Short selling around the world with applications to the SSE

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Executive Summary

This document describes short selling practices around the world and makes suggestions for the best way to implement short selling at the Shanghai Stock Exchange. Currently, about 93% of the world's market capitalization is available for short selling. The ability to sell short is extremely important for making security prices more efficient and for preventing overvaluation of shares. Furthermore, short selling is essential for ensuring the fair pricing of derivatives such as ETFs, futures and options, as well as for making it possible for entities acting as market makers to provide liquidity.

However, short selling is highly regulated around the world because of the fear of abuse. Short sellers have often been blamed for falling stock prices. However, academic research demonstrates that markets that allow short selling have lower volatility, both for individual stocks and for overall market indices. Short selling may also cause problems with the settlement system if short sellers fail to deliver promised shares at settlement time.

Regulations with respect to short selling generally fall into the following categories:

- Identity rules: Who may or may not short sell?
- Stock specific rules: Which stocks may or may not be shorted?
- Trading rules: Under what conditions may a stock be shorted?
- Disclosure rules: Who finds out about short sales and when?
- Location rules: Must shares be borrowed before the trade is executed?
- Lending rules: Can securities firms lend out shares?
- Collateral ("margin") rules: What collateral must short sellers post?
- Tax rules: What is the tax treatment of short transactions compared with long transactions?

This document describes in detail the regulatory climate in the United States, which represents approximately one half of the world equity market capitalization. In addition, the paper describes the regulatory climate in capital markets in other jurisdictions.

This document then makes detailed suggestions for the design and implementation of a successful stock lending market at the Shanghai Stock Exchange. The SSE has the advantage of being able to learn from the experiences of other markets and adapt the best practices from around the world to local conditions.

An efficient and transparent Securities Lending Market (SLM) can be established in cooperation with the China Securities Depository & Clearing Corporation (CSDCC), using a limit order book platform at the SSE. Holders of stock can enter their offering rates for stock lending through the SLM. In order to prevent settlement failures as well as to prevent the creation of "phantom" stock, the securities lending market should be automatically connected to the spot market to make sure that a stock loan is made before a short sale. The proposed market is set up for seamless straight through processing.

Such a market would add over RMB 44 million to the revenues of the exchange through increased transaction fees, in addition to the fees charged for the operation of the Stock Lending Market.

The following regulatory suggestions are made:

Available stocks:

- After the testing period, all stocks should be shortable, although the SSE and the regulators should have the ability to suspend short selling in particular stocks if deemed necessary for a fair and orderly market. Short selling is even more necessary for smaller stocks than for larger stocks. The authorities may wish to monitor or restrict short selling in the period surrounding a secondary offering.

Position limits:

- In order to prevent abuses, exchange authorities should have the ability to restrict stock lending on a case-by-case basis if the level of lending exceeds a particular level such as 10% of the public float.

Disclosure:

- Investors should be required to disclose when placing orders whether they are long or short. Brokers and the SSE should retain this information as part of the normal audit trail.
- The Stock Lending Market should disclose on a real-time basis the best bid and offer prices for stock loans, and at least daily the total quantity of outstanding loaned shares.
- The SSE should disclose at least daily, if not in real-time, the total number of shares sold short for each stock. The exchange could charge an additional price for this additional data to investors who want to buy it.

Authorized short sellers:

- There is no compelling reason to restrict the ability to sell short to certain classes of investors. Any investor with sufficient funds should be allowed to sell short.

Trading rules:

- No "uptick" rule is recommended because such rules do little to restrain short selling or dampen volatility and are easily evaded. Other protections such as daily price limits are sufficient to protect market quality.
- If regulators desire such a rule, an "upday" rule is far better. Such a rule restricts short selling only on days when the stock is trading below the previous closing price.

Collateral requirements:

- Proceeds of the short sale are held by the SLM as collateral for the loaned stock. In addition, the SLM will require the borrower to put up additional collateral to protect the lender from possible default. In the initial stages of the market, the initial total collateral requirement should be 125% with a maintenance level of 115%.
- The SLM will revalue the loaned stock daily and recalculate the required collateral. If the collateral is less than the maintenance level, the borrower must pay additional cash. The borrower will receive interest on the collateral, less expenses.
- As derivative markets are developed, an integrated collateral system should be developed based on the net long or short position of a particular investor. For example, an investor who is completely hedged, such as someone who is long an ETF and short all of the constituent stocks, would have a lower collateral requirement than a pure speculator.

Taxation issues:

- Because a stock loan is a loan and not a sale, stamp duty should not apply to the loan. However, stamp duty naturally applies to the sale of the borrowed stock, as well as to the covering transaction.

I. *Introduction: The uses of short selling*

Short selling is an often misunderstood part of financial markets. Short selling is simply the sale of a financial instrument that the seller does not own at the time of sale. This can occur in several circumstances:

- The seller has borrowed or intends to borrow the stock from someone else prior to the settlement of the sale transaction.[1] In much the same way as one can borrow money and spend it, one can in many countries borrow shares and sell them. The borrower can then buy the shares on the open market later to repay the stock loan.
- The seller expects to buy the shares prior to settlement.[2]
- The seller expects to receive the shares prior to settlement. This can occur if the seller has recently purchased but not yet received the shares, or expects to receive the shares as part of a corporate action such as a merger or spinoff.
- The seller plans to make use of flexibility in the settlement system to delay delivery until a later date. This is possible in some countries.

Here is an example of how a short sale can work. Suppose that an investor wants to sell short 1,000 shares of China Unicom ADRs on the New York Stock Exchange.[3] The investor's broker would arrange to borrow the shares and then sell them on the NYSE at the current market price of USD $7. If the stock price drops to $5, the investor can then

buy 1,000 shares at $5 to repay the stock loan, leading to a $2 per share profit before transactions costs. On the other hand, if the stock had gone up to $10, the investor would have lost $3 per share.[4]

Short selling has some very important uses in financial markets. The most important use is that it decreases volatility and allows more information to be incorporated into stock prices. Long investors can easily incorporate good news into stock prices by buying stocks. However, if only optimistic information is incorporated in stock prices and the bad news is kept out, then stock prices will temporarily be higher than their true values and investors will ultimately be disappointed. Several studies in the U.S. market have found that, when short selling is constrained through inefficiencies in the stock lending market, subsequent stock returns are far less than the market.[5] In other words, when short selling is limited, investors pay prices that are too high for stocks. Although at first it might seem good to have stock prices that are too high, it is not good. As the stock price eventually falls, many investors are unhappy and they lose their trust in the market mechanism. They become reluctant to buy any stocks, which increases the cost of capital for all firms.

The second major use of short selling is to support liquidity provision such as market making. Market makers are investment professionals who add liquidity by making a "two-sided" market in a stock at all times. Throughout the trading day, they post a bid price at which they are willing to buy and an offer price at which they are willing to sell. This ensures that investors will be able to buy or sell the stock quickly when they want to.

However, a market maker may not always have inventory available when a customer wants to buy the stock. If the market maker can short the stock, then the market maker can service the customer at the current market price. If the market maker cannot short the stock, then the stock price may jump up temporarily to an unsustainable level, making the stock more volatile.

Many of the largest securities markets in the world have such professionals to add liquidity to their markets, although the details vary from market to market. The NYSE has a single specialist who acts as a market maker for each stock. Nasdaq has an average of over 10 competing market makers for each listed company. Euronext and Deutsche Boerse also have optional provisions for "liquidity providers" to act as market makers based on agreements with the issuers. In markets without formal market makers, private investors often act as market makers by entering buy and sell orders into the limit order book. For example, Wei and Shi (2002) document that in China investors have been acting as de facto market makers in the shares of closed-end funds.

Market makers make money by buying at the bid price and selling at the higher offer price. In some countries, market makers may also receive benefits of various types from the issuers who may provide cash compensation, or other business such as investment banking business. Furthermore, market makers may receive special advantages, such as a reduction in trading fees, in exchange for their willingness to provide market making services.

The third major use of short selling is to make sure that the prices of derivative securities are properly based on the underlying cash prices. The prices of derivative securities are related to the underlying stock prices through well-known arbitrage relationships. If the price of the derivative deviates from the correct price, then arbitrageurs seek to buy the underpriced security and sell the overpriced security. This helps to push the prices back to the correct level.[6]

For example, one basic form of a derivative security is an Exchange Traded Fund (ETF) that reflects an interest in a basket of stocks that trade on an exchange. For example, one popular ETF in the United States is the so-called "spider", the Standard and Poors Depositary Receipt that tracks the S&P 500 index. ETFs are very useful for investors who want to own all of the stocks in the index without making numerous individual transactions. In order to make sure that the price of the ETF closely tracks the value of the index, arbitrageurs monitor the prices of the ETFs and the stocks that go into the ETF. When the price of the ETF is below the true value of the stocks it contains, the arbitrageur can buy the ETF and short the stocks. This action will push the price of the ETF and the stocks closer together. Conversely, if the price of the ETF is higher than the price of the stocks in the basket, then the arbitrageurs will buy the stocks and short the ETF, causing the prices to move to where they should be. In a similar way, arbitrage involving short selling ensures that the prices of stock index futures is also properly tied to the price of the underlying stocks.

Another useful derivative is the put option. A put option is similar to a type of insurance that makes a payment if a stock goes down. Some investors who own a stock but are afraid that it might go down could be very eager to purchase such insurance. Market makers who sell such options, however, need to hedge their risk by short selling the stock.

Indeed, without short selling, derivatives markets cannot function properly. Chen and Zhou (2004) examine the problems related to the failure of the first Chinese government bond futures market in 1995 and concluded that, among other things, short sale restrictions on the government bonds made the problem worse.

The controversy over short selling

Short selling has been controversial from the very beginning of financial markets. Virtually every developing stock market has banned short selling at one stage of its development, only to reinstate it later. Holland banned the practice in 1610. The United Kingdom banned short selling in 1733. Napoleon banned short selling in France in 1802. New York State banned short selling in 1812.[7]

The opposition to short selling usually reaches a peak after a major market decline as investors look for someone to blame for their losses. The arguments against short selling typically include:

- *Selling something you don't have is theft.*
- *Short sellers make money when other people lose money. It is wrong to profit from other people's misery.*
- *Short sellers make prices go down.*
- *Short sellers spread lies about good companies.*
- *Short sellers manipulate prices.*
- *Short sellers increase stock volatility.*
- *The ability to sell short encourages excessive speculation.*
- *Short sellers endanger the settlement system when they do not deliver shares.*

Officers of listed companies often have an intense personal hatred of short sellers. For one thing, the short sellers have an economic interest diametrically opposed to that of the issuer. Furthermore, short sellers usually do not hesitate to spread negative information about the management of a company that they are shorting.

Most of these criticisms of short selling are misinformed, are just plain wrong, or also apply to long buyers. Clearly, borrowing stock and selling it with the lawful permission of the owner is not theft. Short sellers can help prevent stock prices from becoming too overvalued, thus preventing long buyers from losing even more money. If the short sellers have good information, stock prices should go down so that the stock prices reflect the true value of the companies. If the short sellers are wrong, they lose money as the stock returns to its true value.

In the past, short sellers have been accused of "bear raids" in which groups of sellers continuously sell and exhaust all of the buying liquidity in the market, pushing the stock price down far below the true value of the stock. However, numerous investigations over the years including Meeker (1932) and Lamont (2003) in the US have shown that companies complaining about the tactics of short sellers have often been substantially overvalued and sometimes outright fraudulent.

Spreading misleading information is prohibited under Article 72 of the Securities Law. Indeed, short sellers have no more incentive than long buyers to spread false information. Furthermore, firms can sue the short sellers for libel if the short sellers spread false information about the firm.

As far as excessive speculation goes, even in markets where short selling is fairly unrestricted, the amount of short activity is usually quite small. In a typical month, the short interest in NYSE listed stocks is around 2% of the total shares outstanding. However, the amount of short selling on the NYSE is actually much higher. In 2003, short sales represented 13.5% of the total volume on the NYSE.[8]

The threat to the settlement system is another matter. Clearly, if short sellers can sell stock without ever borrowing or delivering stock, then problems can occur as buyers do not receive the shares that they have contracted for. Furthermore, such naked short selling creates "phantom" stock and improperly increases the number of shares in circulation.

Because short selling requires securities lending, there are also the usual banking issues that arise in any lending situation, such as credit risk. Lenders need to be sure that they will get their stock back when they want it. The financial system needs to be robust enough so that a major market movement does not cause a cascading failure of financial firms. One possible systemic risk would be if a major short seller loses so much money so quickly that the loaned stock is not repaid, and the brokerage firm responsible then defaults, leading to a series of problems in the financial markets. While this is a very remote possibility, regulators need so be aware of it and take steps to prevent it.

