressure on other areas of public policy.²¹

None of these is to say that short sales necessarily cause disorderly conditions, or that disorderly conditions cannot arise from long sales. The regulatory concern is that short sales may make the risk of disorderly markets higher than it might otherwise be. The regulatory judgement is whether, in the circumstances, this warrants regulatory intervention.

b. Market abuse

A second regulatory concern lies in the way in which short selling may be used to assist market abuse. That does not make short selling abusive in itself. But its ability to add incremental weight to a downtrend, or to support insider dealing by those with adverse information about an issuer, clearly makes it a potentially useful tool for those who are intent on abusing a market.

Precisely what regulators consider constitutes manipulative activity varies between jurisdictions. But selling, accompanied by false rumours designed to encourage others to sell, is a clear case of abusive behaviour. Selling in an attempt to move a price to a different level with a view, say, to triggering a much larger profit (or reduce a loss) on a related transaction, e.g. a related derivative, enters a greyer area. But behaviours designed to position prices, distort markets or mislead investors normally constitute, or at least sit on the edge of, market abuse. The abuse is the same irrespective of whether the selling is long or short, but short selling may well increase the scope to carry out the abuse.

high that there should be opportunity for an intermediary to close out the position and cap the loss as soon as margin levels are exhausted.

²¹A notable example of concern over the wider financial impact of sustained short selling was the Hong Kong authorities’ concern during the 1997 Asian crisis. In this case, hedge funds took advantage of the Hong Kong currency board mechanism. They on one hand attacked the Hong Kong currency and on the other hand built up large short selling open positions. The attack on the Hong Kong dollar caused interest rates to rise, which in turn pushed down stock prices. The rapid decline in stock prices and the weakened Hong Kong currency caused panic selling from institutional and retail investors which exacerbated the selling pressure on the market.

c. Settlement disruption

Short selling may also raise regulatory concerns in the area of settlement. The principal issue here is whether the short selling process is conducted in a way that causes difficulties for the buyer. Timely delivery may be particularly important for a buyer in the context of, for instance, being able to exercise voting rights or to meet obligations in respect of an onward chain of transactions. Indeed, where there is generally inadequate provision to ensure the timely settlement of short sales, there may be wider systemic risk.

The potential difficulties in this area are likely to arise from two sources. The first is where the short seller has not arranged borrowing ahead of his sale and feels under no strong incentive to deliver (and the rules/disciplines of the system provide latitude not to). The second is changing supply and demand in the securities lending markets. Although securities lending markets have grown in liquidity and sophistication in recent years, a short seller nonetheless remains vulnerable to sudden shortages or the unexpected recall of stock.²²

B. Regulatory approaches and tools

Regulatory responses to the risks posed by short selling vary across SC2 jurisdictions. Some countries have not adopted specific controls over short selling but address some of the attendant risks more obliquely through settlement disciplines, margin requirements, general volatility halts and similar measures. Others permit short selling but impose varying degrees of controls on the process. There is no single reason why these different approaches have evolved. In particular, it is difficult to identify any particular market microstructure characteristics that explain regulatory decisions to intervene, or not intervene, in short selling. For example, controls over the pricing of short sales apply to both auction and dealer markets in the US, but they are applied to neither in Europe. In fact, the most apparent commonality is precisely that the countries with few controls are in Europe, while those with more controls are primarily in North America and Asia.²³

Where there is regulation, it has generally been developed with a view to capturing the potential benefits of short selling (e.g. correcting an overvalued market, facilitating hedging and other risk management), while simultaneously reducing the scope for short selling to destabilise markets. Controls tend to focus on three main areas:

- the types of securities that may, and may not, be sold short;
- the processes by which short sales are executed;
- settlement requirements of specific relevance to short selling.

The table below sets out the broad approach adopted in SC2 member jurisdictions.

²² While most securities lending markets are relatively opaque, there seems to be little evidence of practices that might disrupt borrowers' access to securities. Most securities lending markets have rules or codes of practice (or commercial disciplines) in respect of the reserving (or 'icing') of securities or stock recall procedures.

²³ The impetus for controls in these countries has tended to flow from national legislation and/or the rules of the statutory regulator, even if many of the detailed rules have been developed and are imposed by exchanges. This is the case with the United States, the Canadian provincial regulators, Australia, Hong Kong, Japan and Malaysia.

Regulatory approaches to short selling				
Jurisdictions	General approach	Instrument limitations	Trading controls²⁴	Disclosure
Australia	Illegal to sell a security which seller does not have right to vest unless under exemption approved by regulator.	Liquid securities only; no more than 10% per issue; not during takeovers.	Tick rule.	Yes.
Brazil	No restrictions.	None.	None.	Stock lending.
Canada ²⁵	Permitted, subject to reporting and margin requirements, and trading controls.	None.	Tick rule.	Yes.
France	No restrictions.	None.	None.	No.
Germany	No restrictions.	None.	None.	No.
Hong Kong	Illegal to sell a security which seller does not have right to vest unless exempted under the law by regulator.	Liquid securities and underlying securities of a derivative and approved ETF.	Tick rule.	Yes.
Italy	No restrictions.	None.	None.	No.
Japan	Permitted subject to trading rules and margin requirements.	None.	Tick rule.	Yes.
Malaysia	Permitted on-exchange with pre-arranged stock borrowing. ²⁶	Liquid securities only.	Tick rule.	Yes.
Mexico	Permitted on-exchange, subject to certain restrictions.	Higher liquidity equities only.	Tick rule.	Yes.
Netherlands	No restrictions.	None.	None.	Yes.
Singapore	Unrestricted, but exchange may suspend individual securities if speculative activity is excessive or abuse is suspected.	None, unless security is temporarily designated as ineligible.	None.	No.
Spain	No restrictions but stock must be borrowed by the day of delivery.	None.	None.	Stock lending.
Sweden	No restrictions.	None.	None.	Yes.
Switzerland	No restrictions.	None.	None.	No.
UK	No restrictions.	None.	None.	Planned (see footnote 40).

