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**DEVELOPING SHORT-SELLING ON THE MAINLAND
CHINESE EQUITY MARKETS**

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Developing short-selling on the mainland Chinese equity markets^{*}

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Abstract

We review the theory and evidence on liquidity, price discovery and market efficiency associated with securities lending and short-selling. We also study the efforts by the Hong Kong and Taiwan stock exchanges to develop short-selling. We build on this to generate ideas for the development of securities lending and short-selling in mainland China. We argue that a phased program of reform, well-implemented, can help build confidence in the mainland Chinese equity markets, by aiding price discovery and improving market liquidity.

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1. Introduction

Securities lending and short-selling are of interest to academics, market participants and regulators alike, because of their impact on market prices and liquidity, and because of their role in the process of arbitrage. The impact of short-selling on market prices has been the subject of much empirical work. Constraints on short-selling have also been examined, theoretically and empirically, in a variety of studies. Although short-selling is permitted on many stock exchanges worldwide, mainland Chinese exchanges do not explicitly permit the practice. We review the literature on securities lending and short selling, and discuss the implications for equity markets on mainland China. We argue that it is in the long-term interests of the mainland Chinese markets to permit these practices. We study the gradual development of short-selling in the Hong Kong and Taiwan markets, and incorporate evidence from the literature, to suggest a phased program of reforms in the mainland Chinese markets. Transparency and anti-abuse measures are discussed as part of the development program.

The aim of this paper is to explore the effect of securities lending and short-sale restrictions on the mainland Chinese equity markets, and to observe liberalization efforts in other markets. We conduct a documentary analysis of the literature on short-sale constraints and their impact on markets, and make pragmatic arguments for their application to the mainland Chinese equity markets. We identify successful elements of reform in other markets, particularly those in Hong Kong and Taiwan, and consider their application to mainland Chinese equity markets.

Securities lending is the market practice whereby securities are transferred temporarily from one party (the lender) to another (the borrower) for a fee. The borrower must return the securities to the lender either at the end of an agreed term, or on demand. In law, securities lending is an absolute transfer of title (or sale) against an undertaking to return equivalent securities. Most securities loans are collateralised with cash or other securities. The process is facilitated by intermediaries such as custodians, investment banks or stockbrokers. Lending of securities is primarily motivated by the fee income received from the loan. Although generally at a thin rate (averaging 25b.p. per annum in the USA, but occasionally reaching much higher levels, according to D'Avolio, 2002), lending improves the asset's total performance and can offset custodial fees and administrative expenses. Lenders can also be motivated by the desire to borrow short-term money, and can do this by arranging transactions such as cash-collateralised securities lending or repurchase agreements. Securities lenders include long-term investors such as pension funds, insurance companies and mutual funds. Banks and broker-dealers also act as securities lenders.

The most common reason for borrowing, according to Faulkner (2004), is to settle an outright sale of securities. This is known as short covering, and is required after a short-sale. In the United States securities markets, for example, Regulation SHO requires short-sellers to locate stock for borrowing, prior to selling a stock short. Other motivations include market makers borrowing securities to fill customer buy orders, exchange specialists borrowing to maintain price stability, and stockbrokers borrowing to cover a short position after failed settlement. Securities borrowing can also be related to hedging by the counterparties to contracts for differences, spread

bets and swaps. The temporary transfer of ownership can also motivate securities borrowing. This includes dividend capture strategies such as ‘scrip dividend arbitrage’ and ‘dividend withholding tax arbitrage’. In this latter case, for example, the holder of securities is subject to withholding tax on interest or dividends, but the borrower would be free of withholding tax. Some of the benefits the borrower obtains from receiving the dividend free of withholding tax are shared with the lender. As an illustration, appendices 1 and 2 show the composition of securities borrowers and lenders on the Taiwan Stock Exchange (TSEC).

The securities lending process includes negotiation of loan deals, delivery of collateral to securities lenders, the investment of cash collateral and the eventual return of the borrowed securities. Clearing and settlement services are provided by clearing houses acting as central counterparties, central securities depositories and providers of cross-border settlement. In view of the narrow margins that users expect, securities lending has become a volume business. Agent lenders are generally global custodians or specialised agents participating on behalf of a large number of clients. Specialized agents invest in the systems needed to conduct securities lending operations, and gain economies of scale by pooling the securities of various owners. Agents and owners split the revenues arising from securities lending deals. Intermediaries undertake a variety of tasks, including: negotiation of loans for securities owners, daily mark-to-market calculations to ensure that collateral is maintained at minimum required levels, investment of cash collateral, risk and compliance monitoring, and performance reporting.

Short-selling is the sale of securities that the seller does not own, or that the seller owns but chooses not to deliver. The short-seller must borrow securities in

order to fulfil delivery obligations to the purchaser. ‘Naked short-selling’ occurs when the short-seller does not borrow, and so does not deliver, stock to the purchaser. Short-selling is particularly associated with the activities of arbitrageurs and hedge funds. Although some funds exclusively sell short, seeking to benefit from a decline in the value of a security, most short-selling is part of a broader trading strategy, designed to exploit perceived pricing anomalies between two or more securities. Examples of such trading strategies include capital structure arbitrage (see Yu, 2006), merger arbitrage (see Mitchell and Pulvino, 2001) and pairs trading (see Jacobs and Levy, 1993). Not all short-sales are driven by expectations of a price change; some sales are meant to stabilise prices. For instance, underwriters often sell short to reduce volatility in the price of public offering and buyback programs.

In a theoretical, perfectly efficient market, all available information is imputed in security prices. Classical descriptions of arbitrage, such as Fama (1965), regard short-selling as an essential mechanism for correcting over-pricing in securities. Arbitrage is thus regarded as a process that ensures that securities markets are informationally efficient in equilibrium. In practice, however, a number of risks and limitations are associated with arbitrage (see for example, Shleifer and Vishny, 1997, and Jones and Lamont, 2002). Short-selling constraints feature amongst these, and range from costs associated with borrowing securities to the outright prohibition of short-selling. A fertile area of research in recent years has been the study of the impact of short-selling constraints on market prices and returns. In this paper, we review the theoretical literature on short-selling constraints in Section 2.1, and explore the empirical literature in Section 2.2. In the later parts of Section 2, we discuss the benefits and risks arising from short-selling, alternatives to short-selling,

and issues arising for regulators. Section 3 discusses the possible development of securities lending on mainland China. Section 4 provides suggestions for developing short-selling on mainland China, and we conclude in Section 5.

2. Theory and evidence on short-selling

2.1 Theoretical perspectives

Classical asset pricing models such as arbitrage pricing theory (APT) are based on the assumption that there are no short-sale constraints in markets. However, in practice, impediments to short-selling exist. Miller (1977) theorises that with short-sales constraints and divergence of opinion amongst investors, the price of a security is set by the beliefs of the most optimistic investors, not by those of the average investor. This allows some securities to become overpriced. In his model, overpricing develops because pessimists are prevented from short-selling overpriced stocks. Miller concludes that “the presence of a substantial number of well informed investors will prevent there from being substantially undervalued securities, but there may be securities whose price has been bid up to excessive levels by an uninformed minority, thus contradicting the efficient market hypothesis.”