Because of the potential for problems, it is important to regulate short selling for the following reasons:

- Prevent problems with the settlement system.
- Prevent problems with brokerage firm failures if borrowed stock is not repaid.
- Prevent systemic risk from cascading failures of financial institutions.
- Maintain confidence in the integrity of the market mechanism.
- Make it look like the government is doing something when it really isn't.

Types of regulations

Regulations with respect to short selling generally fall into the following categories:

- Identity rules: Who may or may not short sell?
- Stock specific rules: Which stocks may or may not be shorted?
- Trading rules: Under what conditions can a short sale be executed?
- Disclosure rules: Who finds out about short sales and when?
- Location rules: Must shares be borrowed before the trade is executed?
- Lending rules: Can securities firms lend out shares?
- Collateral requirements: What collateral must be posted by the short seller?
- Tax rules: What is the tax treatment of short transactions compared with long transactions?

II. Short selling regulation in the United States

Short selling in the United States has undergone a variety of different regulatory treatments. In 1812, New York State prohibited the practice of short selling, although the ban was not well enforced and the ban was later repealed.

Even before regulation by the federal government, the New York Stock Exchange regulated trading practices on its exchange. To this day, the NYSE requires its members and listed firms to adhere to standards much stricter than the minimum standards imposed by law. In particular, in response to concerns about short selling, the exchange began gathering statistics on short selling by requiring that all orders be marked as long or short. The exchange also instituted its own form of the uptick rule in 1931, seven years before the SEC imposed its own regulations.

The stock market crash of 1929 and the ensuing depression led to a number of reforms in U.S. financial markets. The Securities Exchange Act of 1934 created the Securities and Exchange Commission that imposed the original uptick rule in 1938.

Short sales in the United States are now regulated as follows:

Identity rules. In general, most investors can sell short. However, U.S. law prohibits short selling from tax-deferred retirement accounts such as Individual Retirement

Accounts (IRAs). At one time, mutual funds were not permitted to sell short, although that restriction has been lifted. Nevertheless, the charters of many mutual funds and other institutional investment products often contain restrictions on short selling. Similarly, corporate executives were once banned from shorting the stock of their own companies. This ban has been replaced with a restriction on short-term trading of company stock that does not contain an explicit ban on shorting. The employment contracts of many executives, however, often contain restrictions on shorting company stock.

Location rules. Investors must make an "affirmative determination" that shares can be borrowed before making a short sale. In practice, when an investor places an order to sell short, the brokerage firm checks to make sure that the shares are available. This is usually done by consulting a "hard to borrow" list that is put together daily by the brokerage firm or its clearing firm. If the stock is not on the list, then the brokerage firm assumes that shares can be easily obtained and proceeds with processing the short sale order. Note that the firm does not actually borrow the shares until needed, as the order may not be executed. Other firms rely on an "easy-to-borrow" list that specifies the stocks that are available for borrowing. If the stock is not on the "easy-to-borrow" list, then the brokerage firm has to search for the shares before executing the trade. The trend is for firms to rely on an "easy-to-borrow" list rather than a "hard-to-borrow" list.

In order to facilitate retail short sales, brokerage firms usually borrow the stock from the accounts of their own customers. When customers open margin accounts in the United States, the standard account agreement gives brokers the right to "hypothecate" or lend

the shares. The brokerage firms do not notify customers that their shares are being loaned out. The lending customers receive no fees for lending their shares. Brokerage firms may not lend out shares from cash accounts, and they can only lend out shares against which customers have actually borrowed money.

If the customer who owns the shares wants to sell or take delivery of the shares, the brokerage firm will typically borrow the shares from another account. In rare cases, the short seller will be bought in if the broker cannot reborrow the shares from another account. This adds a risk to short selling in that a short seller might be forced to buy shares to cover the short position at exactly the wrong time.

There is also an institutional market for stock lending, as described in D'Avolio (2002). Custodians for large institutional investors have securities lending programs in place so that the institutional investors can earn money from lending out their securities. Such institutions only lend to borrowers whose credit they trust. Typically, the borrower posts collateral worth slightly more than the value of the shares – typically the proceeds of the sale plus 2% of the value. This collateral is then marked to market daily, and the borrower must post additional collateral if the price of the shares increases. Typically, the borrower receives a "short rebate" equal to the interest on the collateral less a fee that is retained by the lender.

Of course, the stock borrower has to make the stock lender whole for any distributions such as dividends that are paid on the shares. However, the lender of the shares loses voting rights.

Market makers and specialists have an exemption from the location rules in connection with bona fide market making activities. This permits market makers to provide liquidity quickly by selling the stock when a buyer appears, without have to search for a lender first. Often, the market makers will close out the position the same day by purchasing shares, removing the need to deliver shares at settlement. However, the market makers still have to borrow or buy the shares in order to meet their settlement obligation on date T+3.

Disclosure rules. When an investor places a sale order, the order must be marked as long or short. This information is used to alert the brokerage firm of the need to locate shares. The information is passed on to the exchange or market maker for compliance with the tick rule or bid test.

Collateral ("margin") requirements: Federal Reserve Regulation T generally requires short sellers to post 50% collateral before entering into a short position *when the broker arranges the loan of the stock*. The collateral requirements can be met by any long securities in the customer's account. The maintenance level is usually set by exchange rules to a minimum of 25% and the actual level is ultimately left to the brokerage firm. Indeed, brokerage firms can and do sometimes set higher collateral requirements.

However, this only applies to short sellers who borrow the shares through their broker. If an investor borrows shares directly from a stock lender, then the 50% collateral does not apply, and the only margin required is that negotiated between the borrower and the lender.

U.S. regulations and brokerage practices often set higher collateral requirements for low priced stocks. This means that low priced stocks are not often held in margin accounts and thus are unavailable to borrow. Institutional investors also tend to avoid very low priced stocks, which reduces the supplies of such stocks to the stock lending market. This makes it difficult to borrow such stocks at any price.

Tick rules: The US has a complicated set of rules that govern when short sales may be executed. These rules vary dramatically from market to market and are in the process of revision by the SEC.

Stocks that are listed on the New York Stock Exchange and the American Stock Exchange fall under the so-called uptick rule. First adopted in 1938 and modified over the years, SEC rule 10a-1 permits short sales only at a price above the previous price, or at the same price as long as it was above the last different prior price.

These rules also apply to the trading of NYSE- and AMEX-listed stocks on other trading platforms such as the regional stock exchanges, Nasdaq, and Electronic Communication

Networks (ECNs). However, the other trading locations apply to the tick to the last trade anywhere, whereas the NYSE applies the rule using only the last trade on the NYSE. Thus, a short sale could be permitted in an NYSE-listed stock in one location but not at another location at the same time. For example, suppose that the last trade on the NYSE was at $10.04 and the last trade on a regional exchange was $10.02 and the current best bid is $10.03. The NYSE would not permit a short sale at the bid price of $10.03 but it would be legal on the regional exchange.

There are some exceptions to the uptick rule. Market makers, including options market makers, and certain arbitrage transactions are exempt from the rule. Furthermore, transactions in ETFs are also exempt from the uptick rule.

The rules are different for Nasdaq-listed stocks. The Nasdaq Stock Market, Inc., operates a decentralized market in which hundreds of different entities are connected via computer linkages to trade stocks. Each entity has up to 90 seconds to report a trade that it makes. Most report instantaneously, but there are variable delays in trades coming from different trading platforms. Because of this, it is difficult to determine exactly which trade was the last trade. Accordingly, Nasdaq never had a tick-test like the NYSE. In 1994, Nasdaq implemented a bid test for Nasdaq National Market stocks. This rule prohibits short sales at the bid price if the bid was less then the previous bid price.[9] However, this rule only applies to trades by Nasdaq market makers or through Nasdaq's SuperMontage trading platform. The bid test does not apply to trades made on other Electronic Communication Networks (ECNs) such as Inet or Archipelago.

Nasdaq also operates a separate market segment for smaller stocks known as the Nasdaq SmallCap Market. The Nasdaq SmallCap market has lower listing requirements than regular National Market stocks, although it uses exactly the same trading platforms as the National Market stocks.

There are no bid or tick restrictions on short selling stocks listed in the Nasdaq Small Cap market. On the other hand, it is difficult to borrow many, but not all, of the SmallCap stocks because institutions rarely hold small capitalization stocks, reducing the supply of shares to the stock lending market. Furthermore, the low prices of many of these stocks leads to restrictions on their marginability, further depleting the supply of lendable shares from customer margin accounts.

Ferri, Christophe, and Angel (2004) examine the rate of short selling across the Nasdaq National Market, which has a bid test, and the Nasdaq Small Cap market, which has no bid test, and find no significant differences in the rate of customer short selling and no differences in the rate of extreme price drops associated with short selling. They conclude that the bid test does not do any good for market quality.

Stocks that are not listed on the NYSE, Amex, or Nasdaq markets are traded through the OTCBB and Pink Sheets markets. The OTC Bulletin Board market is a Nasdaq-operated dealer market for approximately 3,100 stocks.[10] The only requirements for trading on the OTCBB is that the firm has to file financial statements with the SEC, and a market maker

has to quote the stock. The majority of these stocks are penny stocks that do not meet the listing requirements of larger markets, and include many firms that were delisted from the major markets.

There is no uptick rule or bid test for stocks traded on the OTCBB. However, it is often extremely difficult to borrow OTCBB-traded stocks, so it is very difficult to short such stocks.

Stocks that are not registered with the SEC can be traded in the Pink Sheets market.[11] Example of stocks that trade on the Pink Sheets market include foreign stocks that have chosen not to register with the SEC, and thus cannot be listed on U.S. exchanges, along with stocks that are so small that they are not required to register with the SEC. In addition, firms whose financial records are in such disarray that they cannot file audited financial statements with the SEC can also be found on the Pink Sheets. For example, the common shares of the bankrupt Enron trade on the Pink Sheets.

Similar to the OTCBB, there is no bid test or uptick rule. However, it is very difficult to find the stock to borrow, making it very difficult to short such stocks. There have been numerous complaints about naked shorting and delivery failures in the OTCBB and Pink Sheets markets.

The SEC (2003) proposed to replace the different rules with a consolidated bid-test, but then decided not to adopt the proposed bid test. Instead, the SEC will implement a one-

year pilot program in 2005, eliminating all bid and tick restrictions on the trading of 1/3 of the largest 3,000 stocks to see whether eliminating the tick test has any impact.

Post Trade Transparency: Once a month in the United States, the exchanges report short positions on a stock-by-stock basis. No more frequent numbers are available. No information is available on short positions for OTCBB or Pink Sheets stocks.

Short selling in other countries

Short selling practice and regulation varies considerably around the world. In general, short selling is allowed in most developed stock markets. Bris, Goetzmann, and Zhu (2003) surveyed stocks markets around the world and report that 93% of the world's stock market capitalization is available for short selling. Figure One from their study documents the increase in the number of stock markets allowing short selling over the past 100 years. Bris Goetzmann, and Zhu. Also reported on the country-by-country status of short selling restrictions, which is reproduced as table 1 of this report.

Other global surveys of short selling include Morgan Stanley (2003), which is included as Appendix B to this report. The International Organization of Securities Regulators (IOSCO, 2002) also reported on the regulation and implementation of short selling in a variety of jurisdictions. Their findings are included in table 2 of this report.

Europe

In general, the major European countries impose very few restrictions on short selling. Unlike the United States, there are generally no requirements that orders be marked as short, nor are there restrictions on when short sales can be made. Indeed, the Financial Services Authority (2003) of the United Kingdom recently concluded:

> "Our assessment of short selling remains that it is a legitimate investment activity which plays an important role in supporting efficient markets. It accelerates price corrections in overvalued securities, it supports derivatives trading and hedging activities and facilitates liquidity and trading opportunities. We therefore see no case for any prohibition on short selling, either generally or for particular stocks in times of market stress."

However, the FSA did conclude that increased transparency would help the market, and prodded CrestCo, the settlement firm, to release information regarding securities lending activities. CrestCo now releases monthly data on the level of securities lending for the top 350 securities, and sells daily data upon subscription. CrestCo also releases information on the 50 firms with the worst settlement problems.

Deutsche Boerse, AG operates the Frankfurt Stock Exchange, along with the Eurex derivatives markets. In general, short selling is unrestricted in Germany with no disclosure or location rules. The stock lending market operates over the counter between banks and investors, although Deutsche Boerse also operates a securities lending service as well.

Euronext operates the stock exchanges in Paris, Brussels, Amsterdam, and Lisbon with a harmonized rule book. There are no restrictions comparable to the U.S. marking, location, or tick rules.

In Scandinavia, the exchanges in the Nordic and Baltic regions have aligned into the Norex alliance and share a common rule book and a common trading platform, SAXESS. However, the exchanges maintain their own legal and regulatory identities. Member exchanges include Stockholm, Oslo, Copenhagen, Iceland, Latvia, Estonia, and Finland. The harmonized Norex rule book contains no restrictions on short selling at all.