²⁴Markets/exchanges adopting tick rules generally provide various exemptions for market-making and a variety of hedging, risk management or arbitrage trades. Strict adherence to an up-tick rule would otherwise make it impossible to carry out many trades where timely execution is critical, leading to reduced liquidity or increased risk.

²⁵This reflects the regulations of the Canadian provincial regulators and exchanges/SROs.

²⁶Malaysia introduced a regulatory framework for short selling in June 1996. This was suspended in September 1997 as one of several measures to maintain market stability during the Asian crisis.

US	Permitted, subject to trading rules, borrowing requirements and margin requirements. ²⁷	None.	Tick and best bid rules.	Yes.
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The tools employed often overlap in the risks they address. Tick rules, for instance, by potentially slowing a price decline may serve both to underpin market orderliness and make it more difficult for a manipulator to drive a price down. The remainder of this section examines the characteristics of the principal tools and summarises them in the table at the end of the section.

a. Controls on eligible securities.

Some jurisdictions, including Australia, Hong Kong, Malaysia and Mexico, permit short selling in only the more (or most) liquid securities. This reflects a concern that the prices of less liquid securities can be moved much more easily (i.e. more cheaply) than those of liquid securities, leaving them more open to manipulation. A second concern may be that short sellers in smaller, less liquid companies will have difficulty finding stock to borrow, so increasing the risk of settlement disruption.²⁸

Contra arguments for regulators to consider include both the general desirability of encouraging liquidity in less liquid issues and the relatively unattractive incentives for manipulators. Although it may be relatively cheap to move the price of a less liquid security, the scope to make significant profits (in absolute terms or relative to the risks) may be proportionately less. For instance, if stock needs to be borrowed, supplies are normally far more difficult (and more expensive) to obtain than is the case with liquid securities, and the risks of being caught in a ‘bear squeeze’²⁹ are significantly higher.³⁰

Overall, any decision as to whether or not to restrict securities eligible for short selling will depend on the many considerations that a regulator will need to take into account in his local environment. These may include the level of interest in short selling, any evidence that short selling has commercially damaged smaller companies, and the effectiveness of any other trading controls in mitigating specific risks in the less liquid sector.

b. Scope and timing

Other types of restrictions on short selling involve limiting the size of permitted short positions or banning short selling in individual securities during periods when the market authorities consider that it might increase the risk of a problem arising. The Australian Stock Exchange, for example, caps the maximum permitted (aggregate) short position in any individual securities at 10% of the

²⁷ The margin requirement imposed by the Federal Reserve’s Regulation T is 150% of the market value of the net position. Thus short sales against the box, for example, will have lower margin requirements.

²⁸ There is a limited parallel here with equity derivatives markets where liquidity considerations are normally a primary consideration in determining whether a derivative contract can be efficiently hedged. In Hong Kong, for instance, one factor in determining the eligibility of a security for short selling is whether or not there is an exchange traded derivative contract based on it.

²⁹ A bear squeeze is a term commonly used to describe a situation in which short sellers – the ‘bears’ – are squeezed by buyers of the stock in which they are short or by holders of that stock restricting their willingness to lend the stock. In such circumstances, short sellers will often be forced to close out their positions, adding further upward momentum to the price and possibly leaving them with a loss. (See example in Appendix 1).

³⁰ It is also the case with liquid stocks that short selling is normally less widely used where the securities lending market is less developed.

issue³¹ and bans short selling of relevant securities during a takeover offer period. In the US, the SEC indirectly achieves a restraint on short selling ahead of the pricing of a follow-on (secondary) offering by prohibiting short sellers from covering their positions directly from shares issued in the offering.³²

c. Trading controls

The more widespread form of controls are those imposed on the trading process. These controls, generally known as ‘tick’ rules³³, aim to prevent short sales at successively lower prices. This is intended to moderate a pace of price decline that short sales might otherwise quicken.

While ‘tick’ rules may slow the pace of decline in some cases, their application is not straightforward. In particular, jurisdictions with tick rules generally require various, often quite extensive, exemptions to cater for dealers with formal market making obligations and for the execution of hedging and other risk management orders.³⁴ Without them, liquidity may be adversely affected and it is likely to be more difficult to complete a hedge or arbitrage contemporaneously, and therefore symmetrically and efficiently. Although such exemptions may indirectly benefit all market users by improving efficiency/liquidity in targeted areas, there is nonetheless some risk (as with many rules containing exemptions) that availability of the exemptions to some market users (or some forms of trading) may discriminate against others and/or encourage people to restructure their trades to gain the exemption’s advantage.³⁵ Tick rule exemptions also tend to increase the costs and complexity of monitoring.

d. Pre-sale stock availability requirement

Many markets and regulators pay particularly close attention to settlement arrangements in respect of short sales. Measures may include stringent buying-in regimes in the event of non-delivery on the due date³⁶ and paying close attention to the robustness and efficiency of the processes for securities lending.

³¹ Short position figures published daily by the Australian Stock Exchange (ASX) include the percentage of each issue for which the short position accounts.

³² U.S. Securities and Exchange Commission Rule 105 of Regulation M generally prevents persons from covering short sales with offering securities purchased from an underwriter, broker or dealer participating in the offering if the short sale was effected during the Rule’s restricted period, which is typically 5 days prior to pricing and ending with pricing (‘105 restricted period’). The aim of the rule is ensure that secondary offering prices are based upon open market prices that are determined by supply and demand rather than artificial forces.

³³ Tick rules normally prevent a short sale taking place below the last traded price or, in some cases, permit it only at a price better than the last traded price. In dealer markets, the restraint is often formulated as a prohibition on a short sale below the market’s current best bid. This reflects the fact that in dealer markets, there can be greater delay in publishing last trades and trade report sequencing anomalies..

³⁴ For example in the United States, the NASD rules covering short sales in NASDAQ National Market System Securities contain exemptions for short sales by NASDAQ market makers in connection with bona fide market making activities. However, there is no similar status-based exemption in SEC Rule 10a-1, promulgated under the Securities Exchange Act of 1934, for short sales by market makers in exchange-listed securities.

³⁵ For example, a market user faced by the constraints of tick rules might decide that he can create a short position more rapidly and more efficiently by using a short derivative purchased from a market maker if the latter is exempt from tick rules and can hedge the position immediately.