Harrison and Kreps (1978) state that if the markets for stocks were perfect, the amount of stock available to be held long would not be fixed, but would “increase as members of less optimistic classes sold the stock short”. They conclude that “Equilibrium will be reached only when investors take positions sufficiently

disparate that their aversion to risk gives them identical marginal beliefs". Morris (1996) argues that the price of a stock can be higher than the valuation of all investors due to the opportunity to speculate that arises when shorting is prohibited.

However, Jarrow (1980) points out that under "homogeneity of beliefs" for the covariance matrix of future prices, short-sale constraints will only increase prices of risky assets. He points out that according to Miller (1977), market-wide short-sale constraints would lead to pervasive overpricing of the entire market. Diamond and Verrecchia (1987) explicitly dismiss the possibility of price bias as a result of short-sale constraints, observing that "rational expectations formation...removes any upward bias to prices." They conclude that in a rational expectations framework, short-sale constraints might not lead to overvaluation. Chen, Hong and Stein (2002) note: "in spite of its surface plausibility and intuitive appeal, the evidence for Miller's theory remains somewhat sparse, even after 25 years... [perhaps because]...empirical efforts in this area have tended to follow Figlewski (1981) who tests the theory by looking at the relationship between short interest and subsequent returns."

With new theories incorporating his insight into more formal and refined models, Miller's assertion has recently won greater appreciation. Duffie, Garleanu and Pedersen (2002) claim that a large discrepancy between the beliefs of optimists and pessimists, or strong lender bargaining power, can produce share prices above even the most optimistic shareholders' valuation. Danielsen & Sorescu (2001) empirically test the implications of a general equilibrium theoretical model derived as an extension of Jarrow (1980) and Miller (1987). They assert that high return correlation with the broader market leads to a higher probability of short-sale

constraints. Hong, Scheinkman, and Xiong (2004) claim that “a speculative bubble arises because investors, with heterogeneous beliefs due to overconfidence and facing short-sales constraints, anticipate the option to resell the stock to buyers with even higher valuations.” Research thus continues to explore the nature of the differences between the perfectly efficient markets of classical finance theory, and more realistic markets that suffer from short-selling constraints.

2.2 Empirical studies on short-selling

Various studies examine the relationship between short-interest (the proportion of shares shorted) in a security, and abnormal return. Figlewski (1981), Brent *et al.* (1990), Figlewski and Webb (1993) and Woolridge and Dickinson (1994) find no evidence of a strong relation between short-interest and abnormal return. By contrast, Senchack and Starks (1993) investigate the market reaction to monthly short-sale announcements from both the New York and the American Stock Exchanges. They examine the wealth effects of short-interest announcements, and the relation between wealth effects and the degree of unexpected increases in short-interest. Using monthly common-stock short-interest figures from 1980 to 1986, they identify companies showing ‘unusually large’ increases in short interest. They find evidence that some significant negative price reaction occurs in an extended period around the announcement of a substantial increase in short-interest.

By focusing on firms with large short-interest only, Asquith and Muelbroek (1996) argue that the power of such tests can be improved. They find a strong and consistent relation between short-interest and excess returns. Shares with high levels

of short interests (greater than 2.5% of shares outstanding) perform significantly worse than comparable shares without high levels of short interest.

Only limited, monthly information on short interest has been publicly available in the USA prior to 2005, and this has limited the scope of research into this topic. Aitken *et al.* (1998) analyse information provided by the Australian Stock Exchange (ASX), covering intra-day information on short positions in listed ASX equities. Short trades were reported to the market soon after execution. Using details of all limit and market orders placed, and trades executed on the ASX's automated trading system, they investigate the market reaction to short sales. They study short periods of time (up to 45 minutes) after short sales, and also the 30 trades that immediately follow the short-sale. They find a significantly negative abnormal return in calendar time following short-sales (both limit orders and market orders). Abnormal returns are calculated by comparing short-sales to matched non-short sale trades.

Dechow *et al.* (2001) examine the extent of short selling during the period 1976-1993, using public US data. They use as their short interest variable the percentage of outstanding shares shorted. From their sample of over 34,000 firm-years, they show that 36.6% of firm-year observations show no short positions. Approximately 46% of observations show small short positions (greater than zero but less than 0.5% of outstanding shares). Less than 2% of observations have over 5% of outstanding shares shorted. They chart percent of outstanding loans shorted against time in calendar years, and suggest that the growth in short selling (from less than 0.2% of outstanding shares being shorted in 1976 to approximately 1.4% in 1993) may be due to deregulation of the capital markets and the growth in hedge funds. The

authors also investigate the trading strategies of short-sellers. They highlight a strong relation between the trading strategies of short sellers and ratios of fundamentals to market prices. They show that short sellers target equities that have low fundamental to price ratios, and then unwind their positions as these ratios revert to the mean. They also show that short sellers refine their trading strategies in three ways: by avoiding equities where short-selling is expensive; by using information other than fundamental to price ratios that has predictive ability with respect to future returns; and by avoiding equities with low fundamental to price ratios where the low ratios are due to temporarily low fundamentals (as opposed to temporarily high prices). Their evidence suggests that “short sellers are sophisticated investors who play an important role in keeping the price of stocks in line with fundamentals.”

Jones and Lamont (2002) study the centralized stock loan market on the floor of the New York Stock Exchange (known as the ‘loan crowd’) from 1926-1933. They show that as stocks ‘enter the loan crowd’, they generally have high valuations and low subsequent returns. Size-adjusted returns are 1-2% lower for stocks that enter the loan crowd for the first time, and despite the high costs of borrowing and shorting these securities, it is profitable to short them.

Angel *et al.* (2003) study 3 months of short trades reported to NASDAQ through its ACT trade-reporting system (from 13/9/00 to 12/12/00). They assess the frequency of short selling for their sample of NASDAQ trades. They find that 2.36% of trades are short trades, with the median less than the mean, suggesting that short sales tend to be concentrated in certain shares on a subset of days. Based on the percentage of shares shorted, they find that 2.88% of shares traded were shorted. The median (1.10) was much lower, suggesting a concentration of shorting activity in

certain companies. Where the degree of short selling is greater than average, significantly negative market-adjusted returns follow in the next three days. Short-selling is more common in actively traded companies and in shares with higher price volatility. Angel *et al.* (2003) also find that short selling is focused on shares exhibiting greater than average price performance, as measured by price performance during the three month period under analysis.