Both the Helsinki (Omhex) and Athens (Athens Exchange, SA) exchanges have formal securities lending markets as part of their derivative markets. These exchanges provide good models for a securities lending market in China, as both exchanges have modern computerized limit order book trading platforms.

In the Athens market, securities borrowing is referred to as "reverse stock repo."
The exchange administers the stock lending pool and serves as the only securities lender. Thus, investors make their shares available to the pool, and if their shares are loaned out through the exchange, the investors get the proceeds less the exchange's fee. However, potential stock lenders do not put offers into the exchange system. Only one contract is available, and it expires at the end of the year. A new contract becomes available on the first day of the new year, so investors cannot borrow stock with this facility over the end-

of-year period. Even though the contract lasts until the end of the year, borrowers can repay the stock loan earlier, and lenders can demand delivery earlier as well.

There is also a competing over the counter market in stock lending in Greece.

The Helsinki market operates a transparent stock lending market as part of its derivatives market. The market allows potential stock lenders and borrowers to post bids and offers for the lending of stock. There is one contract expiring each month, with maturities available out to one year. Most of the active stocks are available for lending, although some illiquid shares are not.

There is also considerable flexibility in the terms. The borrower and the lender may agree on flexible dates of delivery and payment and whether the loan can be called in early. The exchange has the capability to match borrowers and lenders anonymously in their system.

In addition, the Helsinki Exchanges also offer delivery failure loans that settle on T+0. A participant with clearing party status can automatically borrow shares to meet a delivery failure, although the expenses are higher and the delivery failure loans are limited to 10 days.

A table contrasting the Helsinki and Athens products is found in table 3, and representative stock lending rates for Helsinki are displayed in table 4.

Canada has an uptick rule similar to the United States, along with a pre-trade marking requirement. However, program trading, market making, and arbitrage transactions are also exempt. Furthermore, there is no requirement to locate shares before trading, leading to problems with naked shorting.

Short selling in Asia

In general, Asian countries tend to be much more restrictive than European or American markets. Japan has recently increased restrictions on short selling as a means of appearing to fight deflation.[12] These measures included increased enforcement of its requirements that short sales be marked as short and increased surveillance. Furthermore, the Japanese version of the uptick rule was made more stringent to prohibit short sales at the same price as the previous trade if that price was below the last different price. In this author's opinion, these changes are mostly cosmetic attempts to make it look like the government is doing something rather than policies with real economic merit. Currently, investors who borrow stocks from securities firms must post collateral of 30% prior to the transaction (plus the proceeds of the transaction), for a total collateral of 130% and a maintenance level of 120%.

India has just introduced this year a centralized stock lending market. Before 2004, stock lending was done through a number of approved intermediaries. Foreign investors and mutual funds were not allowed to sell short.

Short selling practice and regulation in China

Mainland China

Officially, short selling does not currently exist in the mainland, and there are no official facilities for securities lending. Indeed, Article 141 of the Securities Law prohibits securities firms from lending out customer's securities. The law also requires that securities actually be in the investor's account before sale orders can be executed. This prevents settlement failures. It is likely that there may be unofficial stock lending between private investors, but the scale of such activity, if any, is unknown.

Short selling itself, however, does not appear to be explicitly illegal. It therefore appears to be possible, with the approval of the State Council and the CSRC, to design and implement a stock lending market without requiring legislative changes. Appendix A discusses some of the relevant sections of the Securities Law.

However, short selling does exist in the so-called "N-shares", Chinese companies that have issued ADRs that trade in the United States. The ADRs can be and are shorted in the US. Table 5 presents some data on a sample of Chinese ADRs that trade in the U.S.

Hong Kong

Short selling in Hong Kong has gone through a variety of regulatory treatments over the last decade. Short selling was generally prohibited prior to January 3, 1994, when the Stock Exchange of Hong Kong introduced short selling for 17 of the 33 constituent stocks in the Hang Seng Index. There was also an uptick rule, and stamp tax would be imposed if the short sale was not covered in two weeks. These restrictions were dropped on March 25, 1996. Fung and Draper (1999) document that mispricing of the Hang Seng index futures contract dropped significantly after the reduction in short selling restrictions. Hong Kong reinstated the uptick rule in response to the Asian financial crisis of 1998. Draper and Fung (2002) find that the intervention increased mispricing of the Hang Seng futures contract.

Hong Kong also requires that short sales be marked as such, and discloses on a daily basis the stock-by-stock amount of short selling. Collateral for stock borrowing is at least 105% of the value of the stock. The Hong Kong Exchanges are at the early stages of planning whether to introduce an exchange-based stock lending program due to broker complaints about the existing stock lending market.

Taiwan

Taiwan has restrictions on the types of shares that can be shorted. For example, a stock must be listed for six months and cannot be selling for less than par value. Also, if there are problems in the trading such as settlement failures or excessive volatility, then short sales can be curtailed. Taiwan does have an uptick rule except for except for trades related to ETF and derivative hedging. Taiwan also imposes additional restrictions on the activities of foreign firms.

III. The Securities Lending Market

The Research Center of the SSE has already conducted research into establishing a Securities Lending Market (SLM) at the Shanghai Stock Exchange. This proposal draws heavily upon the excellent work that has already been performed.

There are five basic alternatives for a Stock Lending Market in China. The first alternative is to have long-term lending contracts similar to those traded on the Helsinki Stock Exchange. The second model is the Athens model with the Exchange serving as the sole administrator of the lending pool. The third model is an over-the-counter system similar to the United States and many European countries. The fourth model is to have a simplified lending arrangement. The fifth model is for a hybrid system that combines the best of the Helsinki and Athens models.

Alternative 1:Helsinki Model: Long-term lending contracts

The first alternative is to offer stock lending contracts similar to the Helsinki Exchange. The Helsinki model appears to work fairly well.

There are, however, some problems with the Helsinki model. First, there is still buy-in risk if the stock lender wants the stock back early. An early buy-in would lead to the nuisance of having to borrow the stock again and incur another set of transactions fees.

Second, the lending process is not automatically linked to the stock purchase process. This adds an unnecessary level of complexity to short selling.

Another problem in implementing this system is that procedures would have to be worked out for posting and handling collateral, including daily adjustments to current market prices.

Alternative 2: Athens model

The next alternative is the Athens model, in which the exchange itself administers the lending pool. The owners of stock make it available to the pool, but all pricing and lending decisions are made by the exchange. The advantage of this model is that the simplicity of the process theoretically will attract more lenders. All potential lenders need do is make their shares available to the pool. Lenders need not worry about monitoring prices in the lending market. If the exchange lends out their shares, they get money. Thus, from the lenders perspective, participating in the pool is free money without risk.

One should keep in mind that with widespread participation in the lending pool, lending rates will be very low most of the time. Only in rare situations will there be significant demand for borrowing the stock. Thus, for most stocks on most days the price of borrowing stock will sink to the minimum level and there will be excess supply of lendable stock available. For many investors, it will not be worth the trouble to actively monitor the stock lending market in which most of the rates are negligible and stay that way.

However, the Athens model shares some of the same problems as the Helsinki model. The borrowing is not automatically linked to short selling, and the risk of buy-in is still there.

Furthermore, a centralized model along the Athens lines may run afoul of Article 150 of the Securities Law, which prohibits securities registration and clearing corporations from lending out customer securities. Thus, the CSDCC cannot play too active a role in the lending of securities, although there does not appear to be any barrier to its transferring shares between an investor wishing to lend stock and another investor wishing to borrow.

Alternative 3: U.S. Model

In the United States and many parts of Europe, the securities lending market is an over-the-counter market with a high degree of fragmentation, no transparency, and serious

shortages of some securities. Although the system works well for the most liquid stocks, it does not work well for less liquid securities. As Lamont (2003) observed about the U.S. market: "A somewhat paradoxical description of the stock lending market is that it usually works very well, except when you want to use it, in which case it works terribly."

Furthermore, the U.S. market depends on brokerage firms lending out shares from customer accounts. This practice is strictly forbidden in China, and it would require a change in the securities law to permit this practice. Indeed, permitting securities firms to lend out customer securities would require a much more deeper, sophisticated, and expensive monitoring of securities' firms activities than is now practiced in China.

For these reasons, implementing a U.S.-style model is not recommended.

Alternative 4: Limited loss contracts

One problem in implementing a stock lending market in China is that stock lending as practiced in other countries requires the management of collateral. Given the current state of development of the brokerage industry, there may be concerns about how brokerage firms would handle the collateral. Even if the collateral is managed by the SML, the systems upgrades for daily adjustment of the collateral may be difficult.

A simpler alternative is to structure the stock lending market as a limited recourse reverse repurchase agreement as follows. The lender sells the stock to the borrower and

simultaneously agrees to buy the stock back on a specific date at a specific lower price. The proceeds of the sale are held in the SLM. The decrease in price is effectively the rent that the lender earns.

The borrower posts a collateral with the SML, which also holds the proceeds of the sale. If, on the maturity date, the borrower does not return the shares, the borrower forfeits the collateral, which goes to the lender. However, the lender does not receive the shares back and there is no further recourse. In other words, if there is a default, the lender receives only the collateral, which is now worth less than the value of the stock.

For example, suppose an investor wanted to short 1000 shares of China Unicom, which is selling at RMB 3. . The investor borrows the shares for one month through the SLM at the current best price of 2% for borrowing. The investor would post a collateral of 25% of the price plus the 2% borrowing price. The SLM would hold this collateral along with the proceeds of the sale (RMB 3000), for a total of 1.27*3000 = RMB 3,810. If the borrower has not returned the stock by the end of the 30th day, the lender gets to keep the collateral.

In effect, the lender is giving up a call option with an exercise price equal to the stock price plus the collateral. One would expect that the repurchase price would incorporate the value of the option plus the value of the securities lending. The payoff to the lender is similar to a covered call strategy.

The value of this call option is usually very small. For example, with a 30 day contract with a collateral of 50% on a non-dividend paying stock with an annualized volatility of 50%, the theoretical Black-Scholes value is just 0.01% of the original value of the stock. Table 6 shows the value of the option for various levels of collateral. As the table demonstrates, with a sufficiently large collateral the value of the option that the lender is giving away becomes exceedingly small.

One major advantage of this setup is that the default option reduces the risk of squeezes.

However, even the very small risk that the borrower will default means that this is not a riskless transaction. This will likely drive up costs and reduce the supply of stock available for lending.

The tax treatment is another potential problem. If the transaction is deemed as two separate sale transactions, then it could generate two sets of stamp taxes on the transaction, in addition to the stamp tax on the sale of the borrowed shares. This could make such a transaction rather expensive. However, authorities in other countries such as Ireland have recognized that the economic substance of the transaction is that of a loan rather than a sale and treat it accordingly.[13]

The Recommended Stock Lending Market: A hybrid system

The recommended alternative is a hybrid system that contains the best features of the other models. The Shanghai Stock Lending Market (SLM) would be a facility of the SSE that matches borrowers and lenders with a system linked to the SSE trading platform and the depository.

Here is an example of how the market would work to facilitate a short sale:

Making the short sale:

Step 1. Customer enters order to sell short just like any other order.

Step 2. Broker transmits order to Shanghai Stock Exchange (SSE).

Step 3. SSE trading platform routes order to Securities Lending Market (SLM).

The SSE trading platform notices that the order is for a short sale and transfers (routes) the order to the SLM so that the borrowing can take place. The SSE then waits for confirmation from the SLM that a successful loan has occurred.

Step 4. The SLM matches the short order with an offer to lend at the best available price.

Step 5. The SLM notifies the depository, the China Securities Depository & Clearing Corporation (CSDCC) to transfer the shares from the account of the lender to the borrower.[14]

Step 6. The depository transfers the shares from the account of the lender to the borrower and notifies the SLM that the transfer has been completed

Step 7. The SLM notifies the SSE that a successful borrowing has occurred.

Step 8. The SSE executes the short sale.

Step 9. Appropriate messages are sent to the affected parties.

These transactions would all happen in a fraction of second. Note that it would also be possible to have the broker contact the Stock Lending Market first before routing the order to the Shanghai Stock Exchange, but this would add unnecessary complexity to the market.

Settlement of the short transaction

On settlement date, the following transactions occur:

Settlement:

Step 1. Collateral of 25% of the purchase value is transferred from the short sellers cash account (via the brokerage firm through the normal clearing and settlement process) to the SLM.

Step 2. Sale proceeds are transferred from the buyer's cash account (via the buyer's brokerage firm through the normal clearance and settlement process) to the SLM. Thus, the SLM would hold collateral equal to 125% of the price of the stock.

Step 3. The shares are transferred from the short seller' account at the depository to the buyer's account.

Covering of the short position

When the short seller wants buy shares to pay off the stock loan and thus "cover" the short position by buying the stock, the following steps occur:

Covering the short position:

Step 1. Short seller submits buy order in the usual manner through a brokerage firm that routes the order to the SSE.