³⁶ Many exchanges have rules providing for buying in securities that a short seller fails to deliver. In the case of Singapore, for example, the exchange may instigate buying in, at progressively rising prices.

Where regulators consider that mainstream settlement disciplines are not necessarily sufficient in the case of short sales, they use several approaches. The blanket approach is to prohibit all sales where the seller cannot demonstrate ownership of the securities he is selling.³⁷ But there can also be more flexible approaches. In Spain, for instance, a short seller is required to have borrowed stock before settlement day (but is normally subject to a fine if he then fails to deliver). In other jurisdictions, it may be sufficient for the seller to demonstrate that the stock is available³⁸ or that he has access to the stock lending market and is a regular borrower.

Another approach, adopted by the Singapore Stock Exchange, is temporarily to ban short selling in securities in which it considers there to be excessive speculative activity, suspected market abuse and increased risk of settlement problems.

When considering their approach here, regulators once again have to take into account the particular needs of market makers and other principal dealers, especially the degree of flexibility that they require to enable them to go short instantaneously in response to market demand.³⁹

Regulatory tools		
Tools	Objective	Observations
Restrict class of security eligible for short selling.	Normally to reduce risk of disorder or manipulation in less liquid securities, which are more volatile + easier to manipulate.	Ban may further reduce liquidity and increase the risk of stock prices being inflated. Incentive to manipulate may not be high because rewards relatively low and stock to borrow generally scarce.
Restrict short sales in individual securities when trading appears disorderly.	To prevent disorder, including settlement disorder, but only where market monitoring shows this to be likely.	Allows freedom to short sell in most circumstances. Imposition of ban may increase risk for those with open positions (and disrupt derivatives market).
Restrict short sales in individual issues at sensitive times, e.g., takeovers, new issues.	To protect issuers against manipulation that might adversely affect funding operations, etc .	May reduce scope for manipulation, but may make price arbitrage less effective or could increase risk of offers being over-priced.

³⁷ For example, in Hong Kong, the law requires a short seller to provide documentary assurance (which may be in the form of written document, electronic document, tape recording etc.) to the broker-dealer, and the broker-dealer to obtain confirmation from the short seller, that the lender has the security available to lend to him before the broker-deal can transmit the short selling order to the exchange for execution.

³⁸ For example, in the US, the self-regulatory organisations have rules that generally require short sellers, prior to effecting short sales, to make affirmative determinations that they can borrow or otherwise provide delivery of the securities sold short by the settlement date.

³⁹ For example, Hong Kong law provides a naked short selling exemption for market makers in the performance of their market making functions and for both securities and derivatives market makers in respect of their hedging of positions built up in the course of their market making. This saves market makers the costs that would arise from a pre-borrowing requirement, enabling them to price more efficiently and to trade without widening their spreads.

Cap percentage of issue that may be sold short.	A ceiling control designed to control excessive short selling.	Ceiling level may restrict some 'legitimate' short sales and potentially facilitate an artificially high stock price. More difficult to enforce when security trades in several locations.
Rules to prevent short sales at sequentially lower prices.	Aims to curb short selling's capacity to drive prices rapidly lower.	Blanket restrictions may interfere with hedging activity, but exemptions may change trading methods and their relative costs.
Ban naked short sales.	Aims to prevent settlement disruption and deter 'free-ride' speculation.	Requires effective intermediary controls. No comparable controls on speculative longs.
Require (customer) margin.	Aims to protect broker and others involved in transaction against credit risk.	Up-front margin may reduce short selling by increasing cost. May divert business via derivatives if margin costs in each market are out of line.

III. Transparency issues

Whether or not a market authority or market operator uses any of the above tools to control specific risks caused by short selling, a general issue remains as to whether the potential market efficiencies that short selling can deliver may be partly offset by the information asymmetry of other market users being unaware that the sales are 'short'.

A number of countries take the view that there is value in the disclosure of short selling to market users and provide for transparency in their short selling regimes – generally at the exchange/SRO level. In some cases, disclosure involves publishing cumulative short sales volumes in individual securities on, say, a daily basis. In others, it involves periodic publication of the overall short position in individual securities as measured at a specific moment. In four member jurisdictions – Brazil, Japan, Spain and Sweden - there is regular disclosure of stock borrowing statistics.⁴⁰ These can serve as useful indicators not only of trends in short selling but also of the current availability of stock more generally (e.g, for other forms of collateralisation).

Details of present disclosure regimes are set out in the table on page 21. The rest of this section considers the principal arguments for and against short selling transparency. It also considers issues relating to symmetrical treatment of sales and purchases and long and short positions. Finally, it considers whether the availability of short selling information, publicly or solely for regulatory use, may be beneficial in countering abusive/manipulative short selling.

A. Potential benefits of transparency

The nub of the case for transparency is that short sales contain valuable information and that knowledge that short sellers are active represents information which, if widely available, could enhance pricing efficiency. The ways in which this would take place are essentially four-fold.

⁴⁰ In the UK, CRESTCo, the central securities settlement system, intends to start regular publication of securities lending data, per security, during the second half of 2003.

- Timely information on short selling would provide market users with an early signal that there may be material grounds for considering individual securities to be over-valued.
- The removal of uncertainty as to how much selling in a share was short or long selling might improve investors' willingness to trade. This is particularly important given the adverse impact that rumours of short selling can sometimes have on trading.
- Information that sales are short creates an awareness that, at some future point, many of those sales will need to be reversed by new purchases.
- Greater transparency may tend to deter attempts at market abuse

While the more recent economic literature supports the contention that short sales do indeed contain strong informational messages relating to the over-valuation of securities, SC2 has found relatively little research that addresses whether affording transparency specifically to short sales adds to or detracts from market efficiency. The economic literature relevant to the issue is reviewed in Appendix 3. Certainly, the benefits of regulatory intervention to require transparency of short selling are not clear-cut.

