The Associate PRM Exam – reading material extract from the PRM Guide to Financial Markets, published by McGraw-Hill (2008), ISBN 978-0-07-154648-5

The Stock Market

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Introduction

Stocks (also known as *shares* or *equities)* represent an interest in the ownership of companies or corporations. These securities may exist as paper certificates ('bearer form') or notional entries in the computers of the share register ('book entry form'). These stocks are bought and sold (traded) among different market participants, including investors, hedge funds and investment banks. Stock are issued and sold by companies or corporations on their formation as a way of raising working capital and spreading the risk of ownership among shareholders according to their individual risk appetite. Companies and corporations are often founded as small private ventures with a limited number of shareholders who know each other and are often directly involved in the business. As the business grows and the need for capital expands, the existing shareholders frequently 'float' the company on the stock market by issuing new shares to new investors. This typically dilutes their shareholding and they often sell some of their own stake at the same time. This process is often known as 'listing' or doing an initial public offering (IPO). Alternatively, as corporations grow, they may need more capital. One way of raising extra funds for a company that is already listed it to make a 'secondary' or 'rights offering'. Here existing shareholders are offered the right to subscribe to new shares in a corporation, usually at a substantial discount to the current market price.

Access to the stock market is regulated in most developed economies so that a company applying for a listing has to achieve and maintain minimum standards of capitalisation, disclosure and financial standing. The other market participants, such as professional traders, investment banks and investors, are also required to operate within the rules of the market, which may include refraining from activities such as 'insider trading'.

A stock market is therefore, in general, a regulated marketplace for the buying and selling of the ownership of corporations for the purpose of spreading risk and raising capital. The corporations benefit by having a large liquid market in which to raise capital, and investors benefit by having the ability to spread and control their investment risk via the liquidity that a large and deep market offers. Intermediaries such as investment banks benefit by generating commissions and fees on stock trades and participation in the movement in price of the individual stocks.

The details of stock that are listed on the various stock markets are generally available via daily official lists from the market controller (e.g. the London Stock Exchange or New York Stock Exchange) which are often reproduced in whole or part in newspapers such as the *Financial Times* or *Wall Street Journal*. This information is also invariably available electronically via data vendors such as Reuters and Bloomberg and includes statutory disclosures (part of the listing requirement) by the listed company of information affecting shareholders, such as dealings in shares by a director of that company.

The market may itself have divisions into 'senior' or 'junior' listings with higher or lower listing requirements, and therefore potentially more or less investment risk. For example, the UK has the Alternative Investment Market, which has less onerous listing and capitalisation requirements than a full stock exchange listing. Other stock markets, such as Luxembourg or Johannesburg, may have higher or lower listing standards and requirements than, say, London or New York. Some very large

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companies may be listed on more than one stock exchange: for example, HSBC is listed in Hong Kong and London. The total value of stocks traded on the world's stock markets is approximately US$30 trillion dollars (US$3 × $10^{13)}$ with the USA having the largest single market (approximately 50% of the total), followed by the Eurozone, UK and Japan.

In the following sections we will look in more detail at the characteristics of the stock market and its participants, the properties of common equities, the primary and secondary markets, and the mechanics of trading, including costs, strategies (such as going short), and the use of leverage via margin trading or exchange-traded derivatives.

The Characteristics of Common Stock

As we have seen above, common stocks represent the ownership of a company or corporation. More specifically, the equity holder has a *claim on the residual assets* of a company after all other claims have been paid in the event of a liquidation of the company. If we consider a simplified company balance sheet, we can illustrate this point more easily.

Simplified balance sheet of a company

Assets	**Liabilities**
Fixed Assets	Creditors/Bond Holders
Debtors	Shareholders' Funds

The balance sheet equates assets to liabilities; the balancing item is the shareholders' funds. The shareholders' funds represent the value that the equity shareholders would be entitled to if the company were liquidated. However, practically speaking, this value is directly accessible only by breaking up or liquidating the company. When this happens, there is a strict hierarchy of pay-out to the creditors of the firm based on seniority.

Pay-out hierarchy on liquidation

First in the queue	Inland Revenue/Tax Authorities
	Secured Creditors □Mortgagor□
	Trade Creditors
	Senior Bond Holders
	Junior Bond Holders
Last in the queue	Equity Holders

This means that senior creditors such as the Inland Revenue or the bond holders will be paid in full prior to any remaining assets being distributed to the equity holders. In this sense the equity holders have a *residual claim* on the company based on seniority. They are the most *junior* and therefore the *bearers of the most risk* on liquidation. Generally, this liquidation or break-up of the company would occur only when the company became insolvent and could no longer operate. In those circumstances it is unlikely that the residual value available to shareholders would be significant and is likely to be close to zero. This explains why, when a company announces a serious operating problem or potential insolvency that is not widely known, the equity share price rapidly falls towards zero. Similarly, when the company has a sudden windfall success (e.g. an oil field find or successful drug trials) the equity price often jumps substantially.