Step 2. SSE executes buy order.

Step 3. At settlement, the cash to pay for the purchase is transferred from the collateral account at the SLM to the cash account of the new seller through the normal clearance and settlement process.

Step 4. The balance remaining in the collateral account is returned to the short seller, after lending and exchange fees are deducted. The lending fee is paid to the account of the lender, and the exchange fee is paid to the exchange.

Lending pool

It is critical to the success of this market that there be a large supply of securities for lending. If enough shares are not available, squeezes and other market manipulations can occur as short sellers are forced to buy in at artificially high prices.

In order to ensure the widest possible lending pool, all investors would be required to indicate whether or not their securities were available for lending through the SLM. They could notify their broker that all of the stocks are available, none, or on a stock-by-

stock basis and specify their minimum lending rate. They could specify a default lending rate for all stocks, as well as separate rates for each stock. Of course, investors could change their selections at any time. These offers would be transmitted by the brokers to the SLM retained in the SLM system on a good-till-cancelled basis.

When customers open their accounts, they could indicate with a simple check mark on the application form whether they want to rent out their securities in exchange for additional income or not. A simple check-off system like this should ensure the widest possible pool of available securities.

With such a wide pool of available securities, the usual condition will be that the price of borrowing shares will be the minimum fee. As there will be excess supply at this fee, the SLM will allocate loans to participating customers using a tie-breaking algorithm. Customers would receive an electronic confirmation that their stock had been loaned out. The confirmation would indicate the security name, identifying number, number of shares loaned, and the loan rate, along with a standard message describing the rights of the lender to recall the shares.

Borrowing demand

A customer entering a short sale order would automatically generate a borrowing inquiry to the SLM. The SLM would then check to see if enough shares are available for

lending. If so, the SLM would immediately lend the shares to the borrower and send a message to the depository to move the shares from the lender's to the borrower's account. This would happen automatically and instantaneously by computer. The short sale would then proceed like any other normal sale transaction. The verification screen in which the customer verifies the order entry information such as the stock ID, and price would also contain information about the projected borrowing cost for the stock.

In the rare event that shares are not available to borrow, the system would reject the order. (The system would also check to make sure that the investor had enough cash to put up the required collateral.) This is important to protect the integrity of the settlement system and prevent settlement failures.

If the sale order is cancelled or expires unexecuted, then the SLM would reverse the loan transaction.

The confirmation for the short sale order would contain the rate for borrowing shares.

Price Setting

The price for the stock loan is set at the time of the loan. Following the practice in Helsinki, the lending rate would remain fixed over the life of the stock loan. The rate would be applied to the actual price of the shorted shares.

Maturity of loan

The stock loan would have no specific maturity date, but the lender could recall the loan at any time. This is similar to bank accounts in which a customer lends money to a bank with no fixed expiration date, but with the understanding that the customer can withdraw the funds at any time.

There is no reason to put any arbitrary limit on the length of time that a short seller can borrow shares. Longer loan periods do not entail any additional risk, because the SLM is holding sufficient collateral to protect the system. Stock lenders can get their stock back at any time, so there is no reason to put an end date on the loan in advance.

Putting in an arbitrary ending date for stock lending just adds complexity and expense as it forces users of the market to roll over old loans into new loans.

Quoting

For simplicity, the price would be quoted as an annualized percentage rate (APR) with a minimum tick size of 0.10% or 10 basis points. This would be applied to the stock on a daily basis without compounding, with the payment made at the end when the stock loan is terminated.

On each day, the borrowing fee would be:

Fee/day = (APR/365)*P*Q

Where

- APR is the Annual Percentage Rate of the stock loan as a decimal
- P = Price of the stock in RMB
- Q = Number of shares

The total fee paid would be calculated by taking the daily fee times the number of calendar days loaned.

Fee = Fee/day * Number of days

For example, suppose an investor borrows 10,000 shares of stock for 20 days. The stock is sold for RMB 10 per share, and that the stock loan rate was 1.00% APR.

Fee/day = .01/365*10*10,000 = RMB 2.74/day.

Total fee = 20*2.74 = 54.8

Ticket charge

In addition to the lending fee, the borrower would also pay an exchange fee to the SLM in addition to the fee that would go to the stock lender. This ticket charge would be a fixed amount plus a fee based on the value of the loaned stock. This ticket charge would be applied monthly.

Tie-breaking algorithm

As it is likely that there will often be more shares offered for lending than demanded at the market-clearing price, a tie-breaking algorithm is needed. While Article 33 of the securities law requires price and time precedence for securities trading, it is not clear that this is required for securities lending. Keeping track of time precedence over a large number of accounts could be cumbersome. Other tie-breaking algorithms include:

- Size. Giving the loan to an account offering at least as many shares as the loan amount would reduce the number of accounts affected by a particular transaction and thus reduce the number of confirmations needed.
- Random. A random allocation would be quick and fair.
- Combination methods. These methods can be mixed. For example, one could start with size by picking accounts with the same number of shares as the desired

amount to be borrowed. If there is more than one account with the same size, then pick randomly among them.

It probably does not matter much, so I recommend whatever is simplest to implement.

Recalling shares

A customer can demand the return of borrowed shares at any time. However, to prevent games, the lender would forfeit the securities lending fee. Selling the shares would similarly generate a demand for the return of the shares and the loss of the lending fee.

A sale of the shares would involve the following steps:

Step 1. The stock lender places a sale order through a brokerage firm to the SSE.

Step 2. The SSE notifies the SLM that the shares are needed for a sale.

Step 3. The SLM checks to see if shares can be borrowed from another lender. Most of the time, this will be the case. If there are no shares available for lending, the SLM will send an immediate buy order to the SSE.

Step 4. The SLM notifies the depository to transfer shares from the account of the new stock lender to the account of the old stock lender.

Step 5. The depository transfers the shares from the account of the new stock lender to the account of the old and notifies the SLM.

Step 6. The SLM notifies the SSE, which executes the sale transaction.

Step 7. Appropriate notification messages are sent to all parties.

When the borrowed shares are recalled or the lender tries to sell the shares, the SLM would check to see if the shares could be borrowed from another lender. If so, the loan would be replaced with a new loan immediately. The borrower would **not** have to pay an additional ticket charge for the replacement loan.

If no shares are available, the SLM would automatically buy in the shares before executing the sale of the recalled shares or returning the shares to the original lender. In the event of a buy-in, the sale or return of the shares would be delayed until after the execution of the buy-in.

If for some reason the SLM cannot buy in the shares, such as when the price is at a limit movement, then it will not allow the sale of the recalled shares to proceed. This is important to protect the integrity of the failure-free settlement process.

Rights of securities lenders

Borrowers of stock would have to make the lenders whole for all of the cash flow rights that they would normally receive. Thus, if the stock pays a dividend, the borrower must pay the same amount to the lender of the shares. The tax treatment of this payment may be problematic, depending on the tax laws of the country of the recipient of this dividend. For this reason, some investors may not wish to lend their stock around the ex-date for dividend payments.

Similarly, if there is a spinoff or similar corporate action, then the borrower must make the lender whole. The typical practice in other markets is for the borrower to compensate the lender for the calculated cash value of the right. Also, the borrowing position would be adjusted in the event of stock splits.

Voting rights

The lender of the stock is also lending the voting rights as well. If a short seller borrows the stock and then sells it, the purchaser of the stock is expecting a complete share with all the rights and benefits thereunto appertaining, including voting rights. Thus, lenders

of shares need to be aware that they are effectively giving up their voting rights when they lend their shares around the time of a corporate vote.

Collateral

A lender of shares is rightly concerned that the borrower will return the shares when needed. It is traditional that investors put up collateral in excess of the value of the borrowed stock, and to adjust the value daily. If the value of the collateral falls below some minimum level, then the borrower must increase the collateral. If there is excess collateral, the borrower may receive it back.

To come up with an appropriate collateral level, it is useful to look at what other markets are doing. However, care must be taken in comparing collateral levels in markets around the world because sometimes the levels are quoted including the initial sale proceeds and sometimes not. In this document, the practice is to include the sale proceeds in the description of the collateral. Furthermore, practices differ as to what can be posted as collateral. A market that permits risky equity securities to count as collateral will likely require more collateral than a market that only permits low-risk securities.

Some practitioners refer to the collateral as "margin." However, the word "margin" in financial English is often used to refer to many different types of transactions with very different economic and risk-management effects. Comparing the "margin" requirement

for such different transactions can lead to misleading comparisons. For the purpose of establishing a collateral requirement for the Stock Lending Market, it is important to look only at the collateral requirements for other stock lending markets and not to confuse them with other financial instruments.

In the Helsinki market, the collateral is usually between 110 and 112% of the value of the borrowed stock. In the U.S. institutional stock lending market, the collateral is usually 102% of the value. Retail investors in the U.S. are required to put up 150% of the value (the proceeds of the sale plus 50%), with a maintenance level of 125%. In other words, if the level drops below 125% of the value of the stock, then the borrower must replenish the collateral up to 125%. The daily process of adjusting the collateral is referred to as "marking to market."

The daily mark to market process would work as follows:

Step 1. At the close of trading, the SLM updates the value of the collateral account. The collateral account balance is just the previous day's balance plus accrued interest less accrued fees.

Step 2. The SLM compares the collateral account balance with the value of the borrowed securities. If the collateral account were below the maintenance level of 115%, then the SLM would transfer enough funds from the borrowers account (via the brokers) to the

collateral account administered by the SLM to bring the collateral account back to 125% . This would happen through the normal clearance and settlement systems.

Given the current state of the development of securities firms, the collateral should be held in a special account administered by the SLM. Upon settlement of the short sale, the proceeds of the transaction plus the required collateral would be transferred to the special account. Each day, the value of the collateral would be compared against the value of the loaned stock, and a demand for funds issued if the value of the collateral falls below the maintenance level. The collateral would, of course, earn interest, and the interest (net of fees and expenses) passed on to the borrower upon the return of the stock.

Collateral would be netted at the account level. In other words, if one account had borrowed two different stocks, then the value of the total collateral would be compared with the value of the total securities borrowed to determine whether or not to make a demand for funds. (In the future, as other derivative products are launched, a more sophisticated collateral system such as the SPAN system should be implemented to take into position the total risk of the position.[15])

In the event of a demand for more collateral, the system would automatically transfer funds from the cash account of the customer via the broker in the same way that the customer's cash account pays for normal stock purchases. If sufficient funds were not in the account, a "demand for more collateral" would be issued that demands that the

investor either submit funds to make up the shortfall or else liquidate the position by buying in the stock. The SLM should reserve the right to make intraday margin calls under extreme market conditions.

The amount of time that the customer has to meet the call should be a function of the size of the shortfall and the volatility of the stock. For example, if the investor has good credit and were only one Yuan short, then the customer should have several days. On the other hand, if the shortfall were extremely severe, then the customer should have only enough time to wire the funds into the account. If the call is not met within the appropriate time, then the position will be liquidated. If there were not enough money to purchase the stock, the SLM would purchase the stock anyway, although the stock borrower and the borrower's brokerage firm would still be legally responsible for the deficit. Other securities owned by the investor could also be liquidated to make up for the deficit from the buy-in.

IV: Suggested regulations

An appropriate regulatory environment is extremely important for a successful stock lending market. This section suggests appropriate regulations for the market.

Disclosure

Customers must disclose short sales at the time of placing the order. This can easily be done with slight modifications to the standard order entry form by adding another order type, a short sale.

In order to monitor for abuses, it is necessary for the surveillance authority to be able to identify short transactions. For this reason, it makes sense to require a disclosure rule that requires customers to mark short sales when they place their order.

Collateral Requirements

Collateral requirements serve three major purposes. First, they protect lenders and brokers from losses if the borrower loses money on the short position. Second, they increase the cost of using borrowed securities or money for trading, and thus serve as a

means of discouraging speculative trading. Third, they deter unsophisticated investors from speculating.

One question is "How large should the collateral requirements be to protect the stock lenders and their brokers from losses if the stock price increases?" In order for the broker to lose money, the following events all have to occur:

- The stock price goes up so that the value of the collateral is reduced.
- The short seller is unable or unwilling to meet the demand for additional collateral.

The stock price rises so high before the buy in that the system was unable to purchase the stock before the collateral is depleted. The goal of the collateral requirement is to make sure that the combined probability of these three events is acceptably low.

- Note that in the institutional stock lending market in the United States, the stock lender usually requires total collateral of 102% of the value of the stock. However, lenders are also very careful in choosing the counterparties with whom they will trade.

One approach would be to examine the probability that a stock increases by more than a certain amount. Currently, there is a 10% limit on daily price movements. If a stock would naturally trade above that limit, trading effectively stops. For example, suppose that there is a merger announcement that a firm will be bought at a price 50% above the

current stock price. The stock may not trade for several days because of the 10% limit each day.