D'Avolio (2002) examines stock lending fees and shows that 'growth' and 'low-momentum' stocks are relatively more likely to be 'special', leading to practical difficulties and costs in creating the long/ short factor portfolios found in the finance literature. Geczy *et al.* (2002) analyse a private database of US securities lending. They examine if investors can actually realize the returns of such long-short factor portfolios, including the book-to market strategy from DeBondt and Thaler (1987) and Fama and French (1993), and the price momentum strategy from Jegadeesh and Titman (1993). Geczy *et al.* find that the expected-return difference between unconstrained factor portfolios found in the literature and portfolios that investors could actually hold is significantly smaller than the unconstrained factor portfolios' documented profitability. They argue that if short-selling problems explain the availability of factor portfolio returns to unskilled managers, then these short selling problems are not borrowing costs, but perhaps prohibitions on short-selling, or liquidity constraints, as cited in Shleifer and Vishny (1997).

Bris, *et al.* (2003) find empirical evidence supporting the hypothesis that difficulty in short-selling is associated with security mispricing. They analyze a sample of countries where short-selling is permitted, using time-series and cross-sectional difference techniques, and compare with countries where short-sales are not

allowed or not practiced. They construct two measures of price efficiency that quantify the asymmetric response of individual stock returns to negative or positive information. They find that prices reflect information faster in countries where short-sales are allowed. This evidence is consistent with more efficient price discovery at the individual security level in the absence of short-selling constraints.

Charoenrook and Daouk (2004) survey the regulation and feasibility of short sales and put option trading across a number of stock markets and employ this data to analyse the effects of short-sale constraints. They assert that in countries where short selling is possible, volatility is lower and liquidity is higher. They also argue that in countries where short selling is permitted, markets have “lower cost of capital and the stock market price increases when short-sale restrictions are lifted. The authors argue that: “These findings appear to support the argument that short-sale constraints reduce market quality”.

In summary, the empirical literature generally finds a negative relationship between unexpected or above-average short-selling and abnormal returns at the individual stock level. However, short-selling constraints at the country level are associated with higher volatility, poorer liquidity and less efficient price discovery at the individual stock level.

2.3 Opportunities arising from short-selling

Alexander (1993) argues that, as most stocks have a positive covariance with one another, “short-selling creates a set of negative covariances”. This can be used to reduce risk when constructing a portfolio. He suggests that in the context of total

portfolio risk, short-selling might not be as risky as it seems when merely looking at the variance of a short position. The ability to undertake short-selling also allows the manager a further means of protecting portfolio value against an anticipated market fall. Brent *et al.* (1990) find evidence supporting arbitrage and hedging motives for taking short positions. They find only weak evidence in support of tax-based or speculative trading motives.

Ackermann and Ravenscraft (1998) show that regulatory differences between mutual funds and hedge funds lead to large differences in their uses of short-selling, as well as leverage, concentration, derivatives illiquid securities and lock-up periods. Such differences appear to hinder mutual fund performance relative to hedge fund performance. Ackermann *et al.* (1999) study hedge fund returns in the eight years ending 1995. They find higher total risk (as measured by standard deviation of monthly returns) in hedge funds compared to US mutual funds. They refer to the latitude and flexibility that hedge fund managers have compared to mutual fund managers and find that hedge funds achieve higher Sharpe Ratios than mutual funds, despite their higher volatility. However, they warn that “some of the characteristics that enhance hedge fund performance may not be appropriate for mutual funds that attract undiversified, risk-averse clients.” Thus, the major concern with respect to risk should not be the stand-alone volatility of returns for a fund, but how it fits into a client’s existing portfolio.

Short-selling allows for more ‘informationally efficient’ portfolios to be created (see Clarke *et al.*, 2004). Information gained from investment analysis, including negative opinions on stocks, is fully utilised when short-selling is permitted. Equities deemed to be over-valued need not merely be zero-weighted in a

portfolio (as is traditional in long-only portfolios) but can be short-sold to reflect a negative opinion. This is particularly helpful when a negative opinion is obtained on a smaller company, as merely holding a zero weighting in a smaller company will have little benchmark-relative impact on performance.

2.4 Constraints and risks associated with short-selling

The legal, fiscal, institutional and cultural restrictions, and the various costs and risks of short selling, are collectively referred to by financial economists as ‘short-sale constraints’. These include the direct monetary costs of borrowing shares, difficulty in locating securities to borrow and regulatory constraints such as the “up-tick” rules found in the USA and Japan².

Investment risks associated with short-selling include fundamental risk. A typical arbitrage position, such as might arise in pairs trading, involves a short position in an apparently over-valued security, and a long-position of equal size in a similar, less over-valued security. This partially hedged arbitrage position is risky, because the fundamental value of the combined position might change over time. Furthermore, the valuation models used by the arbitrageur might be faulty.

² An up-tick rule is imposed by the SEC and the exchanges: Rule 10a-1 under the Securities Exchange Act of 1934. A short-sale may only occur at a price above the previous transaction price, or else at a price equal to the previous transaction price, so long as the previous transaction in turn was at a higher price than the transaction before it. This is commonly used in reference to stocks, but it can be extended to commodities and other forms of securities.

Noise trader risk, such as identified by De long *et al.* (1990), addresses the risk that prices can move further away from fundamental value, due to the correlated actions of some investors who trade on sentiment, as opposed to fundamental analysis or privileged information. If the investor can hold on the position long enough, a reversion to fair value will ensue and noise trader risk merely presents opportunities to take additional arbitrage positions. But in practice, the investor might be unable to hold the position long enough to profit from reversion. Reasons for this might include an inability to meet margin calls for collateral on the short sell position if noise traders move prices further away from the investors perceived fair value, or redemption by clients disaffected with short-term performance, as highlighted by Shleifer and Vishny (1997).

Short sellers must borrow securities to settle short positions. For a security borrowed on call rather than on a term loan, the short-seller risks having the borrowed security 'recalled' by the lender. A 'short squeeze' is an orchestrated recall at a time of a rising share price, forcing the short-seller to cover his/ her position at disadvantageous prices. D'Avolio (2002) highlights that when a 'special' (an expensive to borrow security) is recalled, short sellers on average are unable to renew a similar loan for a mean of 23 days (median of 9 days).

Synchronization risk, as identified by Abreu and Brunermeier (2002) is concerned with uncertainty about the market timing decisions of other rational arbitrageurs, and thus the timing of the price correction. They show that rational arbitrageurs should not act immediately on knowledge of stock over-valuation, but instead wait for other rational arbitrageurs to learn about the over-valuation. Acting immediately might lead to losses, if enough other rational arbitrageurs do not know

of the over-valuation and fail to act at the same time. Chanos (2003) states “It is very costly and full of risk for the short seller to execute and maintain a position, waiting for the rest of the market to realise the stock is overvalued.”