Share Premium and Capital Accounts and Limited Liability

Shares usually have a nominal value, typically in the UK 25p. These shares are known as 'ordinary shares of 25p nominal value'. At primary issue the shares are often sold at a premium, say £1, in which case 25p of the sale price goes into the

share capital account of the shareholders' funds and 75p goes into the *share premium account*. Both of these accounts, along with the profit-and-loss account, constitute the shareholders' funds in the company balance sheet. After the initial issue of shares, they then trade in the secondary market at the 'market' price. This price then simply reflects the amount agreed by both counterparts to buy a share and this amount is paid to the seller in exchange for the equity share.

Once the shares are sold in a primary issue, the equity holder's liability to the debts of the company is limited to the amount already paid for the shares, i.e. the value of the share premium and share capital accounts. Occasionally, shares are issued 'part-paid', which means that only a fraction of the issue price is paid up-front, with further payments due in the future, or, in the event of company default, due immediately. In this sense the owner of the company, the equity shareholder, has *limited liability* to the debts of the company, the amount of this liability being the fully paid-up share capital. This is the fundamental idea of a 'limited-liability corporation'.

Equity Shareholder's Rights and Dividends

The ordinary shareholder usually has voting rights associated with his holding in the corporation's stock at special company meetings such as the annual general meeting (AGM). Therefore, a shareholder with 30% of the issued equity would carry a 30% weight in any vote or resolution. This means that decisions regarding the company's management and overall direction are controlled by ballot weighted by ownership. There are exceptions where voting rights are not evenly distributed throughout the equity shareholders, although these are increasingly rare.

The shareholders are responsible for electing the company's board of directors, who in turn control the day-to-day activities of the company. The AGM provides a regular forum for shareholders to air their views and ultimately control their company by the support (or otherwise) of the managing director and the rest of the company board of directors. The directors run the company on behalf of, and with the permission of, the shareholders, who, with sufficient voting numbers, can remove them at any time.

In addition to voting rights, the equity shareholders will also receive dividend payments on their stock if the board of directors decide that a dividend can be paid. This decision is based on the financial standing of the company. Dividends are declared annually and may be varied or stopped completely if the directors decide that it is in the company's interest to do so. Typically, in the UK, dividends are paid twice a year (usually an *interim* and then a *final dividend*, the former usually being smaller); in the USA dividends on large companies are paid four times a year in equal instalments. Dividends are usually announced and a record and payment date set, such that all holders of the equity on the record day qualify for the dividend payment. After that date the share trades 'ex-dividend' and the payment of the dividend is made at some later date to the holder on the record date, who by then may have sold their shares on as 'ex-dividend' stock.

Therefore the holders of common stock have voting rights to control their company and they receive dividends if they are considered appropriate for the company by the board of directors. The board is ultimately controlled via the shareholders' votes. The return on an investment in equity is a combination of dividends received and any capital appreciation (increase in price) realised when the stocks are eventually sold. Equity shares can therefore provide a combination of income (which is uncertain) and capital gain (which is also uncertain). This makes equity valuation relatively difficult!

Other Types of Equity Shares – Preference Shares

In addition to ordinary shares, a company may issue other classes of equity such as *preference shares*. These shares are usually senior to the ordinary equity, but junior to bonds, and usually carry a *fixed dividend* such as 5% per annum based on their face value or a fixed amount such as US$5. This dividend can be *cumulative* or *non-cumulative*. In the case of cumulative shares, if a declared dividend is not paid in one year, then when the next dividends are paid the missed dividend is also paid, i.e. the dividends are rolled up for cumulative preference shares. Missed dividends are not made up in the case of non-cumulative preference shares. It is important to note that, if the dividends are not paid on the preference shares, no dividends can be paid on the ordinary (or common) stock since preference shares are senior to common stock. In the case of cumulative preference shares, all outstanding dividends have to be paid prior to any dividend payment to the common stock holders. Generally preference shares carry either limited voting rights or no voting rights at all. Usually the total amount of preference shares issued is much smaller than the common stock: for example, IBM-A preference shares represent less than 2% of the IBM-issued common stock. The smaller amounts naturally lead to lower trading volumes and less liquidity (i.e. wider bid–offer spreads in quoted prices and smaller trade lot amounts).