If the collateral level is set too low, then there is a greater possibility of loss to the system. Furthermore, there is the danger that unsophisticated investors will act foolishly.

On the other hand, if the level is set too high, then the artificially high barrier to short selling will lead to less accurate prices and thus higher volatility in the market.

Upon the introduction of the market, there is an understandable desire to set high collateral levels while investors and regulators gain experience with the market. Thus, an initial cash collateral requirement of 125%, with a maintenance level of 115% seems reasonable. This is much higher than the levels required in the U.S. and Helsinki markets, but not so high as to choke off the market entirely. These levels can be reduced with experience.

It is possible to have different collateral requirements for different classes of investors. In the US, there is a de facto two-tiered market in which professionals have very low collateral requirements, and retail investors have high collateral requirements. However, implementing and enforcing such a system adds unnecessary complexity to the market with little benefit for market quality.

It is also possible to have different collateral requirements for different stocks. For example, higher collateral levels could be required for riskier stocks. However, the recommended 125% level is sufficiently high to protect the system for the overwhelming majority of stocks.

Uptick rules

I do not recommend an uptick rule that restricts short selling only to upticks for several reasons:

- Countries that have uptick rules generally have numerous exceptions to the rule. The rule becomes quite cumbersome and difficult to monitor and enforce.
- An uptick rule restricts "good" short selling as well as bad. Good short selling is short selling such as index arbitrage that keeps derivative prices appropriate, as well as stabilizing short selling that prevents prices from spiking to unsustainable levels.
- The United States, which pioneered the uptick rule, is now experimenting with eliminating the rule.
- Uptick rules do little to reduce the total amount of short selling. Even on days when stock prices are dropping, there are usually a large enough number of upticks during the day that a short sale can be accomplished. All the rule does is add complexity to the market without real benefits.

However, if regulators do want such a rule, an "upday" rule would be much simpler and more effective. An upday rule would permit unlimited short selling at prices higher than the previous day's closing price. Thus, stabilizing short selling would be encouraged. However, short selling at prices lower than the previous closing price would be highly restricted, permitted only to legitimate arbitrage activity with derivatives, convertible bonds, and foreign-listed shares, as well as entities acting as market makers with passive market making quotes.

Authorized Short Sellers

One issue is what classes of investors should be allowed to sell short? In keeping with the incremental nature of the reform process, it may be tempting to reserve the ability to sell short to certain classes of investors. For example, one could argue that retail investors are unsophisticated in the use of such financial instruments and that only institutional investors, or only investors with a certain wealth level, should be allowed to sell short. Similarly, one could argue that foreign investors should not be allowed to sell short so that those foreign devils do not disrupt our markets.

However, any such class distinctions will create several problems. The first is that any such partial restriction leads to a tremendous compliance and enforcement headache. Scarce enforcement resources are better spent fighting real fraud, not enforcing a useless restriction.

The second problem is that class distinctions will lead to the perception that the market is not fair, and that certain favored investors can do things that others cannot. The other groups will blame the groups that have the ability to sell short whenever stock prices go down. If the "playing field is not level", then the other investors will stay away and invest their capital elsewhere.

Disclosure is one way to deal with the problem of unsophisticated investors. For example, in the U.S., brokerage firms are required to give customers a standardized disclosure on the risks of trading options before customers are permitted to trade options.

Authorized Stocks

One issue that comes up is whether all stocks should be shortable or only a specified list of the most liquid stocks. The proper way to approach this question is to remember the main reasons for short selling: reduced volatility, better price discovery, enhancement of market making, and better pricing of derivative products.

Clearly, short selling needs to be available for all securities upon which derivatives trade. This includes not only securities in ETFs and major indices, but also stocks where convertible debt has been issued.

However, better price discovery is needed for all stocks, not just the large stocks typically involved with derivatives. This is especially the case for the smaller and less liquid stocks.

Furthermore, the ability to go short enhances the ability of investors to act as market makers who provide liquidity. Although large liquid stocks may not need the help of market makers, smaller and less liquid stocks can especially benefit from the liquidity and stabilization provided by market makers. Thus, it is especially important that short selling be allowed for smaller and less liquid stocks.

Some markets restrict short selling for illiquid securities because of fears of market manipulations such as squeezes or problems with the settlement system. However, it is the inefficiencies in the stock lending market that lead to such problems, not the small size of the companies themselves. These inefficiencies include a fragmented over-the-counter stock lending market in which securities are unavailable for lending, and opaque markets where investors cannot find out about lending rates or opportunities.

A well-designed stock lending system such as the one proposed here would prevent such problems. One key features of the proposed system that would prevent such problems is the wide availability of shares for the lending pool. By making it easy for all investors to lend their securities, there will be little opportunity for squeezes.

Furthermore, the high transparency of the system that would make any abuses plainly visible. An attempt to corner the supply of shares would be very obvious in the public trading figures of the SLM.

Of course, it is advisable in the implementation stage to start with a small number of shares, such as the SSE 50 stocks, to gain experience with the market. However, there is no need for major long-term restrictions on the shares available for short selling.

Corporate Governance Concerns

The existence of a stock lending market could make it possible for stock borrowers to purchase voting rights in a company. This has the potential for abusive takeovers as one could purchase voting rights at very low cost.

However, the proposed design eliminates the possibility of buying votes because the proposed lending market is linked automatically to short sales and the shares are only borrowed when the short sale is executed. The proposed market is not set up for borrowing shares for other purposes.

Even if the stock lending were separated from short selling, there are several possible ways to limit the potential abuse from purchasing votes. The first is transparency. In a fully transparent market, it would be extremely obvious that someone was attempting to

purchase control of a company. One would expect this to push the price of the purchased votes up to the market value that control. The true owners of the shares would then make their own rational economic decision as to whether to vote the shares themselves or lend them out for a fee.

Second, the usual tender offer rules could be applied to the acquisition of votes through borrowed shares. A holder wishing to take control of a company with borrowed shares would be required to launch a tender offer to actually purchase the shares. Limitations on the number of

Third, permit only purchased shares to vote. Thus, someone who purchases a borrowed share could vote, but someone who merely borrows a share would not be able to vote. This appears to be the simplest and best approach to the corporate governance issue.

Fourth, one could impose position limits on the number of shares that can be loaned in the market. This limit could be on an individual basis or on a market-wide basis. See the section on position limits, below.

<u>Position limits</u>

With the existence of securities lending, it is theoretically possible to have short positions larger than the number of shares outstanding. For example, suppose that there are 100 shares outstanding of ABCD, Inc. The owners of the 100 shares lend them all out to a

short seller, who sells them. The new owners also lend out the shares to another short seller, who also sells them. Thus, the current short position is 200 shares.[16] This is theoretically possible, and does not necessarily indicate a breakdown of the settlement system.

It is common in some derivative markets to impose position limits on individual positions. Such limits may prevent trading problems when the supply of the underlying commodity is limited. In a market "corner", a manipulator gains control over a large portion of the deliverable commodity, and then goes long the futures contract in a large quantity. At first, market participants do not worry about going short, as it is normally easy to trade out of a short position. They see the price rising above what they perceive as the true value, and sell (short) the contract to attempt to restore the price to the appropriate level. As contracts are normally liquid, it is usually easy to trade out of a short position without making physical delivery.[17] However, the manipulator buys a large number of futures contracts and then demands delivery. The shorts are unable to locate deliverable supplies of the underlying commodity, and the price soars.

By imposing position limits, the derivatives market reduces the risk that prices will be manipulated as the longs squeeze the shorts. In the US, position limits are sometimes set by the exchange and sometimes by the Commodity Futures Trading Commission based on examination of the deliverable supplies of the commodities. However, financial futures often have no position limits because it is much harder to corner the market in financial instruments such as currencies. In some markets, the limits are not absolute

limits, but in large situations the exchange of the CFTC can step in and require large players to reduce their positions.

Legitimate hedgers and those engaged in arbitrage activities are generally exempt from the position limits.

Position limits can also reduce risk to the clearing system if one participant with a very large position defaults. However, collateral (margin) requirements also reduce this risk. However, there have been situations in the US in which brokerage firms have failed to collect sufficient margin and have failed under extreme market conditions.

Enforcing position limits on individual accounts can be difficult for two reasons. First, it is important for the surveillance authority to combine positions across different accounts. A group of manipulators (a "pool") might act together to manipulate prices, so their positions would have to be combined for enforcement purposes. Second, as derivatives are introduced, the regulator must decide whether to include derivative positions in the position limits. For example, short call positions and long put positions are economically similar to short positions. Should these be included as well in the position limits? Thus, enforcement of position limits on individual accounts will be hard.

Position limits can also be applied to the total level of activity in the market. For example, stock lending could be limited to no more than, say 10% of the float, the number of shares actually available for trading.

Large short positions can occur when there are extreme differences of opinion between the optimistic ("bull") and pessimistic ("bear") investors. Academic evidence from the United States generally indicates that large short positions are normally "bad news" in that future stock returns on firms with large stock positions are usually quite low. However, whether this is from the information content of the short position, or an artifact of inefficiencies in the U.S. stock lending market is not clear.

One reason for position limits is political. Stock prices are naturally volatile, and occasional large price declines are a normal part of the investment landscape. Short sellers are often blamed when stock prices go down. Since firms with large short positions are often going to go down in price, limiting short sales when the total outstanding short interest is large may be politically attractive. When the stock bubble finally does pop, the shorts will not be the ones doing the popping.

Hard position limits on total short selling can actually lead to squeezes and manipulations. A manipulator, seeing that a stock is close to the position limit for total stock lending, could then start calling in loans, forcing the borrowers to purchase the shares, temporarily pushing prices up to unrealistic levels.

For this reason, I recommend "soft" position limits in which the regulators have the authority to step in and use judgment to limit additional transactions when the level of short selling exceeds 10% of the total float.

Tax Issues

The existence of a stock lending market also brings up unanswered tax questions that could have a large impact on the success of the market. These will need to be resolved before participants will feel comfortable with the market.

The first question has to do with stamp duty. Would the stamp duty that is normally applied to stock sales also apply to the lending of stock? The answer should be no, since the stamp duty will apply when the borrowed stock is then sold. To apply the stamp duty to the lending transaction would be double taxation.

The second tax question has to do with whether the lending of shares constitutes a taxable transaction that could generate capital gains taxes. Clearly, the answer should be no, as the shares are merely loaned and not sold at this point. However, the revenue from the lending of securities would clearly appear to be taxable income.

V Other Issues

Revenue Implications

It is extremely important for the SSE to examine the business case for offering a stock lending market. While the benefits of more efficient stock pricing, enhanced liquidity, and better derivative pricing are extremely important, they are also hard to quantify. On the other hand, it will take a substantial investment of resources in order to launch the new stock lending market. Will the new market generate enough revenue to cover its costs at a reasonable pricing level?

The Stock Lending Market will generate revenue in three ways:

1. Ticket charges from the Stock Lending Market itself.
2. Normal transaction charges for short sales.
3. Normal transaction charges for the purchases to cover short sale.

It is possible to do some crude calculations to estimate the revenue impact of adding a Securities Lending Market. On the NYSE, short selling currently represents about 13.5% of its total trading volume. Suppose that short selling adds enough trades to become 5% of the SSE trading volume. These short sales will also require covering purchases, meaning that short selling would add about 10% to the total transaction volume of the exchange. In 2003, total turnover at the SSE had a value of RMB 2,082,400 million. With the existing exchange fee of 2.2 basis points (1.1 basis point to each side of the

transaction), an increase of 10% in trading volume would bring in an additional RMB 44 million per year in transaction fees alone. And this does not include the fees charged for the operation of the stock lending market. Clearly, these additional revenues will more than cost justify the expenditures needed to build the SLM.

Revenue Sharing

The successful operation of the SLM will require participation on the part of investors, securities firms, the SSE, the depository, and the regulators. Investors need to have a financial incentive to lend their shares. Furthermore, securities firms will have to modify their systems so that investors can specify their stock lending preferences, as well as deal with the collateral issues for stock borrowers. The SSE faces substantial hardware and software costs for designing, building, and operating this market. The depository will bear costs for making real-time transfers of stock between lender and borrower, and for the clearing and settlement of marking-to-market transactions. The regulators will also have additional responsibilities for regulating the market. Accordingly, the minimum ticket charge from operating the SLM should be divided up among these parties in a fair and equitable manner.

VI. Summary

A stock lending market will improve the quality of the Chinese equity markets in three major ways:

1. Short selling helps to stabilize prices and thus make stock prices more efficient. Markets that permit short selling generally have lower volatility than markets that don't.
2. Short selling is necessary for a successful and efficient derivatives market.
3. Short selling helps investors to provide liquidity by acting as market makers.

It is possible to design and build a transparent stock lending market for China that fits the unique characteristics of the Chinese market. The Stock Lending Market would automatically match borrowers and lenders in a seamless, straight-through-processing environment.