B. Potential drawbacks of transparency

a. Deterrence of short sales

The main case against short sales disclosure is that it would prove a two-edged sword. While it might signal new, adverse information in respect of issuers, it would also signal the existence of open short positions. This would leave some short sellers vulnerable to tactical behaviour that may trap them in bear squeezes. Short sellers might consequently consider that the adverse swing in the risk/reward ratio had materially reduced their incentive to sell short. This could create costs for the market as a whole in terms of reduced private search for adverse information and less market liquidity.

This argument tends to be made particularly strongly by those interested in short selling less liquid securities, by market-makers who have obligations to provide continuous liquidity and where there are only a small number of active capital providers. Their concern is that disclosure, or certainly inappropriate forms of disclosure, would not only leave short sellers more vulnerable to bear squeezes in general but often make it easy for other market participants to work out who has the short position and use that information competitively to move the market against them.

b. Problems of interpretation

A second potential drawback in short selling disclosure relates to ambiguity in the information. Any indication via short selling that a security may be fundamentally over-valued is clearly useful information to other market users. However, because short selling now fulfils a wider range of (market neutral) trading objectives, it is increasingly possible that many short sales contain no such message. This would be the case for short sales entered into for most arbitrage trades, to implement long/short strategies and for much derivatives hedging. This makes it questionable how much value the specific identification and publication of short sales might add for market users. It is even possible that publication could mislead market users, because they will have no knowledge of, and may misinterpret, the motive behind the sale.

These arguments in respect of data on short selling *volumes* extend naturally to information relating to outstanding short *positions*. The issue here is similar - whether knowledge of the size and change in a short position conveys any useful information unless one is aware why the short position exists, why it has changed, or what related long position may be offsetting it.

This motivational issue largely drops out of the equation when one focuses on the value of short sales information purely as a guide to the technical situation. However, market users may still be unable to rely heavily on the figures as an accurate guide to the extent of short positions that will at some point need to be closed out by a purchase. The main drawback here is that not *all* short sales will in practice be closed out through an on-market purchase. For example, many short sales executed to protect the writing of put options will not need to be closed out in the market as any stock borrowed can be redeemed from stock delivered when the option is exercised. Nonetheless, it arguably remains of considerable value for market users to have at least some idea of how much pent-up demand for a stock is outstanding.

This still leaves the question as to whether, overall, more awareness that the sales were short might create perverse outcomes. For example, some market users might decide to sell on indications that an issuer was about to suffer a downward revaluation, but others might feel encouraged to hold off selling, or even to buy, on the view that the closure of short positions would lead the price to recover. In fact, these different reactions need not necessarily be in opposition to each other. With sufficient disclosure of short selling activity, they might even tend to follow each other sequentially. Market users might increase their sales when greater short selling first became evident, thus further accelerating the price correction process. But as the price continued to fall, they might subsequently provide greater buying support if the short selling element showed signs of contracting.

Overall, it is possible to make arguments either way as to the utility of short selling information in aiding pricing efficiency. But even when the information is imperfect, many market users may consider it a useful, even if not necessarily critical, piece of the jig-saw in helping them make better-informed trading decisions.⁴¹

C. Symmetry between long and short disclosure

An issue that is commonly raised in debates on short selling transparency is that of symmetry in any disclosure requirements. This normally breaks out into two separate issues. In the first, it is argued that there is no case to break down either sales or purchases into various sub-sets. A buy is a buy and a sale is a sale; pricing will be as efficient whether a sale is long or short; and why should leveraged shorts be disclosed when there is no corresponding requirement for leveraged longs? Thus, introducing sub-sets of one but not the other is asymmetric and unreasonable. The counter argument rests largely on the view that short sales have the potential to temporarily increase, possibly dramatically, the proportion of an issue being actively traded, thus meriting that shorts be viewed differently. It may also be argued that market awareness of the extent of short sales enables users to take a better informed view of subsequent buying demand and the extent to which it may represent no more than short covering.

⁴¹ Much market information has limitations attaching to it. General trading data often reflects no more than short-term technical adjustments and could be wrongly interpreted. For instance, a number of large trades in a security made for purely technical reasons could be wrongly interpreted as an indication of a changing market view on an issuer. However, that does not mean that information relating to those trades is no use to market users and should not be published.

The second main issue concerning symmetry relates to the disclosure of long and short *positions*. Here a case might be advanced that since some jurisdictions require disclosure of long positions, markets would also benefit from having symmetric information concerning short positions. While it is possible to make a case that market users, and issuers, should be aware of significant short positions, the logic is not wholly symmetric. This is because requirements for the disclosure of long positions - more than 5% of a company's outstanding share capital, for instance - normally flow primarily from the perceived need for companies' managements to be aware of who currently holds a significant interest in their voting capital. Although these disclosures are generally viewed as being of interest to the market at large, the market consideration is often considered to be secondary to the needs of management.⁴²

Prima facie, the justification for the investor notification and subsequent public disclosure does not automatically translate to an equivalent short position. The holder of the short position has no interest in the company's voting shares, nor indeed any proprietary interest at all. Any case for a disclosure regime of this kind would need to be predicated not on symmetry for symmetry's sake but on evidence that management awareness of large short positions in its securities was important to its ability to communicate with all those who have a significant economic interest in their capital, whether long or short.

However, to replicate a long notification regime may not be straightforward, particularly where the aim is to require the declarer to disclose derivative positions (e.g. put options) as well as any short position in the underlying. Even when the interest is held only by way of a short position in the securities, this may pose a considerable enforcement challenge, particularly in jurisdictions with no requirements for the declaration and recording of short sales. Requiring disclosure of short positions held via derivatives adds to that complexity. In April 2003, Hong Kong introduced a disclosure requirement for short economic interests with a view to improving the transparency of the economic interests of substantial shareholders in a company. The regulations require the disclosure of economic short positions and derivative positions, however arising, of 1% or more of an issuer's share capital, where the person making the disclosure has long economic interests of 5% or more. Long and short positions cannot be netted. It will take a little time to assess compliance with the requirement.⁴³

D. Transparency to regulators

A further important consideration for regulators is the extent to which the ready availability of information relating to short sales (and short positions), whether or not it is published more widely, may assist in combating market abuse.