The distribution of returns associated with short selling and arbitrage introduces new risks to investors. Ackermann *et al.* (1999) state that the “standard deviation of return measure of total risk may not fully capture the complex risk taking from hedge funds’ dynamic, highly leveraged strategies.” For example, the distribution of returns from hedge funds typically exhibit ‘fat tails’ relative to a Normal or log-normal distribution. Mitchell and Pulvino (2001) state that “Risk arbitrage is appropriate only for those investors that are willing to incur negative returns in severely depreciating markets and limited positive returns in flat and appreciating markets.” As the expected return from owning a risky asset is positive, holding a short position in that same risky asset has a negative expected return. Furthermore, profits are limited to 100% of the proceeds on the date of sale, but there is no pre-defined limit to the extent of losses. In practice, the capital of the short-seller places a constraint on losses. At the point at which the short-seller runs out of capital and is unable to meet variation margin, his/ her short-position will be covered by the broker and the short-sellers loss will be crystallized.

2.5 Alternatives to short-selling

Geczy *et al.* (2002), and Lamont and Thaler (2001) both note that there are alternative means of obtaining short exposure to an equity, other than short-selling.

Fabozzi (2004) suggests that it is less costly to implement a short-selling strategy in the futures market than in the 'cash' market.

Raab and Shwager (1993) show that the existence of an index future allows traders to 'span' the market – to create a short-sale position in any individual stock through a combination of long equity positions and a short index futures position.

Single stock put options allow investors to gain from falling share prices, and can thus provide an alternative to short selling. Because of the lower transaction costs associated with single stock put options relative to short selling of shares, the introduction of such derivatives is associated with price drops in the underlying securities, according to Sorescu (2000) and Danielsen and Sorescu (2001).

Markets for futures contracts on single equity stocks were first offered to U.S. investors in 2002. Selling a single stock future is equivalent to taking a short position in a company. Margin for single stock futures is set at 20 percent of the contract's value, well above the 5 percent margin typical for other futures contracts. Johnson (2005) suggests that margin levels on single stock derivatives have been set by regulators in such a way as to balance attractiveness across markets. This in turn suggests an understanding by regulators that investors can treat each market as an alternative to the others.

Contracts for differences, spread bets and swaps allow traders to hedge or speculate on price movements in securities without the need to purchase or sell-short those securities. Where an investor or speculator enters a contract for differences or a swap, or places a spread bet, the counterparty may choose to hedge his/ her exposure to the underlying security.

Investors thus have several alternative methods for placing trades that are economically equivalent to short-sales in the ‘cash market’. Regulatory restrictions on short-sales must thus be viewed in light of the possibility of finding alternative means of expressing a negative opinion about the value of a security.

2.6 Issues for Regulators

Financial regulators worldwide attempt to meet a variety of goals, including, amongst other things, the maintenance of confidence in financial markets, and the provision of the ‘correct’ degree of protection for consumers³. At times, regulators must balance conflicting priorities. For example, the evidence reviewed above suggests that markets in which short-selling is permitted should be more informationally efficient than those in which the practice is prohibited. However, unsuccessful short-sellers can face unlimited losses on their positions, although in practice, bankruptcy sets in at some point as losses rise. If confined to sophisticated investors, large losses and bankruptcy might be tolerable. However, amongst retail investors, especially those invested via collective investment funds, this might become politically unacceptable. Some regulators attempt to solve this dilemma by legally preventing those investors involved in collecting money from the public from short-selling securities. However, increasingly available alternatives, such as single stock futures, spread betting and contracts for differences, allow smaller (or ‘retail’) investors to short-sell securities. Robotti (2005) explores short-selling and arbitrage

³ See, for example, the stated aims of the United Kingdom’s financial regulator, the Financial Services Authority, at www.fsa.gov.uk

in a regulatory context and argues: “The puzzle for regulators lies in this tension between the need to protect investors and the need to promote efficiency, which regulators find equally constraining.” The author argues that the efficiency argument has had an important influence on the way regulators allow short-selling to operate in a market.

Deciding on the appropriate level of disclosure of information on short selling also presents a challenge to regulators. Publishing information on outstanding short positions improves transparency in markets, and should assist in making market more efficient, in the sense that information is readily available, disseminated widely and can be imputed into security prices. However, by disclosing such information, the risks associated with short-selling can increase. Amongst these is the risk of a short squeeze – a form of predatory trading. Predators can use knowledge about outstanding, specific short positions to initiate short squeezes. Fear of a short squeeze might deter short-selling amongst traders, and thus curtail the process of risk arbitrage. If short sellers stop driving prices towards fair value, the market becomes less efficient. This is a particularly difficult dilemma to resolve and regulators generally arrive at a compromise. For example, in the USA, aggregate short positions are disclosed to the market once a month for major stocks. In the UK, the aggregate securities on loan position for the largest 350 companies is disclosed daily, five days in arrears, to the market. Such disclosure provides a degree of transparency, but by using aggregated data, protects investors with limited capital from predatory trading.

Robotti (2005) analyses responses to the SEC’s consultation process ahead of implementation of regulation SHO 2004, and shows that different institutions are affected by short selling regulation in different manners. For example, broker/

dealers favoured less regulation, perhaps due to the fact that they derived income from the process of short-selling and wished to see it unconstrained. Stock exchanges, representing indirectly the corporate sector, favoured no change in regulation. Smaller capitalization companies favoured tighter regulation, perhaps fearing that short-selling could drive down their share prices and raise their cost of capital. Some smaller capitalization companies, and their shareholders, criticised short-sale abuses and alleged share price manipulation. Robotti (2005) argues that any initiative on short selling can affect the balance between the interests of long-shareholders (investors) and hedge funds/ market makers. The author concludes: “The efficiency justification of short selling produces a divide [between corporate and financial interests, and also between long and short holders of capital].” Furthermore: “Contrary to the dominant view on short selling, no financial practice is positive or negative in absolute terms but only in relative terms. There are always social conflicts surrounding market practices.”

3. Developing securities lending on mainland China

The Bank for International Settlements (1999) asserts that “the ability to borrow securities is an indispensable element in the development of advanced, effective capital markets”.⁴ The UK’s Stock Lending and Repo Committee comments that⁵: “Securities lending is a major and growing activity providing

⁴ International Organization of Securities Commissions, July 1999

⁵ Stock Lending and Repo Committee (SLRC), March 2004, an Introduction to Securities Lending

significant benefits for issuers, investors and traders alike. These are likely to include improved market liquidity, more efficient settlement, tighter dealer prices and perhaps a reduction in the cost of capital.”

Various Chinese financial institutions are likely to benefit from securities lending. In particular, long-term investors, including social security funds, would be able to increase their income by lending securities to other parties with more immediate need for those securities. Additionally, the different tax positions for various investors in China create opportunities for borrowers to use tax arbitrage, in effect to exchange assets temporarily for the mutual benefit of both borrowers and lenders. Table 1 illustrates the tax rates that are applied to various types of investors for stock dividends and bond interest in China.

[INSERT TABLE 1 HERE]

Investors subject to higher rates of tax on dividend distributions are able to lend to those subject to lower rates. Tax savings are shared according to a formula agreed in advance between the two parties. Note that tax collection revenue is diminished as a consequence of this activity.