Equity Price Data

Details of trading activity of stocks in the market are distributed widely via electronic and print media. This may be 'real-time' (almost as it happens) or delayed or summary statistics.

Market Capitalisation (or 'Market Cap')

The market capitalisation value of a listed company is the total amount of issued share capital multiplied by the current share price. This represents the total value or worth of the company. For example, a company with a share price of £10 and total number of shares issued of 100,000,000 would have a market capitalisation of £1 billion. The sum of all the market caps of all the listed shares gives the total stock market value. The market cap is often used as the weighting factor in the calculation of stock market indices such as the Standard and Poor's (S&P) 500 and the Financial Times Stock Exchange (FTSE) 100.

Stock Market Indices

Stock market indices such as the S&P 500 and the FTSE 100 are used to measure broad equity market performance and to benchmark investment portfolios. Most indices are weighted by market cap, although simple price-weighted indices do exist (e.g. Nikkei 225, Dow Jones). Price-weighted indices are generally avoided due to the ease with which they can be manipulated by unscrupulous traders.

A cap-weighted index is based on the sum of all the cap-weighted prices of the constituent companies. In this case movements in price are scaled by the economic size of the company and so it is much harder (and more expensive) to manipulate its value. In the case of the FTSE 100, the index contains the largest 100 companies listed on the London Stock Exchange, the 'largest' being defined by market cap.

Summary statistics can be produced for the index in the same way that they can for a single stock, thus we talk about the market yield or the market P/E ratio, which is usually based on an index such as the FTSE 100 or FTSE All-Share Index. These indices often form the reference underlying price for derivatives contracts such as futures and options. On the FTSE 100 and the S&P 500 there are both exchange-traded and over-the-counter (OTC) derivative transactions.

Some indices such as the DAX 30 are based on 'total return', so that they are adjusted to include dividend payments over time. An index including both price movements and dividends is sometimes referred to as an *accumulation index*.

Equity Valuation

Clearly, one way to establish the value of a company is to analyse the balance sheet and calculate the net book value of its shares. This value is frequently much less than the market price of the stock as it does not take into account future earnings and the value of the company as a going concern. An alternative approach is to value the equity as the present value (PV) of all future dividend payments – this is the so-called 'dividend discount model' which can be simplified to the 'Gordon growth' model.

Valuation of equity shares is very difficult due to the many sources of uncertainty and the long-term nature of the business enterprise. Ultimately the market mechanism determines the price of equity by matching supply and demand at the 'market price'. This is underpinned theoretically by techniques such as net book value, P/E ratios and the dividend discount model, as well as more complex corporate and market analysis.

Stock Markets and their Participants

The stock market exists to bring together buyers and sellers of equity risk. This facilitates the efficient raising of capital and diversification of risk necessary for capitalism to thrive. When a company needs to raise new capital it may do so by selling shares; when an investor wishes to deploy excess capital to earn a return he or she may do so by buying shares.

The Main Participants – Firms, Investment Banks and Investors

Companies (or 'corporations' or 'firms') issue equity to raise capital and diversify their risk among a wider ownership group. This capital raising can occur at the commencement of the business or at some time later when extra funds are required for expansion or to shore up existing activities. The initial issuance of new equity capital by a company is called a *primary issue* and companies access the stock market via a *listing* (or *float*) of their equity securities on the stock market. This listing requires compliance with specific stock market rules and regulations and is usually undertaken by a specialist financial company (an *intermediary*) such as an *investment bank* or *stockbroker*.

Once a listing can be achieved, details of the new issue will be circulated to *investors* by the financial intermediary, who will be asked to *buy* the issue. Frequently, the deal is 'bought' in its entirety by the financial intermediary, who then takes the risk of selling it on, so guaranteeing the amount of capital raised to the issuing company. Alternatively, the financial intermediary may *underwrite* the issue, so that, if not all the 'paper' can be placed with the investors, the intermediary buys up the surplus 'rump', usually at a slight discount to the issue price. A fee is charged by the intermediary for the work involved in listing and for the risks taken in undertaking a bought deal or underwriting. This fee is usually realised by buying the equity securities at a discount to the expected market price. Fees are negotiable and there is intense competition for 'big-name' issues.

Once stocks have entered the market via a primary issue they trade in the secondary market via financial intermediaries such as investment banks and brokers. Commissions are charged by the intermediaries for arranging and settling secondary market trades. The secondary market activity may be organised in two basic ways:

- *Matched market***.** Orders for sale or purchase with amounts are entered into a system or 'order book' with a *limit price* at which the investor is happy to sell or

buy. The system matches trades at the best price that is acceptable to both counterparts and 'crosses' the trade at the matched price. This system can lead to wild swings in prices and periods of illiquidity.