Appendix A. Legal Considerations

Legislative Obstacles?

Clearly, the State Council and the CSRC will have to approve the formation of the Securities Lending Market. However, it does appear that might be possible to implement such a market without making changes in the Securities Law. This section discusses various sections of the Securities Law that affect stock lending.

Article 141 of the Securities Law of the People's Republic of China clearly states

“Securities sold by a securities company upon acceptance of an instruction shall be securities actually held in the client's securities account. A securities company may not finance its clients' transactions by providing securities.”

This article made good sense when the Law was passed in 1998 due to the difficulties in monitoring brokerage firm securities lending policies.[18] However, in its good wisdom the Law did not prohibit securities lending in general, but only prohibited securities firms from lending shares to their own customers.   Permitting securities firms to lend shares to their own customers requires sophisticated and expensive auditing of the securities firms' activities to make sure that customer securities are properly segregated from the assets of the firm. Without careful monitoring of customer protection rules, there is the possibility that customers' shares may be misappropriated, either intentionally or by accident.

A plain reading of the English translation of the text implies that the law does not prohibit investors from lending their own shares, nor does it prohibit stock exchanges or depositories from facilitating stock lending by others.[19] Thus, it appears that the SSE can develop a Securities Lending Market without first amending Article 141. However, the SSE should work closely with the CSRC in developing this market to make sure that the concerns of the regulators are satisfied.

There are other sections of the law that might present problems.

Article 150 states "Before trading listed securities, a holder shall place all such securities in the custody of a securities registration and clearing institution. A securities registration and clearing institution may not use its clients' securities as collateral or lend them to others."

This states that the clearing organization may not lend out the securities, which is a fundamental customer protection that creates trust in the registration and clearing institution. However, it does not prohibit investors from lending out their own securities.

Another issue is whether this article prohibits the registration and clearing institution from investing funds held as collateral. Since cash is not usually considered a "security", this article may not apply.

Article 35 states "Securities trading shall take the form of spot transaction."

This article could have implications for the form of the securities lending market. A regulator could incorrectly argue that a lending market with terms lasting for several days or months would violate this article. However, a stock loan is not a trade, so this section should not apply to the mere loaning of securities. The other approach would be to adopt the rolling spot market model in which all loans are made overnight.

Article 106 Securities purchased by securities companies upon instruction or on their own account may not be sold on the same day.

It is not clear whether this article would prevent a borrower of securities from immediately selling them or not. This article merely discusses a purchased security and not a borrowed one. Since a borrower has not purchased the security, this article would not appear to prevent the immediate selling of borrowed shares.

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Table 1
Legality and existence of short selling around the world

This table is taken from Bris, Goetzman, and Zhu (2003):

We surveyed all 111 countries that have a stock exchange (the list is given in column 1). In our survey letter to these exchanges, we asked if the stock market allowed short-selling and ,if yes, since when. We also asked if short selling actually exists in reality, and, if yes, when was the first date of existence. Wherever possible, the answers were cross-checked against the 2000 edition of the International Encyclopedia of the Stock Market, the 2000 edition of the Handbook of World Stock, Derivative and Commodity Exchanges, and various foreign nationals linked to the finance industry. All the information reported here reflects regulation and practice during the period immediately after WW II through 2002. The figures in Column 2 represent the year when short selling became legal. A "Yes" means that short selling has always been legal. A "No" means that short selling has always been prohibited. The figures in Column 3 represent the year when short selling became practically feasible. The text in Column 4 gives details about short selling rules and implementation in the country of interest.

Country	***Legality***	**Existence**	**Details**
Developed Markets			
Australia	Yes	Yes	
Austria	Yes	Yes	
Belgium	1935	1935	Regulations are not very explicit. Short selling is allowed and widespread.
Canada	Yes	Yes	A temporary ban on short –selling was lifted in Oct 1940.
Denmark	Yes	Yes	The Copenhagen's Rule Book does not carry any restrictions against short selling, and neither does any rules issued by the regulatory authority. We have never had such restrictions in Denmark .The brokers, however may have rules preventing
Finland	1998	No	Tax laws (transfer) inhibit would be short sellers.
France	Yes	Yes	
Germany	Yes	Yes	
Hong Kong	1994	1994	Short selling prohibited until 1/3/94,3/96 many restrictions lifted, 9/98 more restrictions placed.
Ireland	Yes	Yes	No regulations
Italy	Yes	Yes	
Japan	Yes	Yes	Short selling is regulated by Article 162 of the Securities and Exchange Law
Luxembourg	1991	1991	Circular CSSF 91/75 has allowed, among other things, short selling.
Netherlands	Yes	Yes	
New Zealand	1992	No	Short selling allowed in 4/92 for approved securities with respect to liquidity, 7/00 all FASTER securities can be traded short. Short selling is hindered by tax legislation.
Norway	1992	1999	8/99-9/99 short selling rules and guidelines instituted making it feasible (it was allowed in 1992).
Portugal	Yes	Yes	

Country	*Legality*	Existence	Details
Developed Markets			
Singapore	No	Yes	Securities lending takes place outside of the island. Short selling is discouraged by regulators, however, it is widespread.
Spain	1992	No	Allowed in 1992, but not common
Sweden	1993	1993	5/7/1993
Switzerland	Yes	Yes	The Swiss exchange has never issued any rules on short selling .Nor did its predecessors, various local exchanges in Zurich, Geneva, Basel etc. which were floor based and in operation until 1995/96.short selling has always been considered as a matter bet
United Kingdom	Yes	Yes	
United States	Yes	Yes	The U. S. stared prohibiting short sales on a down tick in 1931.in 1932.brokers were required to obtain written authorization from their clients before lending shares. Currently, short sales are allowed when the current price is higher than the price of
Emerging Markets			
Albania	No	No	
Argentina	1999	No	The transaction is not common for stocks, but common for government bonds. Short selling may be held for up to 365 running days. Mercado de Valores de Aires may suspend new sales at any moment. Law enacted on 9/6/1999
Armenia	1999	No	Allowed but not experienced yet
Azerbaijan	No	No	
Bahrain	No	No	
Bangladesh	No	No	
Barbados	No	No	
Bermuda	No	No	
Bolivia	No	No	
Botswana	No	No	
Brazil	1986	No	Legal since 6/9/1986.CBLC (the exchange's clearing and settlement corporation) has a securities custody service called securities lending program –BTC, which was implemented in April 1996. However short selling is very limited.
Bulgaria	No	No	
Chile	1999	2001	11/98 short selling allowed, '99Bolsa de Santiago approved short selling, 11/6/01 short selling exempt from capital gains taxation (short selling encouraged).

Country	*Legality*	Existence	Details
Emerging Markets			
China	No	No	
Colombia	No	No	
Costa Rica	No	No	
Croatia	No	No	
Cyprus	No	No	Considered as a criminal offence
Czech Republic	Yes	Yes	No regulation. Short selling exists
Ecuador	No	No	
Egypt	No	No	
El Salvador	No	No	
Estonia	Yes	No	No regulation, nor restrictions
Fiji	1996	1996	Part VII item 46(4)of 1996 act .
Georgia	No	No	
Ghana	No	No	
Greece	2001	No	Short selling allowed in 5/31/01, but not widespread.
Guatemala	No	No	
Honduras	No	No	
Hungary	Yes	No	Rules not clarified, so short selling not common practice, but no rules against it.
Iceland	1986	No	Short selling not common. It is restricted for mutual funds.
India	Yes	No	Prohibited for foreign investors .No real existence.
Indonesia	No	No	Expected to be launched in July 2003
Iran	No	No	
Israel	No	No	
Ivory coast	No	No	
Jamaica	No	No	
Jordan	No	No	
Kazakhstan	No	No	In the pure state short selling at KASE is absent. They do not have a netting. Within trade day the seller of the shares or bonds is obliged to confirm presence of securities on his account.
Kenya	No	No	
Kuwait	No	No	
Kyrgystan	No	No	
Latvia	No	No	
Lebanon	No	No	Prohibited by article 182 of decree7667of 1995(Beirut Bourse)
Lithuania	No	No	
Malawi	Yes	No	Securities lending is allowed in the market but not yet experienced

Country	*Legality*	Existence	Details
Emerging Markets			
Malaysia	Allowed in 1995,prohibited in 1997	Started existing in 1996,stopped in 1997	Short selling started on September 30, 1996.the prohibition on August 28, 1997 was a reaction to the currency crisis.
Malta	No	No	Legislation is currency being drafted to cater for securities lending.
Mauritius	No	No	
Mexico	Yes	Yes	
Moldova	No	No	
Mongolia	No	No	
Morocco	No	No	
Namibia	1992	No	
Nicaragua	No	No	
Nigeria	No	No	
Oman	No	No	
Pakistan	No	No	
Palestine	No	No	
Panama	No	No	
Paraguay	No	No	
Peru	2002	No	
Philippines	Prohibited in 1989,allowed in 1996	No	Dec 89 short selling prohibited indefinitely. 96 revision of rules lifting ban from 89. The securities and Exchange Commission has approved the proposal PSE rules on Short Selling In 1999. However, its implementation is still pending as we are awaiting the WSE has no rules; short selling regulated by decree of ministers; 1/1/00 short
Poland	2000	No	Selling first allowed.
Romania	No	No	The trading system accepts an order only if the securities exist in the seller's account.
Russia	Yes	Yes	Always existed; explicitly regulated since March 23,2002.
Saudi Arabia	No	No	
Slovakia	No	No	
Slovenia	Yes	No	Short selling is not expressly allowed or prohibited at the moment, but changes in regulation regarding this matter are expected.
South Africa	Yes	Yes	
South Korea	1996	No	Short selling has been allowed since Sep, 1996.But short selling is prohibited to insiders and available only for designated administrative issues.
Sri Lanka	No	No	
Sudan	No	No	

Country	*Legality*	Existence	Details
Emerging Markets			
Swaziland	No	No	Prohibited since March 1999 when the Swaziland Stock Exchange was constituted.
Taiwan	1998	1998	Regulations placed on 9/4/1998, price of short sale not lower than previous day's close. Also, other restrictions.
Tanzania	No	No	
Thailand	1998	2001	October 98 Rules and Regulations placed. Short selling is feasible since January 1, 2001.
Trinidad and Tobago	No	No	
Tunisia	No	No	
Turkey	1995	1995	4/3/95 Short selling allowed for stocks on ISE National 100.
Ukraine	No	No	
Uzbekistan	Yes	No	The legislation does not provide regulatory framework to perform short selling. Still in the initial stage of development, with people lending/borrowing securities directly via depositary houses.
Venezuela	Yes	No	
Yugoslavia	No	No	
Zambia	No	No	
Zimbabwe	No	No	

Table 2

IOSCO Information on short selling practices in various countries around the world.

Source: IOSCO.

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 transaction per 'daily Stock'. Lending balances for 'standardised margin transactions'. Balance of margin transactions per issue. Total balance of margin transactions. Trading values of short selling.	Daily Daily Weekly Weekly Monthly	Exchange Margin lenders Exchange +JSDA Exchange +JSDA 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)

Regulatory approaches to short selling				
Jurisdiction	**General approach**	**Instrument limitations**	**Trading controls**	**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	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 requirement.	None.	Tick rule.	Yes.
Malaysia	Permitted on-exchange with prearranged stock borrowing.	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).
US	Permitted, subject to trading rules, borrowing requirements and margin requirements.	None.	Tick and best bid rules.	Yes.

Table 3

Comparison of contract specifications for the Omhex (Helsinki) stock lending contract and the ADEX(Athens) Reverse Stock Repo Contract

	Omhex (Helsinki)	Athex
Contract Name	LEX Stock Lending Contract	Stock Reverse Repo (Stock Borrowing)
Counterparty Quotation units	Although the exchange guarantees the payments, the buyer is the borrower and a lender for each transaction. Annual Yield, two decimal places e.g. 1.23%	ADEX is the only counterparty. Annualized interest rate
Tick Size	0.10% (10 basis points)	0.01% (one basis point)
Pricing	Price is based on the quoted yield times the previous closing price, and is fixed for the life of the contract. Payment is usually made at expiration or exercise.	
Price limits	None	None
Trading Hours	8:30 – 17:00	10:45-16:15
Available contracts	Contracts are available for each month for up to one year.	Only the current year contract.
Expiration dates	Monthly, on the third Wednesday	Annually, on the last trading day of the year.
Premium payments	Monthly	
Settlement date	Lender delivers shares to borrowers on T+3 unless borrowers request T+1. T+0 is available for delivery failure loans.	ADEX delivers shares on T+3
Early Exercise/Closeout	Borrower may close contract early be delivering stock. Lender may demand	Borrower may deliver the shares early. ADEX may demand early repayment on T+4.

	stock on five days notice. Parties may agree not to allow early exercise.	
Dividends	The borrower must pay the full cash value of the dividend, without taking into account taxes, on the date that the dividend is normally paid.	
Subscription rights	The borrower must pay the calculated value of the subscription rights to the lender.	
Voting rights	Lender loses voting rights.	Lender loses voting rights.
Margin	Between 110 and 112% of the value of the stock. This is marked to market daily using the SECUR clearing system.	Variable
Position limits	15% of outstanding shares (5% per clearing account) 30% total/10% per account for stocks with options/futures contracts.	
Contract fees	No charge to lender or borrower for the trade. Borrower pays 0.20% annualized fee on value of borrowed shares, 0.15% if borrower finds the lender and reports a matched trade. There is a EUR50 minimum charge, plus a EUR 50 charge to party that exercises before expiration, or EUR 50 at expiration, leading to a minimum cost of EUR100.	0.015% of the traded value.