Clearly, mandating public transparency solely to deter market abuse would in itself run risks. Unless it could be focused very specifically on types of short sales/short positions/settlement failure strongly correlated with market abuse, it might deter other more acceptable uses of short selling. However, there may be potential benefits in transparency of short selling information to regulators. It could alert them to significant short selling activity that might merit special monitoring, or make post-event investigation more straightforward, faster and thus more effective. And market awareness that the regulator was receiving short selling information might serve to deter at least some manipulation in the first place.

⁴² The common interest of management and shareholders in long positions is evidence that a third party may be building a stake in the company, possibly as a prelude to a bid for control.

⁴³ The requirement is set out in Part XV of the Securities and Futures Ordinance, which is posted on the HKSF website : www.hksfc.org.hk/eng/bills/html/index/index0.html

Such transparency in terms of data collection and monitoring does, of course, involve cost. We are not aware of any country that collects short selling data purely to help it detect market abuse. Even where regulators do receive this data as a result of other short selling controls, anecdotal evidence suggests that its value in assisting in combating market abuse is, generally, limited, though it can be a useful early warning of the build-up of large short positions or as a prompt to investigate activity in related instruments.

IV. Implementation issues when introducing a transparency regime

Where regulators or market organisers contemplate introducing transparency regimes for short selling, they need to consider in particular:

- the objectives of disclosure;
- the robustness of the definition of what is to be disclosed;
- the mechanisms and processes for delivering disclosure;
- the costs to the parties involved.

This section considers these and a number of related issues.

a. The objectives of disclosure

Before considering how to establish transparency of short sales, regulators need to be very clear as to what they wish to achieve. This will be important to how they scope the regime, the kind of exemptions they may need to include, the type of enforcement framework they will need and, of course, the initial and ongoing costs to themselves and the markets.

The table below is not intended to be exhaustive but simply to illustrate that there is a wide spectrum of possible approaches.

Some possible approaches to transparency		
Objective	Possible options	Comment
To keep market aware of short selling activity on timely basis.	Publication of short sales volumes per security/by sector/ for whole market.	Requires information-gathering systems and resources for operation on regular basis.
To provide market with 'feel' for outstanding short positions.	Publication of short positions per security/ by sector/ for whole market on a periodic basis. Publication of stock-lending data per security/by sector/for whole market on a periodic basis.	Requires information-gathering systems but these could be far less extensive than needed for recording individual short sales, and infrequent disclosure may reduce ongoing costs. May be an imprecise proxy for short positions but information may be readily available from settlement system.
To alert market to securities with high levels of short selling activity.	Publication of short sales and/or short positions above certain thresholds relating to e.g. market capital/	Requires information-gathering systems and processing but focuses disclosure solely on

	average daily trading volume.	securities where high levels of short sales may have special information value.
To alert market to possible high levels of short sales/ potential settlement problems.	Publication of securities above specified thresholds in respect of outstanding non-settled trades.	Information may be readily available for settlement or exchange systems but may not reflect only naked short sales.

b. Definitional issues

Fundamental to any disclosure (or regulatory reporting) regime is the definition of what it sets out to capture. Although there is broad consensus on what constitutes short selling, the term can still be difficult to define with the precision required to provide the basis of an effective regulatory or disclosure regime.

Given that the primary objective in controlling short selling is to address any risks arising from sales that use borrowed stock and sales that are naked, jurisdictions applying regulation to trading, reporting or disclosure generally build their core definitions to capture both these elements. However, this will be a wider than necessary definition if the regulator is primarily concerned with drawing the market's attention to, for instance, the incidence of naked short selling. In this case, the regulator will want to exclude situations in which a seller is selling stock which might be considered as 'owned' or otherwise 'covered'. In determining whether a seller owns the securities being sold, or whether the sale can be viewed as covered, SC2 members (collectively) noted the following factors that might be relevant. Whether the seller:

- has title to the security;
- has purchased or entered into an unconditional contract to purchase the security but not yet received delivery;
- has a title to other securities which are convertible into or exchangeable for the securities to which the order relates (and, normally, for which application to convert or exchange has been tendered);
- has exercised, or holds, an option to acquire the securities to which the order relates;
- has exercised, or holds, rights or warrants to subscribe to and to receive the securities to which the order relates;
- is selling a security trading on a 'when issued' basis having entered into a binding contract to purchase the security subject only to issuance of the security;
- has borrowed the securities under a securities and borrowing and lending agreement;
- has obtained confirmation from a proposed counterparty that it has the securities available to lend.

Even when regulators and market authorities are clear as to what should be declared as a short sale, this often remains an area which brokers and market users can still find complex and difficult.⁴⁴

⁴⁴ The Hong Kong Securities and Futures Commission notes that it receives many enquiries from market participants in relation to short selling regulations, from fundamental issues such as what amounts to naked short selling to reporting requirements. HKSF has therefore issued a guidance note to clarify its policies and help the market to better understand and comply with regulatory requirements. The guidance note has been subsequently revised to further address market participants' concerns and to provide practical examples.

c. Scope issues

Closely allied to definition is the issue of scope. As the EMC pointed out in its 1997 report, ‘information will be meaningful only if the reported activity level is a good measurement of the actual level of short selling activity in the market.’ Considerations here, over and above the basic definition, include the following.

On exchange/OTC. The significance of where and how to draw boundaries in this context is likely to be driven by the local market structure, trading practices and whether short sales tend to take place via a centralised market place – probably an exchange – or in a more decentralised manner via OTC transactions. In many jurisdictions, capturing short sales information from OTC transactions is likely to be more complex than capturing it from exchanges or other core trading venues. Regulators may also need to consider whether focusing transparency on short sales conducted on-exchange is likely to encourage migration to less transparent environments. Approaches adopted by SC2 members with disclosure regimes vary between exclusion, inclusion and banning of off-exchange short sales.⁴⁵

Market maker sales/positions. The role of market making (and other liquidity providers) varies considerably from country to country. Where they do act as a major cog in the market, regulators will need to consider whether or not short sales made by intermediaries in the normal course of that business should be included or excluded from disclosed information. Hong Kong and NASDAQ, for example, include market making positions in their calculations.