In the USA, custodian banks that clear and hold positions for large institutional investors have become the main lending agents. In China, the Law of Securities Investment Fund, and the Law of Trust specify that all assets should be under the safeguard of trustees or custodians when asset owners transfer their assets

to asset managers for professional management. In China, the “big four⁶” banks, together with Bank of Communications, dominate the custody market with approximately 90% market share, allowing for economies of scale. The largest custodian bank, Industrial and Commercial Bank of China (ICBC), for example reported over \$20 billion under custody on June 30th, 2005. Globally, custodians in the securities lending business compete on the basis of their collateral performance record, risk management track record, existing client base and technological capabilities. It is likely that the market share of Chinese custodian banks will ultimately be based on competitiveness in each of the above categories.

4. Policy suggestions for developing short-selling on mainland China

4.1 The case for short-selling on mainland China

The Bank for International Settlements’ Committee on the Global Financial System (1999) stated in its recommendations for creating efficient securities markets, “The ability to make short-sales is an important element of liquidity-enhancing trading rules. If short-sales are not allowed, dealers cannot respond to customers’ buy orders quickly. This impediment to the market-making function would cause a decline in market liquidity. Many countries adopt measures to facilitate short-sales, and special security lending and/or repo facilities through which the authorities can

⁶ Industrial and Commercial Bank of China, China Construction Bank, Bank of China, Agriculture Bank of China.

provide the securities in short supply⁷”.

Chinese investors are subjected to stringent short-sales constraints. Investors' accounts are held centrally at the stock exchanges. Investors' positions are checked by the exchanges prior to trade execution. A limited number of warrants and options on Chinese equities have been available on the Shanghai Stock Exchange since July 18th, 2005, but the derivatives market remains immature⁸.

A major cultural objection to short-selling is that it could be used to attempt to drive down share prices. China's experience in the 21st century - a drop of 15.0% in the Shanghai Composite [Price] Index from 1/1/2000 to 12/31/2005 (source: Datastream) – is that restrictions on short-selling do not in themselves prevent a major stock market fall. If Miller's 1977 proposition is taken at face value, short-selling restrictions could lead to over-valuation of securities about which investors have divergent opinions. Any subsequent unwinding of these over-valuations could cause share prices to fall.

Systematic risk is relatively high in emerging capital markets. Jin (2003) analyzes data from the Shanghai 180 Index in 2000, 2001 and the first half of 2002. The author finds that the ratio of systematic risk to the total risk is 36.04%, 44.44% and 70.77% respectively. Whereas non-systematic risk can be reduced through portfolio diversification, the hedging of systematic risk depends on short-selling, or the use of derivatives.

⁷ “How Should We Design Deep and Liquid Markets? The Case of Government Securities,” Bank for International Settlements, Basel, Switzerland, 22 October 1999

⁸ The government banned bond futures markets in 1995 because of a price manipulation scandal and has also put the development of equity derivatives markets on hold.

Li & Fleisher (2003) provide evidence for explaining the relatively low prices and high returns for B shares relative to their A share counterparts in the Chinese stock market. They assert that their evidence implies that the short-sales constraints are “binding” in the A-share market. In contrast, “dispersion of forecasters’ opinion is not significantly related to B-share returns”, hence short sales restrictions are not “binding” for trading in B shares. They conclude that “different influences of the short-sales restrictions at least partially explain the relatively low price of B shares”.

Kang et al (2002) state that: “most individual investors [on China’s mainland exchanges] possess only rudimentary knowledge on stock investments and trade like noise traders”. Mei *et al.* (2005) analyse a data sample from 1993 to 2000, from the Chinese stock market, using perfectly segmented dual-class shares to test the implication of the presence of short-sales constraints and “heterogeneous beliefs” on asset prices and trading volume. They find several results consistent with the existence of a speculative component in the prices of domestic shares. “In many aspects, the price dynamics of the newly emerged Chinese market resembled the technology bubble in the U.S”. They argue that “investors’ speculative trading is an important determinant of stock prices during bubbles”. A speculative market would benefit from the ability to short-sell those stocks that appeared to be over-priced compared to fair value. Such a mechanism would assist in the efficient pricing of securities.

The Chinese government has been making efforts to improve access to the stock market, including initiating the Qualified Foreign Institutional Investors (QFII) programme, and lowering stamp duty. However, there are areas where government control may yet hinder market efficiency. For example, Baker and Wurgler (2002)

present evidence that US firms tend to issue equities when they perceive their market value to be higher than their intrinsic value. This acts as a market price correction mechanism. However, in China this mechanism is impaired because of government control over the timing of Initial Public Offerings (IPOs) and Seasoned Equity Offerings (SEOs). Specifically, government approval is required before Chinese companies can sell their equity. Strict quotas prevent some qualifying companies from taking advantage of favourable market conditions to issue their shares. In light of this constraint, we believe that the removal of short-selling prohibitions will have a beneficial impact on market efficiency.

4.2 Experiences from Hong Kong and Taiwan

In the past decade, the Hong Kong Securities and Futures Commission (SFC)⁹ has made efforts to develop the short-selling and securities lending industry. Appendix 1 reviews the development history of short-selling in the Hong Kong market. Stock lending for settlement purposes took place informally among local brokers before 1986, but tax authorities imposed a tax on such transactions. From 1989, a limited exemption to stamp duty was offered for securities borrowing of up to 14 days. Prior to 1994, there was little stock lending in Hong Kong. Demand was limited by legislative constraints, especially the Stock Exchange rules constraining short-selling and the restrictions imposed by the Stamp Duty Ordinance. In 1994, after the extension of the stamp duty exemption period from 14 days to 12 months,

⁹ The Securities and Futures Commission (SFC) is an independent non-governmental statutory body outside the civil service, responsible for regulating the securities and futures markets in Hong Kong.

and the removal of legal and regulatory constraints on short selling, the securities lending market developed strongly. The 12-month exemption period restriction was lifted in 1999.

A designated list of permitted stocks for short-selling is one means of control used by the Hong Kong Stock Exchange (SEHK). Chang & Yu (2004) analysed Hong Kong market data from January 1992 to July 2003 and noted that designated stocks are more likely to be value stocks, which are either constituents of indices or are relatively large and actively traded. The SFC has been considering a relaxation of the regulations relating to short-selling and derivatives activity. Relaxation measures are applicable when certain market neutral transactions have been introduced. The short-selling exemption is expected to enhance the liquidity of both the cash and futures markets.

Taiwan began to legalise short selling on June 30, 2003. Stock borrowing costs have been high by global standards (typical costs have been reported by lending agents at about four times the level found in the USA), but growth in lending has been strong. Amongst capital markets, the Hong Kong and Taiwanese stock markets have many similarities with their counterparts in mainland China, including a relatively high ratio of share turnover to market capitalization, and high share price volatility. Their experiences may provide useful information for the China Securities Regulatory Commission (CSRC).