Table 4

Representative Stock Lending Rates from the Helsinki OMHex market
July 23, 2004

This table displays the stock lending offering rates, expressed as an annualized percentage rate, for stock lending contracts on the Helsinki OMHex market. The best volume represents the number of shares offered at the best offer price, while total volume represents the total number of shares offered at all prices. The ID is the stock identifier symbol.

Stock Identifier	BEST PRICE	BEST VOLUME	TOTAL VOLUME
	Offer		
ALM1V	1.50	140,000	140,000
ALM2V	7.00	116,000	116,000
AMEAS	1.30	60,000	83,000
CHIBV	2.00	75,000	399,000
CPMBV	1.50	75,000	75,000
EBG1V	3.00	600,000	600,000
ELI1V	1.00	123,000	706,400
ELQAV	1.50	12,000	12,000
FIA1S	1.50	250,000	250,000
FISAS	2.00	115,000	115,000
FLG1S	1.50	60,000	210,000
FUM1V	0.70	818,800	1,737,400
HUH1V	1.00	175,000	190,000
KCI1V	1.10	9,000	49,000
KESBV	7.00	422,300	422,300
KONBS	1.00	115,700	128,300
KRA1V	1.30	198,000	448,000
KRO1V	1.50	50,000	50,000
LAT1V	1.50	42,000	42,000
MEO1V	0.70	89,000	569,000
MRLAV	1.50	60,000	60,000
MRLBV	0.90	95,000	530,000
NDA1V	0.40	339,000	1,334,000
NOK1V	0.40	1,174,900	1,979,700
NRE1V	1.40	15,000	65,000
OKOAS	1.50	80,000	80,000
OLVAS	2.00	20,000	20,000
OMH1V	1.50	50,000	50,000
ORNAS	1.50	30,000	30,000
ORNBS	0.70	3,000	6,000
OUT1V	1.00	98,000	495,500

POH1V	0.90	255,000	392,800
POS1V	1.50	40,000	340,000
RAIVV	1.50	215,000	215,000
RAP1V	1.50	80,000	80,000
RTRKS	1.10	33,000	131,600
SAMAS	0.60	286,500	1,213,500
SDA1V	1.50	85,400	85,400
STCBV	1.50	55,000	519,300
STERV	0.90	20,800	2,415,600
SUY1V	2.00	400,000	573,500
SWSBV	2.00	470,000	470,000
TAFPS	1.50	200,000	215,000
TIE1V	1.00	145,000	533,000
TLA1V	1.50	200,000	200,000
TLS1V	0.60	801,000	3,666,200
UNR1V	1.00	15,500	160,500
UPM1V	0.50	116,700	2,379,300
VAC1V	2.00	50,000	50,000
VAIAS	1.50	20,000	20,000
VIK1V	2.00	10,000	10,000
WRTBV	0.60	36,000	310,800
YTY1V	1.00	3,000	193,000
Mean	1.52	170,728	474,851
Max	7.00	1,174,900	3,666,200
Min	0.40	3,000	6,000
median	1.50	85,400	200,000
N	53	53	53

Table 5

Short Ratio for US-traded ADRs of Chinese Companies

This table contains information as of July 19, 2004 regarding the American Depositary Receipts of selected Chinese companies traded in the United States. The Average Volume refers to the average daily traded share volume for the ADRs over the previous three months. Short ratio refers to the short interest reported in June 2004 divided by the average daily volume. Thus, a short ratio of 1.0 indicates that the short interest was the equivalent of one day's average trading volume. Source:yahoo.com.

China ADRs

Symbol	Name	Price (USD)	Avg Vol	Short Ratio
ACH	ALUMINUM CHINA	**53.58**	243,507	N/A
BYH	SINOPEC BEIJING	**17.61**	61,636	0.82
CBA	BRILLIANCE	**27.77**	36,181	6.09
CEA	CHINA EAST AIR	**19.33**	6,590	4.83
CHA	CHINA TELECOM CP	**34.13**	255,954	0.6
CHL	CHINA MOBILE	**14.35**	427,681	4.47
CHU	CHINA UNICOM	**7.48**	572,181	1.29
CTRP	CTRIP.COM INTL	**32.81**	89,772	2.72
GSH	GUANGSHEN RLWY	**14.24**	34,136	4.85
HNP	HUANENG POW INTL	**32.21**	136,714	N/A
JCC	JILIN CHEMICAL	**17.52**	23,545	1.13
LFC	CHINA LIFE IN CO	**22.11**	319,500	11.02
LTON	LINKTONE	**9.2**	541,318	2.03
NTES	NETEASE.COM INC	**32.03**	1,807,409	2.06
PTR	PETROCHINA ADR	**49.56**	493,136	1.95
SHI	SINOPEC SHA PET	**35.93**	87,318	1.72
SMI	SEMIC MANFC INTL	**9.87**	439,202	N/A
SNDA	SHANDA INTRATIV	**15.8**	N/A	0.75
SNP	CHINA PETROLEUM	**39.42**	254,227	3.02
TOMO	TOM ONLINE INC	**13.24**	214,409	2.28
YZC	YANZHOU ADR	**61.77**	28,636	1
ZNH	CHINA SOUTH AIR	**19.08**	14,590	5.93

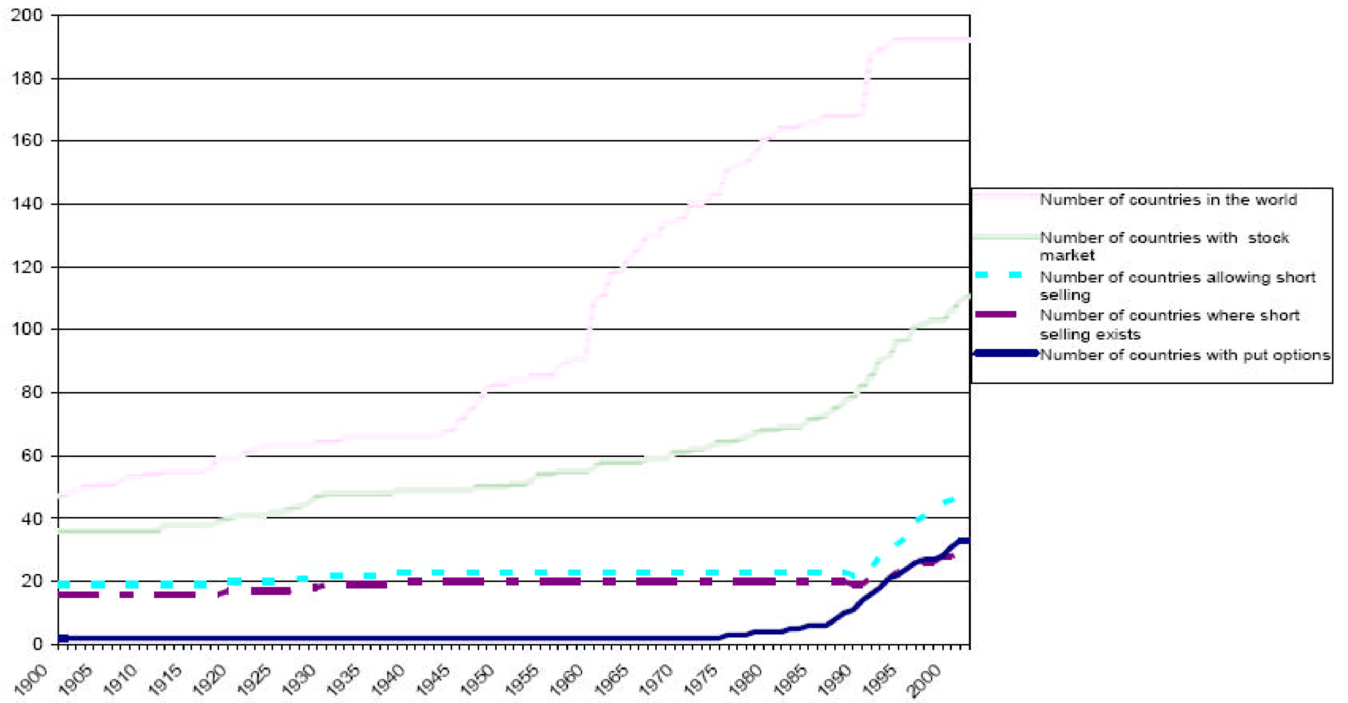
Table 6

Value of default option for limited loss contracts

This table provides the theoretical Black-Scholes option value for a call option on a non-dividend paying stock with a 50% annualized volatility and a 5% interest rate. The option values are expressed as a percentage of par value, for different collateral levels. Thus, if there were no collateral, the exercise price of the walk-away option would be the same as the current price of the stock, leading to an option value of 5.91% of the price of the stock for a 30 day contract and 2.81% for a 7 day contract.

Collateral %	BS Value	BS Value
	30 days	7 days
0	5.91	2.81
5	3.83	1.03
10	2.37	0.29
15	1.41	0.06
20	0.80	0.01
25	0.43	0.00
30	0.23	0.00
35	0.12	0.00
40	0.06	0.00
45	0.03	0.00
50	0.01	0.00

Figure One



Endnotes

[1] Settlement is the process by which the seller and buyer exchange the security for payment. This occurs on T+1, the first day after the trade, for A share s and T+3 for B shares at the Shanghai Stock Exchange.

[2] In some countries there is flexibility in the settlement process so that investors can agree to settlement times outside the " regular way" settlement process. See Angel (1998) for a study of nonstandard settlement transactions in the U.S.

[3] An ADR is an American Depositary Receipt, a security backed by the ownership of the ordinary shares on the home market. ADRs make it easy for U.S. investors to own foreign shares, because the ADRs are traded in U.S. dollars on U.S. exchanges during U.S. market hours.

[4] A more detailed version of short selling in the U.S. will be described below.

[5] See for example D'Avolio (2002), Jones and Lamont (2002), Lamont and Thaler (2003), Ofek and Richardson (2002), and Reed (2001).

[6] For example, Ofek, Richardson, and Whitelaw (2002) document that inefficiencies that short sale constraints in the U.S. for certain stocks lead to deviations from put-call parity for options. Fung and Draper (1999) and Draper and Fung (2002) find that Hong Kong's relaxation of short sale constraints increased the pricing efficiency of the Hang Seng stock index futures contract and that the re-imposition of constraints in 1998 decreased pricing efficiency.

[7] There are many colorful stories about attempts to ban short selling and methods used to circumvent the bans. For more details, consult Chancellor (2001) and Meeker (1932).

[8] Source: NYSE Fact Book Online, http://www.nysedata.com/factbook/viewer_edition.asp?mode=table&key=79&category=4.

[9] See McCormick and Reilly (1997) and McCormick and Ziegler (1998) for more about the Nasdaq bid test.

[10] For more information, see www.otcbb.com

[11] For more information, see www.pinksheets.com.

[12] For example, see http://www.fsa.go.jp/news/newse/e20011221-1.html and http://www.fsa.go.jp/news/newse/e20030313-1.pdf.

[13] See http://www.revenue.ie/pdf/tb17.pdf.

[14] It is necessary to transfer the shares in real time to the account of the borrower to meet the legal requirement that the shares are actually in the account of the seller before the sale transaction can take place. If the relevant section of the Securities Law were changed, then the transfer could be done as part of a batch process at settlement.

[15] The Standardized Portfolio Analysis of Risk (SPAN) system looks at the risk of the trader's entire portfolio to determine the correct amount of collateral, or performance bond, to put up. See http://www.cme.com/clr/rmspan/rmspan/intro1155.html for more details.

[16] Those familiar with the economics of money and banking will recognize that this is similar to the way that the money supply increases by a multiplier effect when the central bank injects new funds into the banking system as banks loan out the same funds over and over.

[17] With most futures contracts, physical delivery is actually quite rare. Even legitimate hedgers usually do not want to buy or sell the specific quality and location of the commodity as specified in the contract, but use the contract to offset their price risk.

[18] The U.S. SEC has elaborate customer account segregation rules that are designed to ensure that customer securities are not mistreated by brokerage firms.