Derivatives. A further substantive issue of scope is whether any measure of short positions should attempt to capture derivative positions. Earlier, we indicated that any attempt to mandate disclosure of large, individual short positions would be immensely complex. To attempt to assemble data on the *total* short position in a stock, including both the stock short and short derivative positions, would be at least as difficult. There would likely be major difficulties with double counting⁴⁶, not to mention any collection of OTC data. If a regulator did go down this route, it would be important both to separate the stock and derivative positions and point out the likelihood of double counting.

d. Procedures for recording short sales

Any short selling disclosure regime will need a process for gathering information. This is normally built on a formal information-gathering requirement involving client and intermediary declarations. In jurisdictions where such regimes are in place, the onus on clients to disclose that a sale is short is generally imposed through the contractual arrangements between intermediary and client. In some cases (e.g. Australia, Canada, Hong Kong, Japan and the US), this is reinforced by a general statutory or regulatory requirement on all market users to make such disclosure. In other words, non-disclosure becomes either a criminal, regulatory or statutory offence.

The way in which information disclosed to an intermediary becomes centralised and aggregated varies according to market structure and the nature of the controls over the trading process. In some jurisdictions, the intermediary is required to execute all short sales through the central trading

⁴⁵ In the US, for example, OTC short sales of exchange-listed securities are permitted but are subject to regulatory requirements, including the ‘tick test’ and borrow requirements.

⁴⁶ For example, if an investor acquired a put option in 100,000 shares of company A and the seller of the put option hedged its position by short selling 100,000 shares in that company, any calculation of an aggregate short position based simply on adding together the put option and the short cash market position potentially gives a misleading impression of the size of the short position. Regulators would need to consider how the information should be presented and to what extent the data could be netted.

mechanism and must designate the trade as a short sale on the order ticket prior to execution. In other jurisdictions, such as the US, where brokers are not necessarily required to use a central trading mechanism, they nonetheless are required to identify short sales prior to execution so that the party executing the sale knows whether it must comply with the tick rules.⁴⁷ Under either of these methodologies, there is the potential to collect short sales volume figures for publication if publication is considered desirable. Where figures are collected for the outstanding short position per security, the compilation is normally formed from the periodic returns required of broker dealers.

In cases where a regulator is contemplating requiring transparency as a stand-alone measure (i.e., without any trading rules), it may have more options available to it in the overall design of the regime. But it will still require rules in respect of the declaration and recording of short sales, procedures and systems for collating and distributing information, and some provision for monitoring and enforcement.

e. Public disclosure – content and timing

The central issues in respect of disclosure relate to the content and timeliness of the disclosure. Major considerations in both cases are likely to be the trade-offs between supplying useful information and affording adequate protection to short sellers, and the costs of assembling data taking into account such factors as comprehensiveness, editing and publication frequency. Present practices are set out in the table below.

Protection of individual positions is generally afforded by aggregating all collected information at the ‘per security’ level, rather than disclosing individual transactions or information that identifies firms. That may still leave individual positions exposed in less liquid securities, and here regulators need to consider whether less frequent disclosure may be appropriate.

Disclosures normally take the form of aggregate short sales per security and/or of the open short position per security. The latter is more common, though several exchanges, including Hong Kong and Mexico, do publish total short selling volumes too. No exchange publishes real-time information. The most frequent disclosure is twice daily, in Hong Kong. This provides disclosure of total volumes per security over the half day’s trading rather than the size of individual transactions.

One advantage of daily (or twice daily) publication of short sales volumes is that it should capture intra-day shorts. On the other hand, publication of gross short sales alone fails to capture how quickly, and on what scale, short positions are being closed. That may be better captured by periodic publication of the net short position. The aggregate short interest per security is generally based on intermediary reports of outstanding borrowing per security on both client and proprietary accounts.

In some markets, publication of the net short position in individual securities takes place daily, but generally it takes place on a less frequent basis. In some cases, it is an end of the week figure, normally published the following Monday or Tuesday, but in others publication takes place twice monthly (Canada) or monthly (the U.S).⁴⁸ In determining the appropriate level of frequency,

⁴⁷ The US divides short sales between ‘exempt’ and ‘non-exempt’. Both types of short sale must be disclosed but exempt short sales (e.g. for specified hedging purposes) are not subject to tick rules. This is also the case in Canada.

⁴⁸ For example, in the U.S., positions are normally reported as of settlement on the 15th day of the month. Given the typical three day duration of clearing and settlement, the last day of trading, such that resulting short positions are included in the short interest reported for the current month, is usually the 12th day of the month. Dealers are required to file their reports by the second day after the settlement date, and the reports are combined into an aggregate number

regulators and market authorities will need to weigh any level of protection they consider necessary for short sellers against the declining usefulness of the information to other market users the longer the disclosure is delayed.

Most public disclosure of short selling information is arranged by the exchange and/or other SROs and publication normally takes place on exchange or SRO web-sites, as well as in major financial periodicals. Data vendors and others often purchase the data for further distribution and some develop value-added analysis for their clients (e.g. comparing the short position with outstanding capital, share price performance and daily trading activity).

Short selling disclosure regimes			
Jurisdiction	Information published	Frequency	Collector/ publisher
Australia	Aggregate net short position per security.	Daily	Exchange
Brazil	Aggregate securities lending.	Daily	Exchange
Canada	20 largest short positions.	Twice monthly	Exchange
Hong Kong	Short sales per security.	Twice daily	Exchange
Japan	Balance of margin transactions per 'daily publicised stock'.	Daily	Exchange
	Lending balances for 'standardised margin transactions'.	Daily	Margin lenders
	Balance of margin transactions per issue.	Weekly	Exchange + JSDA
	Total balance of margin transactions.	Weekly	Exchange + JSDA
	Trading values of short selling.	Monthly	Exchange + JSDA
Mexico	Short sales per security.	Daily	
Netherlands	Aggregate short positions per listed security by members of Euronext Amsterdam Stock Markets and clearing members of Euronext Amsterdam Derivative Markets.	Fortnightly	Exchange
Spain	Bilateral lending per security. This information includes part of the outstanding balance of stock lending which has been used to justify sales carried out on the trading day.	Daily	Exchange
Sweden	Aggregate stock lending by domestic exchange members per (liquid) security.	Weekly	Exchange
US	Aggregate short position per security.	Monthly	SROs (e.g. NYSE, AMEX, NASD)

of shares sold short for each security. The information is disseminated publicly to the news wires after the close of the eight business day after settlement.

f. Multiple market-places

Short selling in a security that is effected through more than one trading venue should not present problems, provided that the disclosure rules for all venues are the same and the information from each venue is readily accessible, whether or not it is consolidated. In the U.S., where information is consolidated, an SRO member reports short positions to its SRO, and that information is then routed through The Securities Industry Automation Corporation ('SIAC') to the appropriate SRO for publication. Thus, for example if a NYSE member reports a short position in a security registered on AMEX, the short position will first be reported to the NYSE and will then be routed electronically to AMEX for publication.