4.3 Introducing short-selling on exchange traded funds

Exchange-traded funds (ETFs) are a hybrid of closed-ended and open-ended securities. ETFs are listed on a stock exchange, and trade like stocks, but represent a basket of underlying securities in the same way as an index fund. The underlying securities are fungible with the ETF, by utilising a continuous in-specie redemption and issuance facility. Over a number of years, ETFs have become successful risk management and hedging tools, largely due to the fact that they can be readily short-sold. As an illustration, in 2002, the Australian Stock Exchange Ltd (ASX) introduced a liberalized short-selling regime for ETFs, similar to those prevailing at the time in Canada and the United States. ASX participants may short-sell an approved ETF without entering into a scrip-lending arrangement. The guidelines also allow short-selling parties to initiate trades free from the 'up-tick' rules, to gain immediate execution, even in falling markets. Daily short-selling reporting is required.

ETF short positions are virtually invulnerable to 'short squeezes' and price manipulation, as the number of shares in an ETF in existence can be increased through use of the in-specie issuance facility. Arbitrage between ETF and underlying securities (and where available, index futures) can be readily undertaken by market makers and specialists. With the updating and reporting of the net asset value of the underlying portfolio throughout the trading day, arbitrage opportunities are readily detected, and this will improve market efficiency under normal circumstances.

In Feb 2005, China Asset Management Co Ltd., launched the first ETF to track the SSE 50 Index in mainland China. As of June 30 2005, it remains the only ETF available in China. Fu's (2005) research on the China SSE 50 ETF, based on turnover in 78 trading days from February 23, 2005 to June 17, 2005, finds that the

China SSE 50 ETF enjoyed 3.66 times more liquidity than a basket of index constituent stocks. The SSE 50 ETF enjoyed approximately 3.55% daily turnover ratio, i.e. 76% monthly turnover ratio, high by global standards. Fu (2005) analyses the arbitrage opportunities with SSE 50 ETFs and finds that the average premium over the underlying securities in the 78 trading days is 0.11%. In 23 out of 78 trading days, the absolute value of premium/discount was higher than 0.30% (breakeven point for offsetting costs), which provides a suitable spread for short selling.

Benchmark index derivatives are widely used in risk management applications in developed capital markets. Since futures and forwards have not been legalised in the Chinese equity market, short-selling of ETFs is expected to be an ideal tool for risk management by holders of actively managed portfolios. Raab and Schwager's (1993) observation that short positions in index futures allow investors to 'span' the market, can be extended to include ETFs. By short-selling an ETF and taking long positions in all but one of the underlying securities in the ETF basket, one creates an effective short position in that single security. Thus, allowing short-selling of ETFs is, in practical terms, equivalent to permitting short-selling of individual securities by those institutional investors able to undertake 'program trades'. However, the risk of 'short squeezes' and price manipulation with ETFs is much diminished. Thus, permitting short-selling of ETFs is one means of introducing short-selling of individual stocks to institutional investors on the mainland Chinese markets, whilst minimizing the risk of short-squeezes.

An economically equivalent alternative to permitting short-selling of ETFs is to permit the launch of a so-called "inverse-ETF" – the performance of which is

inversely related to the performance of a traditional ETF. Buying an inverse ETF is thus equivalent to short-selling a traditional ETF.

4.4 The Chinese second board market – an ideal laboratory

In Hong Kong, the Growth Enterprises Market (GEM) is a stock market established to provide growth enterprises with a platform for raising capital to finance their businesses. Companies listed on a Second Board Market might generally be expected to be smaller and less mature than those listed on a Main Board, with less liquid and more volatile share prices. The Chinese securities authorities have put the establishment of Second Board Market on the agenda for development. Determining how to hedge risks is a concern in developing the Second Board Market in China.

By permitting short-selling in a Second Board Market, one might expect improved price discovery and liquidity. Short-selling has the effect of increasing the total supply of assets available to support trading and settlement, boosting trading volumes and facilitating arbitrage strategies. Market makers in the Second Board Market are responsible for providing bid and ask prices for investors to guarantee market liquidity. With short-sale constraints, market makers would generally hold larger inventories of shares than without such constraints. The greater financing costs associated with larger inventories are likely to be passed on to market participants, in the form of larger bid-ask spreads. Thus, there would be benefits from permitting short-selling on a Second Board exchange, if such a market were to be established.

However, as highlighted in Robotti (2005), the directors of smaller companies can become concerned at the risk of price manipulation in their shares, and thus anti-abuse measures would need to be initiated in tandem with short-sale liberalization.

4.5 Measures to prevent potential short-selling abuse

Protection against abusive short selling is important for both issuer and investor confidence. Manipulation is the “intentional interference with the free forces of supply and demand.”¹⁰ Finnerty (2005) points out that market manipulation can be profitable when there is a difference between the price elasticity of purchases and sales, which the manipulator can exploit. Finnerty highlights a variety of devices used by stock market manipulators, including the release of false information about a company and employing trading strategies that impede the price formation process, such as ‘naked shorting’, ‘wash sales’, ‘matched trades’, and ‘painting the tape’, all of which inject misleading trading information into the market, to move market prices in a direction that benefits the manipulator. The US SEC adopted Regulation SHO in 2004 to curb naked short selling (SEC, 2003b, 2004), ostensibly to reduce abusive or manipulative trading. Likewise, naked short selling in China, should be expressly prohibited. Finnerty also claims: “It is certainly possible, of course, that the manipulator is also an insider”. Allen & Gale (1992) point out stock-price manipulation was an important phenomenon in US stock markets until the 1930s. Concern about the harmful effects of manipulation led to the advent of the Securities

¹⁰ *Pagel, Inc. v. SEC*, 803 F 2d, 942, 946 (8th Circuit, 1986).

Exchange Act of 1934 which prohibits the practices that facilitate manipulation, such as short-selling by managers and the announcement of false information.

Zhang & Ji (2003) obtained data from 108 companies listed on the Shenzhen Stock Exchange and found that Cumulative Abnormal Return (CAR) rose significantly before the release of positive information (including the declaration of high dividends, declaration of M&A of the target companies and announcement of EPS above consensus analysts' forecasts). After release, CAR was negative. They conclude that insider trading is rife in the Chinese stock market. With short-selling, insiders are also able to profit by exploiting both their information advantage and the liquidity traders' timing disadvantage. Strict enforcement of insider trading rules, prohibition on insiders from short-selling and the requirement to disclose aggregate short-positions are all likely to be needed at the same time as constraints on short-selling are lifted.

4.6 Introduction of an up-tick rule

The stated objectives of the Up-tick Rule¹¹ is to allow relatively unrestricted short selling when the firm's stock is advancing; to prevent short-selling of the firm's stock at successively lower prices; and to prevent short-sellers from accelerating a declining market in a firm's stock by exhausting all remaining bids at one price level, thereby causing successively lower prices to be established by long sellers.