[19] A disclaimer is in order: I am not now nor have I ever been an attorney and claim no expertise in the laws of the People's Republic of China. Good legal counsel should be obtained on these issues.

Country	Is Short Selling Permitted?	Short Selling Details
Argentina	Yes	There are no rules or restrictions for short-selling by foreign institutions. However, local brokers executing short sale transactions must cover the position by borrowing the shares from the Merval on trade date.
Australia	Yes	Short selling is permissible in Australia. An order is short if the seller does not have a presently exercisable and unconditional right to vest the security in the buyer. A sale is not considered short if the seller has borrowed securities prior to the sale. Short selling is permissible in designated securities only. The short selling rules provide for comprehensive reporting of short sales - investors are required to disclose short sales to their broker and brokers are require to comply with daily reporting to the ASX. The short selling rules also provide for compliance with uptick rules but contain certain exceptions to facilitate arbitrage trading for dual listed securities. Short sales of each approved security must not exceed 10% of the capital issued. Investors must provide margin cover of minimum of 20% of the contract price.
Austria	Yes	Short selling is freely permitted in Austria. There are no regulations in Austria preventing short selling. However, on settlement day (of the sell) there has to be sufficient holdings in the account to cover the settlement of the sale. This means that the settlement date of the of the buy can not be later than Setllement Date of the Sell. Buy-ins for non-settlement can take place as soon as SD+1. No uptick rules apply in this market.
Belgium	Yes	Short selling is allowed but rarely occurs. Up tick rules do not apply.
Brazil	No	Short selling is not permitted.
Bulgaria	No	Short selling is prohibited.
Canada	Yes	Short selling is permitted in the market only on the uptick.
Chile	No	Short selling in Chile was approved in 1999, however it is not market practice for tax reasons. Collateral must be approved and usually needs to be 125% of the value of the lending amount. There are uptick rules that stipulate that the price of a short sell on the exchange must be greater than the price of the last transacted sale.
China	No	Short selling is currently not allowed.
Colombia	No	Short selling is not permitted in Colombia.
Czech Republic	Yes	Short selling is possible but the stock must be borrowed in the market as securities must be on the seller's SCP account for delivery on settlement date. Back to back trades are possible but these instructions must be prioritized accordingly. There are no uptick rules applicable in the market.
Denmark	Yes	Short selling is legally permitted in Denmark, but it is not practiced and there are no established rules for the implementation of such transactions or for the collateral required. No uptick rules apply in this market.
Ecuador	No	Short selling is not permitted in Ecuador.
Egypt	No	Short selling is prohibited.
Estonia	No	Short selling is not permitted in Estonia.
Finland	No	Short-selling is not allowed in Finland, therefore no uptick rules apply.
France	Yes	Short selling is permitted in the French Market. No uptick rules apply.
Germany	Yes	Whilst short selling is allowed in Germany, an outright short sell is not possible. Clients can go short only if they arrange a loan to cover their deliveries. Short positions in trading must be closed within the normal settlement period. No uptick rules apply.
Greece	Yes	Short selling has recently been introduced as part of the ADEX Securities Lending programe. The uptick rule for short selling means the price of the short sale trade must be higher than the previous trading price.
Hong Kong	Yes	Short selling is only allowed for designated securities. An order is short under the HKSE Rules if the seller (or, where the seller is an agent, its client) does not own the securities which are to be sold and if the sale is consummated by the delivery of

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Country	Is Short Selling Permitted?	Short Selling Details
		borrowed securities. Naked short selling is not permitted, and is subject to heavy penalties. The SEHK re-instated the uptick rule for short selling in September 1998. The uptick rule states that shorts sales of a designated securities must be made at a price not below the best current ask price, except for i) hedging trades executed by market makers of the HKSE traded options in compliance with the conditions prescribed by the HKSE, and ii) index arbitrage transactions carried in the proprietary account of a broker. Short sales may only be executed automatically through the AMS system (i.e. short sales may not be executed by way of direct business). Investors are required to inform their brokers of the short sale at the time of placing the transaction, and provide them with assurances that they have arranged for borrowed securities. Brokers must indicate, when inputting a short selling order into the AMS, that the order is a short sale.
Hungary	No	Short selling is not recognized market practice in Hungary.
India	No	Short selling is not allowed for FIIs. No sale will be allowed against open purchases or securities out for registration or dematerialization. However, local investors (i.e. retail investors and broker/dealers on proprietary books) are permitted to short sell in the market.
Indonesia	Yes	There are no specific regulations prohibiting short selling in Indonesia as long as there are sufficient shares available for delivery on settlement date.
Israel	No	Short selling in the market is permitted only under certain conditions and circumstances. The Tel Aviv Stock Exchange (TASE) rules indicate that TASE Members must not enter into a short position intentionally. As regards Foreign Investors, in the following situations the market facilitates a technical short: a. The sale of domestic securities against a delivery of ADR' s to be converted into Israeli equities. b. The sale of securities from the wash account of an International Broker on behalf of his clients, who hold the securities with a different custodian. If the short security is not covered by settlement date by the Foreign Institutional Investor (FII), or in the event that the FII does not immediately inform his custodian as to where the coverage will arrive from, then the broker counterparty will effect a buy-in in the market to cover for the short position, as dictated by the TASE rules. In addition, a short position is allowed in the securities account of a member' s client, provided that the short security is supported by a Lending Agreement, agreed upon between the seller-in-short and a borrower.
Italy	Yes	There are no restrictions on short selling and no uptick requirements when short selling, however shorts must be covered by settlement date. For example, if a trade is "off-exchange" and there are no shares available, the trade will not be successfully prematched and therefore will not be sent to the clearinghouse. If the trade is "on-exchange", it is automatically matched in the trading system and committed. If on settlement date there are no shares available then the trade will be entered into the Assegnazione procedure, where either a borrow or buyin will take place.
Japan	Yes	With effect from October 23, 2000, revised requirements were introduced for investors and brokers in regards to short selling in Japan.

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Country	Is Short Selling Permitted?	Short Selling Details
		A short sell is defined as sale without ownership of securities; sale with securities borrowed or sale without assurance of timely delivery of securities at the time of settlement. Investors must advise brokers when placing any sale order, whether it is from their own assets or if it is a short sell. In the case of a "short-sale", investors must submit a report through their broker to the stock exchange where the "short-sale" is executed. All market participants should follow the uptick rule, i.e. investors are prohibited from executing a "short-sale" at a price lower than the last price reported by the exchange immediately prior to the short-sale. With effect from March 6, 2002, the prohibition will be extended to include short selling at the same price as the last reported price prior to the short sale while the price of the relevant equity is going downward (i.e. the last price is a down tick or a zero-minus tick). If proper procedures are not followed, then the parties involved are subject to penalties not exceeding a fine of JPY300,000 per incident.
Lithuania	No	Short selling is not permitted in Lithuania.
Malaysia	No	Short selling is currently not allowed for equities.
Mexico	No	There is a regulation that allows short selling transactions at the BMV, however a securities lending trade must be in place in VALPRE before the short selling transaction is done. This is only applicable to proprietary accounts of local brokers. Short selling is prohibited for foreign investors.
Morocco	No	Short selling is strictly prohibited in the Moroccan market.
Netherlands	Yes	Although permitted, short selling is rarely practiced. Uptick rules do not apply.
New Zealand	Yes	Members of the NZSE may short sell approved securities only in accordance with NZSE regulations. Short sales are not permitted if the transaction will amount to more than 10% of the total number of shares issued. All short net positions of NZD50,000 or greater in each approved security shall be identified and reported to the NZSE by the selling broker by 9.00 a.m. on the next business day. Short sales cannot be made during a normal trading session or before 5.00pm at a price lower than the last reported sale of the security except for short sales that are international marriages or special marriages. Short sales made after 5.00pm may be at a price mutually agreed by the buyer and the seller.
Norway	Yes	A member firm can only conduct a short-sell in its own books or on behalf of a client to a market price that is higher than the official bid price in the security. This does not apply for market makers, provided that the short sell follows from the obligations the member has as a market maker. The short sell shall be supported by a securities borrowing transaction. All short sells have to be reported to the OSE latest by 7:00 p.m. on trade date. The member firm shall in addition report the accumulated volume of all stock borrowed the last trade date every week. 'Covered' short sales are allowed in an uptick situation.
Pakistan	No	Foreign investors are prohibited from short-selling.
Peru	Yes	As of February 8th, 2002, short selling is allowed in Peru. Foreign and local investors are allowed to execute transactions on equity transactions listed in the Tabla de Valores Referenciales (TVR). Collateral must equal 50% of the total amount of the transaction during the period from trade date until purchase transaction or securities lending is made. The LSE is informed of all short selling transactions and will penalize investors that do not comply with the collateral requirement. They will be subject to a 5% penalty of the total amount of the transaction, which will be part of the LSE guarantee fund.

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Country	Is Short Selling Permitted?	Short Selling Details
Philippines	No	Short selling is defined as any sale with borrowed securities. According to the uptick rules, short selling is only allowed at a price higher than the last sale price except in case of odd lot sales. Although the Securities and Exchange Commission (SEC) has approved the rules on SBL and short selling, the rules are not clearly defined.
Poland	Yes	Short selling, like securities lending, was made legal in January 2000 but is only currently possible for local brokers. No set procedures have been established and it is still only rarely practiced.
Portugal	No	Short selling in Portugal is prohibited therefore, no uptick rules apply.
Russia	Yes	Short selling of Russian equities is not a recognized market practice, though there is nothing specific in the legislation to prohibit it.
Singapore	No	There are no by-laws under the SGX that forbid short-selling, however, the present CDP system actively works against it. This is because short sellers must cover their positions within the same day or face a buy-in by the SGX. There are no uptick rules applicable in the market.
Slovak Republic	No	Short selling is not possible, as SCP accounts have to be designated to selling brokers and must have shares present first.
South Africa	Yes	Short selling is legal in the market but should be covered by a stock-borrow, which is done with full notification to all parties. There can be substantial fines for not covering a short sell with either a borrow or back to back transaction.
South Korea	No	A sale transaction is "short" under Korean rules if the sale is consummated by the delivery of shares obtained from a borrowing arrangement. The rules require all brokers to verify with the investors whether the order is to sell short. Naked short sales are not permitted, including situations where a sell order is placed before the corresponding buy order on the same day. An offer on a short sale must be made at or better than the last transacted price in the market unless it is part of an index arbitrage trade or strategy.
Spain	No	Short Selling in the Spanish market is illegal and off shore lending has been established in order to provide an opportunity to avoid short sale fines. Current legislation does not permit securities lending at a local level. In the future, when legislation permits, on shore lending will enable a much wider securities lending market to non-resident investors. Detail: Shares have a registration reference (RR) number which identifies the shares and includes the date of the purchase of the shares. Shares used to cover a sale must have the RR numbering dated with the same date or previous to that of the sale. However, if the sale is justified with securities from a stock loan, there is a grace period of two working days on the date of said shares. When selling stock in the Spanish market, agent banks have until the evening of T+4 to justify outstanding sales in the market by providing the SCLV with valid reference record number. Short sale penalties are charged daily at 10 basis points. In addition to this, tiered charges from 1 to 40 basis points are levied according to an investors fail rate. Profits are also confiscated if deemed gained from short selling.
Sri Lanka	No	Short selling is prohibited.
Sweden	Yes	Short selling is practiced in Sweden, but it is unregulated; the only requirement is that securities are in the sellers' account on settlement date. No uptick rules apply in this market.
Switzerland	Yes	There are no restrictions on short selling for non-resident investors. Investors, however, need to be aware of buy in regulations, which although rarely used, do exist. No uptick rules apply.
Taiwan	No	Foreign investors are prohibited from short selling.

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Country	Is Short Selling Permitted?	Short Selling Details
Thailand	Yes	The official Thai definition of a short sale is "a sale completed by delivery of borrowed securities". Short selling is only allowed for securities listed on the SET 50 Index. Investors must disclose to the broker when short selling and whether securities have been borrowed to cover the short sale.
Turkey	Yes	Short selling is legal in Turkey, although it is not widely practiced. Short selling can be practiced on ISE-100 Index, which makes up the main index. The securities on which short selling can be practiced is determined on a quarterly basis by the ISE and announced in the daily ISE bulletin. Resident and Non resident investors are both permitted to short sell.
United Kingdom / Ireland	Yes	Short selling is legal in the UK and Ireland. There are no specific rules governing short selling, however buy-in procedures will apply for failed settlement.
United States	Yes	Short selling is permitted. In the US, there are uptick rules applicable to short selling called "Zero Plus Tick Rules". For a short sell order to be executed under these rules, if trades are executed sequentially at $51, $52, and $52, a short sell sale may be executed immediately following the first trade at $52 (the uptick) or immediately following the second trade at $52(a zero-plus tick)
Venezuela	No	Short selling is prohibited.

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