Potentially, an issue might arise if different venues were subject to differing disclosure requirements. This would most probably be the case where a security can be traded in more than one jurisdiction and one jurisdiction has a disclosure regime but the other does not. However, the survey conducted among SC2 members did not indicate any serious concerns about short selling activity in other jurisdictions of dual or multi-listed securities.

g. Stock lending as a proxy

A different disclosure option adopted in several jurisdictions, including Spain⁴⁹, Sweden and Brazil, is to publish securities lending figures. In some countries these figures may provide a reasonably precise proxy for short selling activity; in others, they may be less useful if stock lending is also used widely for a variety of other activities. (These may include borrowing to enable dividends to be collected by parties to whom they offer some particular advantage, to exercise votes in a vote on an issuer or shareholder resolution, or as part of collateralisation or financing transactions.)

In all jurisdictions where all, or at least most, securities lending is processed through a centralised securities settlement system, the particular advantage of this approach is that the information is already gathered as part of a necessary commercial process. To the extent that it provides a reasonable proxy for short selling, it is likely to be a considerably cheaper option for delivering information to market users than a full-blown short sales reporting regime. The timeliness of the data will depend largely on whether the market's practice is for borrowing to take place on the day of the sale or when delivery falls due in most cases the second or third day following the sale.

Additionally, greater disclosure of stock lending data (when available) can also assist market efficiency by providing potential borrowers with more information (even if not in real-time) on demand for and availability of securities (e.g. outstanding loans per security). It may also serve to spread such information more widely among borrowers in countries where borrowing tends to be dominated by a small number of multi-activity firms who are often perceived as holding a considerable information advantage over other market participants. Finally, such information may assist not only potential short sellers and market users in general, but also securities lenders. In some countries, the latter sometimes incur considerable search costs to establish the extent of demand for a stock and to determine appropriate pricing.

⁴⁹ In Spain, there is disclosure of securities loans negotiated between two parties ('bilateral loans'), which must be reported to, and registered by, the SCLV. The daily bulletins of the stock markets include information relating to the open position of bilateral loans in each listed security. This information includes: the number of new shares lent; the number of shares redeemed and the balance of outstanding loans. The outstanding balance is broken down to show the proportions used to cover the most recent trading day's trades, previous days' trading and other loans. Some recent year lending figures are included in Appendix 2.

h. Settlement transparency

Where regulators' primary concern with short selling relates to settlement issues (and they consider there is insufficient case for banning naked short sales or otherwise interfering in the general settlement arrangements), they could consider promoting transparency of unsettled trades in individual securities. This is useful information to market users whatever the cause of the unsettled trades, and large and long-standing unsettled positions will often reflect naked short sales. Publication – probably above certain thresholds - might include some or all of the following: the number of unsettled trades in a security, the total value of those unsettled trades relative to market value or average daily turnover, and the length of time outstanding. In many jurisdictions, much of this information is already generated by settlement organisations or market authorities and/or regulators as a matter of course but is not routinely placed in the public domain.

i. Enforcement

Creating a disclosure requirement also implies that it needs to be policed. Most SC2 jurisdictions that require identification of short sales monitor compliance with the requirement as part of their supervisory process for firms (whether carried out by the regulator or an exchange/SRO). They may also detect breaches of short selling disclosure obligations by comparing settlement records with intermediary/exchange reports of transactions, or by running matches of short sales and stock borrowing data. The experience of some regulators suggests that determining whether particular short sales were declarable can be difficult, and that short selling declarations in respect of short sales by foreign investors can be difficult to enforce.⁵⁰

j. Costs

The costs of creating and monitoring an information-recording process are not immaterial, even with modern technology. Clearly, it will be a more economically justifiable proposition where the regulator and intermediaries already require information-gathering for other purposes, most obviously, trading controls. But it may be that infrastructure systems/ processes used – or being developed - for other reporting purposes could in some cases be adapted to collect short sale declarations.

In addition to direct costs of information-gathering, there are likely to be some indirect costs too. These include any costs that may be caused to traders from delays in executing trades as a result of information-gathering formalities.

V. Conclusions

The IOSCO Technical Committee notes the growth and the changing uses of short selling in recent years. These include much broader use of short sales both for arbitrage and risk management transactions, and as part of the increased use of long/short (essentially market neutral) investment strategies.

⁵⁰ It may in any event be difficult to control short selling by foreign investors if they are able to transact outside the jurisdiction with an intermediary who, on receiving borrowed securities, is permitted to use those securities as a long position from which to make a hedging sale in the domestic market.

The IOSCO Technical Committee recognises the benefits of short sales. However, it also considers that short sales, largely as a result of their capacity to add incremental weight to selling pressure, may at times increase the risk of a disorderly market and increase the scope for market abuse. It also notes that inadequate arrangements for delivery in respect of short sales have the potential to cause settlement disruption.

About half of the jurisdictions of SC2 members address these risks through specific regulation of short selling. These rules generally control the types of security that may be sold short, or the way in which short sales are executed. A number of jurisdictions also prohibit, or restrict, ‘naked’ short sales. Remaining jurisdictions do not consider it necessary to regulate short sales specifically and rely on more general regulatory measures to contain the risks posed by short sales.

These different approaches to the regulation of short selling do not point to any particular market structure characteristics that make short selling a greater (or lesser) risk in some types of markets than others. A major factor in determining national approaches appears to be the characteristics of the local environment.