Regulators' opinions differ as to whether such a rule is necessary. The organised exchanges in the USA and the Toronto Stock Exchange make use of an up-tick rule, whereas the London Stock Exchange does not. Alexander & Peterson (1999) conduct

¹¹ Securities Act Release No. 16964, July 9, 1980.

a study using a representative sample of stocks listed on the NYSE during May 1996, and conclude that the Up-tick Rule “hinders price discovery in both advancing and declining markets.” They suggest that regulators could use alternatives to the Up-tick rule, for instance, prohibiting short-selling in a given stock on a given trading day after it has fallen in price by a stated percentage during that day. In Taiwan, the TSEC’s Clearing Department has, in addition to an Up-tick rule, introduced a plan (not yet fully implemented at the time of writing) to set ceilings for short-selling. The plan recommends “(1) Daily maximum short-selling of borrowed stock cannot exceed 3% of outstanding shares per lending stocks. (2) Maximum short-selling of borrowed stock cannot exceed 10% of outstanding shares per lending stock. (3) The total volume of short-selling of borrowed stock and short-selling by margin transactions cannot exceed 25% of outstanding shares per stock.” Although the evidence on market efficiency and price discovery does not support the introduction of an up-tick rule, China might initially benefit from an Up-tick rule, and possibly further restrictions on short-selling, such as those used in Taiwan’s equity market, so as to build confidence that short-selling does not lead to downward price spirals. As the market matures, this rule can be reviewed in light of the prevailing evidence.

4.7 Short-selling transparency

At present, SEHK collects and report daily short positions for all qualified securities by issue and by the total relative turnover on a daily basis. The TSEC monitors the 3% of daily shares limit for short-selling and discloses the remaining shares available to short to securities firms via the computerized trading system.

Investors may enquire on-line about the availability of shares for short-selling during the trading session from securities firms.

The frequency of disclosure of data for short-selling is one proxy for market transparency. Gelos & Wei (2003) report on an IMF examination of 639 funds managing approximately US\$120 billion from January 1996–December 2000. Most funds had a focus on emerging markets. They find that international funds invest greater assets in more transparent markets, and during a financial crisis, international investors tend to exit from more opaque markets first. Their discovery is consistent with Ausubel (1990), who suggests that “outsiders” will reduce their investment if they expect “insiders” to take advantage of informational asymmetry.

Increased transparency and publicly available information on securities lending and short-sale positions has a role to play in reducing both informational asymmetry and opportunities for illegal insider trading in mainland China. An appropriate level of transparency would be one that is sufficient to build confidence in the market from both domestic and foreign investors, but not so much as to deter arbitrageurs from their activities. There appears to be no current consensus amongst regulators as to what this level of disclosure might be.

4.8 Liberalizing credit trading to facilitate short-selling

The Chinese legal authorities have recently been discussing amendments to the “Securities Law”. The current practice of prohibiting credit trade is an area of contention. In 2004, the ‘Nine Opinions of the State Council’ were reiterated, seeking to develop the capital markets through financial innovation.

The development of short-selling depends on a reliable and comprehensive credit trading regime. The securities finance industry aims to assist investors in their activities through margin loans, securities lending and by providing channels for cash discounts. According to TSEC (2001), there are three main credit trading regimes in existence worldwide: American style (scattered credit authorization), Japanese/Korean style (centralized credit authorization) and Taiwanese style (parallel and specialized credit authorization). In Taiwan, the main credit trade business is currently carried out by intermediaries known as securities finance companies, which provide margin loans, securities loans and refinancing services to securities firms. Although higher cost than other regimes, risk control is enhanced, and this has value for emerging capital markets. Compared to Japan, the Taiwanese regime is not “institution to institution”, but extends to all investors, and is thus more liberalized. But TSEC (2001) also point out that the Taiwanese regime might cause more clients to default on credit, thus increasing settlement risk.

We propose two stages of credit trading development for mainland China, to combine the advantages of the Japanese and Taiwanese regimes. First, using specialized securities finance companies; and second, allowing liberalized securities financing.

In the specialized securities finance companies system, stock exchanges are responsible for designating stocks available for short-selling, and specifying the requirements for shortable shares. Investors with credit accounts at securities companies can apply to securities firms for short-selling. Securities firms examine investors’ cash account and credit status, and can proceed with the investors’ application by applying to a securities finance company. The securities finance

company determines the number of shares available for lending, required collateral and margin ratio. The securities firm then provides margin to the securities finance company. Once the securities finance company approves securities lending, it informs the transfer agent. The securities exchange transfers the proceeds from the short-sale as collateral to an account at the securities finance company. In this regime, securities finance companies act as a central party for securities transfers and cash flows and bridge the securities lending business with stock exchanges, securities firms, funds and other financial institutions. Only licensed securities firms can provide securities financing for credit trade clients, and securities finance companies cannot provide credit to the clients directly. This regime is simple for regulators to administer, and suited to emerging capital markets.

With greater development of derivatives and capital markets, the role of securities finance companies will become less critical, and a more open, liberalized securities financing system becomes appropriate. The transition to a liberalized securities finance market can take the form of full competition, whereby securities firms can apply for securities lending to the market directly, or via a Korean-style regime, whereby securities finance companies act as warrantors, and collateral is under the custody of securities finance companies. In Korea, for example, the Korean Securities Deposit Company (KSD) works as the intermediary to provide securities financing and securities safekeeping services.

5. Summary and conclusions

Theoretical considerations suggest that, when investors' opinions diverge, short-sale constraints can lead to over-pricing of securities. In empirical studies across markets, Bris *et al.* (2003) find evidence consistent with the notion that price discovery at the individual stock level is more efficient when short-selling is feasible. Charoenrook and Daouk (2004) find evidence that short-sale constraints reduce market quality.

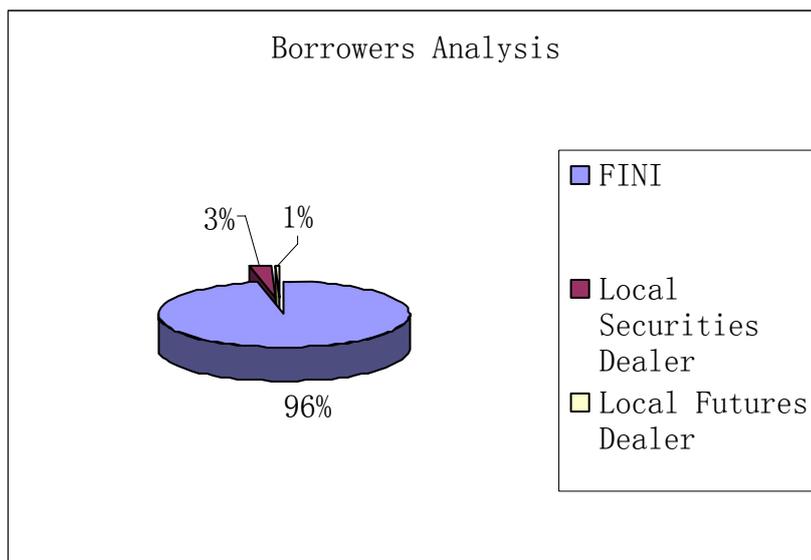
By allowing market makers to borrow securities temporarily, market makers can hold smaller inventories of shares and this leads to tighter bid-ask spreads and lower trading costs. When market makers can borrow stock, this also lowers the potential for failed settlement. Securities lending permits investors to earn incremental income by lending out idle securities held in custody. It also facilitates investment strategies such as arbitrage that would not be possible without a liquid supply of securities available for borrowing. Regulators are aware of the benefits to price discovery and market efficiency that can ensue when securities lending and short-selling are permitted. They are also cognizant of the need to create transparency in a market, but recognize that full disclosure of short positions can raise the risks of predatory trading against short-sellers. However, as revealed during public consultation prior to the introduction of Regulation SHO (2004) in the USA, not all interested parties are in favor of liberalized short-selling. As Robotti (2005) argues: "There are always social conflicts surrounding market practices."