At present, approximately half of the jurisdictions of SC2 members have arrangements that result in information on short selling being available to regulators and/or market authorities as a matter of course. The majority, but not all, of these jurisdictions also have arrangements that result in some of this data being made available publicly. We are not aware of any jurisdiction that collects, or collects and makes public, this information unless they already require it to be gathered as part of a process for implementing specific controls over trading (e.g. tick rules). However, three jurisdictions with no specific trading controls on short selling – Brazil, Spain and Sweden - do publish regular figures on stock lending, which may serve (with caveats) as a rough proxy for short selling.

The Technical Committee notes that short sales contain information that may be of value to both regulators and market users. The *IOSCO Objectives and Principles of Securities Regulation* already identify disclosure of short sales, or at least their disclosure to regulators, as a possible regulatory tool. Market users generally benefit from increased transparency and there seems little dispute that many short selling transactions may contain information, over and above that in long sales, of potential value to market users. Moreover, transparency tends to improve understanding of market processes and build confidence in them – something that is sometimes lacking in respect of short selling.

While the Technical Committee takes the view that, in general, regulators should aim to promote appropriate transparency to support market efficiency, it recognises that achieving this in practice is often difficult, requiring reconciliation of a number of considerations. In particular in the case of short selling, the information message from a short sale may be ambiguous, and possibly open to various interpretations - though that in itself is not necessarily a good reason why data should not be more widely available, especially if any explanation as to its limitations is also available. Secondly, there may be some risk that excessive transparency could alter the risk-reward ratio for short sellers to a degree that the price-correcting benefit of short selling (and the accompanying liquidity) is reduced.

It is also possible that the informational inefficiencies in the short selling process may occur at points in the transaction chain other than the sale itself. They could occur in the stock borrowing sector if it is difficult for participants or end borrowers to assess changes in the supply and demand for securities, or in respect of settlement if market users have no indication of a growing number of unsettled positions in a security to which short sellers may well be contributing. Although there are increased signs of market-led transparency in some stock lending markets, many of these markets

remain relatively opaque, often with considerable information asymmetries. In examining short selling transparency, regulators should consider these aspects too. In some circumstances, it may be more cost-effective to cause more light to shine on these parts of the transaction chain than directly on short sales themselves.

In respect of disclosure of short sales information to regulators, ready regulatory access to information on short selling may provide improved real-time insight into market dynamics and early warnings of potentially disruptive or abusive use of short sales, or (in the case of non-current data) at least expedite post-event investigations. The principal issue is whether this is worth the cost in situations where information is not already being gathered for other regulatory purposes. As suggested in the paragraph above, more cost-effective methods of monitoring for short selling may be available, whether through reviewing stock lending, activity in derivatives markets and/or derivatives positions.

In summary, short sales contain information that may be of value to regulators and to market users. In this respect, the Technical Committee encourages regulators to consider the appropriate level of transparency in this area. The Technical Committee recognises the difficulties in assessing the correct balance between the benefits and potential drawbacks of any transparency regime and the need to structure it in a way that takes into account relevant factors in the local environment. Where regulators are contemplating the introduction of a transparency regime for short selling, the Technical Committee recommends that they should carefully address the following issues.

- A) The objective of the transparency regime for short sales and the most effective way of achieving it, through the identification of:
 - a) perceived inefficiencies in the short selling process: whether they lie in information deficiencies relating to the short sale, the position relating to uncovered sales/unsettled transactions or opacity in the stock-lending market;
 - b) the potential benefits from greater transparency: whether there appears to be scope to enhance pricing efficiency for both over-valued securities and securities that may be adversely affected by rumours of short selling and the extent to which transparency is likely to act, or not act, as a deterrent to the kind of market abuse used by short sellers that has been experienced in the jurisdiction;
 - c) the need to select data for publication that can best reconcile the aims of (i) affording sufficient protection to short sellers to protect their incentive to seek out and act upon adverse information, (ii) delivering data that is useful to market users, and (iii) delivering that data on a time-scale that assists market users with current trading decisions;
 - d) the explicit (e.g. implementation and compliance) and implicit (e.g. trading) costs of a disclosure regime;
 - e) the possible options, especially where information-gathering on short sales is to serve only regulatory monitoring and market disclosure purposes, of providing market users with information in other ways where they are less costly in that jurisdiction, e.g. through the release of centralised stock lending or settlement fail data, where available.

- B) The definition of short sale for the purpose of the transparency regime and in particular:

- a) the precision, robustness, clarity and, so far as possible, simplicity of the definition of what is to be disclosed – and, by extension, what information is excluded;
 - b) the availability of such information to the public;
 - c) the extent to which information to be published could be subject to different interpretations, because the transaction may be more technical than directional, the nature of ‘health warnings’ that should accompany data disclosure and whether there is scope for supplying any supplementary information that may assist interpretation.
- C) The nature of the arrangements required for effective enforcement of a transparency requirement, including:
- a) the measures required to ensure reliable declaration and documentation of short sales;
 - b) any specific measures with respect to short sellers from outside the jurisdiction and of short sales booked outside the jurisdiction with a view to avoiding domestic regulation.
- D) The provisions needed for continuous monitoring and periodic revision of the arrangements in light of :
- a) Changing practices such as (i) new methods of establishing short positions; (ii) new trading strategies using short sales; and (iii) new market developments that alter the information needed by market users;
 - b) the impact of the transparency regime on markets and market participants trading strategies, taking into account the benefits to market users against the costs to market participants.

Members of the IOSCO Technical Committee Standing Committee on the Regulation of Secondary Markets (SC2)

Australian Securities and Investments Commission

Comissao de Valores Mobiliarios, Brazil

Commission des valeurs mobilières du Québec, Québec, Canada

Ontario Securities Commission, Ontario, Canada

Commission des Opérations de Bourse, France

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Securities and Futures Commission, Hong Kong

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Securities Board of the Netherlands

Monetary Authority of Singapore

Comision Nacional del Mercado de Valores, Spain

Swiss Federal Banking Commission, Switzerland

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Commodity Futures Trading Commission, United States of America

Securities and Exchange Commission, United States of America