Liberalization of short-selling presents a new challenge for Chinese securities regulators. We show that several types of institution would benefit if securities lending and short-selling were permitted in mainland China. Practices in other countries, and the incremental development of short-selling in the Hong Kong and

Taiwanese capital markets may provide valuable information for Chinese market regulators. In light of the evidence available, we believe that a phased introduction of securities lending and short-selling would be beneficial to the development of the Chinese capital markets. The infrastructure for credit trading forms the basis for the development of securities lending and short-selling. A specialized securities finance companies system, combining the advantages of the current Japanese and Taiwanese regimes could be considered first by the Chinese authorities. On development of this infrastructure, we propose that short-selling of exchange traded funds be permitted initially. This would facilitate the short-selling of individual stocks by institutional investors, whilst minimizing the risk of short-squeezes.

Next, on the launch of a Second Board Market, short-selling should be permitted from the outset. Beyond this, short-selling on the Main Board, initially for a designated range of shares only, should be permitted. Enforcement of insider trading regulations, a prohibition on naked-short positions, the initial introduction of an up-tick rule, and appropriate levels of disclosure should all accompany this liberalization. These will serve to minimise market abuse and build market integrity. Regulators in any country must balance the interests of the various market stakeholders, but an over-arching goal should be to create a transparent and efficient market, in which companies and investors alike have full confidence.

Appendix 1. Securities Borrowers on the Taiwan Stock Exchange

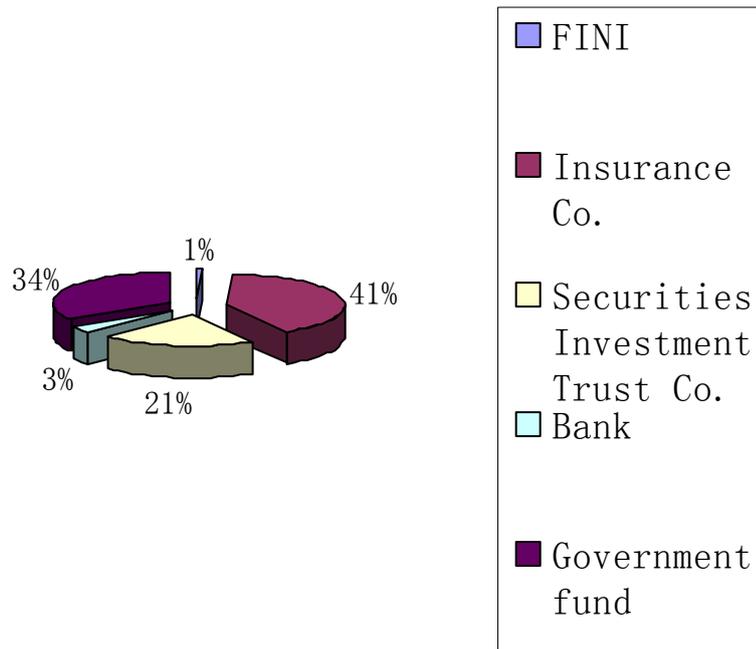


Note: FINI: Foreign Institutional Investors

Source: Taiwan Stock Exchange, January 31, 2005

Appendix 2. Securities Lenders on the Taiwan Stock Exchange

Lenders Analysis



Source: Taiwan Stock Exchange, January 31, 2005

Appendix 3. Review of the Development History of Short-Selling in the Hong Kong Market.

Before January 3, 1994	Prohibited
January 3, 1994	The Hong Kong Stock Exchange (SEHK) allowed 17 out of the 33 constituent stocks of the Hang Seng Index (HSI) to be sold short subject to several restrictions. A typical restriction is called the Up-tick Rule. SEHK relaxed the stamp duty on securities lending transactions and abolished reporting requirements to reduce the administrative expenses of the shorts/borrower.
March 25, 1996	Market development was attributed to three initiatives: (1) Expanding the availability of the designated list of stocks. The number of securities designated for short selling was increased. In total, 113 firms listed on the exchange, including all constituent stocks of HSI, were allowed to be sold short; (2) Up-tick rule was lifted; (3) A rationalisation of margin requirements.
September 7, 1998	After the Asian Financial Crisis in 1997/98, the government increased the penalty for misconduct on naked short selling and mandated settlements on (T+2). To enforce the rules, the Clearing House (SCC) announced it would impose compulsory stock lending and borrowing arrangements for delivery default on T+2, then close out all T+3 fails with buy-ins, regardless of fees and heavy penalties. SCC may consider suspension of membership for repeat offenders. Brokerage firms were told to be ready, upon SEHK's request, to report the names of their beneficiary clients and would be held

	<p>responsible for “ascertaining that clients have the covering stocks for sales orders and, in the case of short sales, have appropriate arrangements in hand, and to report them to the stock exchange.” In parallel, SEHK re-introduced the Up-tick rule for covered short selling. However short-selling transactions by stock options market makers for hedging the risk of the portfolio are exempt from the Up-tick rule.</p>
<p>December 3, 2001</p>	<p>The Up-tick rule on short-selling in the stock market for index arbitrageurs and market makers was repealed to help improve market liquidity, especially in a depressed market. The number of designated securities for short selling is revised on a quarterly basis according to their liquidity and market capitalisation.</p>
<p>January 27, 2003</p>	<p>163 out of 812 common stocks traded on the main board were on the shortable list.</p>

Source: SEHK, Hong Kong Exchanges and Clearing Limited, International

Organization of Securities Commissions and Bank for International Settlements

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Table 1 Tax Rates by Investor Segment in China

Investors Segmentation	Tax Rate Applied		
	Stock	Treasury Bond	Corporate Bond
Mutual Fund	20%	0	20%
Insurance Co	33%	0	33%
Securities Co	33%	0	33%
Social Securities Fund	0	0	0
Corporate Annuity	0	0	0
Trust	0	0	0
Normal Corporate	33%	0	33%
Normal Individual Investors	20%	0	20%
QFII	0	0	0

Source: Asset Custody Department, Bank of Communications