- *Market maker***.** Financial intermediaries make two-way prices (bid and offer prices in market lot sizes) which can be *hit (*i.e. to hit the bid is to sell) or *taken* (to take the offer is to buy) by investors, leaving the market maker with a risk position that he or she must manage. The market maker therefore uses their own capital to create a more liquid market and to dampen wild price swings.

Often, secondary market trading is a mixture of these two methods, with larger stocks trading via a market-maker approach and smaller, less liquid stocks trading on a matched-market basis.

Market Mechanics

The market requires secure communication between qualified participants. Investors deal through a broker of their choice, who may also 'hold' the equity securities on their behalf in *custody* systems. In the most advanced systems, settlement of trades can be achieved almost in real time. Once a trade is agreed, secure electronic messages can be generated and sent, which debit the buyer's cash account and credit his securities account with the purchased stock, while simultaneously doing the reverse to the seller's accounts. In less developed markets, the settlement process involves the movement of physical paper securities, with attendant delays and risk of a failed trade.

When referring to trading and settlement, brokers typically refer to T+1 or T+3 settlement, which means a trade originated on 'trade day' (T) will be settled 1 or 3 days later. This is sometimes called 'rolling settlement'. The UK stock market has a rolling settlement of T+3. Ultimately the goal is to reduce this to T+1 or even same-day settlement. Shorter settlement periods are very useful in reducing the risk of default by a counterparty prior to settlement and in helping to minimise the effects of 'out-trades' or dealing mistakes, as these are spotted earlier and rectified before the stock price has moved too far.

The Primary Market – IPOs and Private Placements

Initial public offerings (*IPO)* are when a formerly privately owned company is selling equity securities to third-party investors for the first time, sometimes known as *floating on the market* or *listing*. *Seasoned new issues* (*SNIs)* is the name given to companies issuing securities after they have floated. Both IPOs and SNIs may be made via a *public offering*, which makes the securities available to the general investor population, or via a *private placement*, in which the issue is placed directly with a few specially chosen investors and is not widely traded after issue. IPOs and SNIs are examples of the *primary securities market* or *new issues market.*

Basic Primary Market Process

The firm wishing to float contacts a number of investment banks to negotiate terms with regard to an IPO. Terms include fees and costs in addition to marketing strategy and experience. The firm chooses a bank to be the lead player in the IPO; sometimes this will involve underwriting the new issue if they fail to place all the paper at launch. Often an underwriting syndicate, headed by the lead manager, will be formed to share the risk and broaden the distribution of the securities. The lead manager advises on terms and pricing of the IPO. A preliminary notice is filed with the regulator giving basic terms and details of the issuing company. This is a preliminary prospectus, which has to be finalised and approved by the regulator prior to its becoming the IPO prospectus. This is then used to market the securities to the investors and the issue price is fixed. This process may take several weeks or longer.

If the issue is *fully underwritten*, the entire issue is bought at launch by the underwriting syndicate at a discount to issue price and then distributed to investors; this is also known as a 'firm commitment'. Compensation for bearing this risk is the size of the discount to issue price and the tightness of the pricing.

If the issue goes ahead on a '*best efforts*' basis, the price risk remains with the floating company and not with the bank. The bank collects a fee for arranging the IPO and a sales commission for stock sold.

Initial Public Offerings

The lead manager is responsible for marketing the new issue once the regulator has accepted the issues registration document and preliminary prospectus. This marketing may take the form of a 'road show' to investors, having two main aims:

- informing investors of the floating company and its activities, emphasising its attraction as an investment; and
- sounding out the investors as to likely price levels at which they will purchase the securities at launch.

Talking to investors and getting them to commit to purchase securities at launch is called *book building*, and this process allows fine tuning of the offer price. Strong early commitment by investors is usually rewarded with a large allocation of shares and possibly even a discount.

There have been initiatives to move away from the investment-bank-led IPO due to the large fee involved and the potentially substantial under pricing. These have included internet book-building exercises and do-it-yourself IPOs. So far they have had limited success and have focused on the smaller end of the market. At present Wall Street still dominates the IPO business and enjoys relatively generous fees in the process.

Private Placements

Private placements of common stock are much cheaper than IPOs since the entire issue of securities is sold to a small group of investors. However, it is difficult to place large issues this way due to the limited risk appetite of a small investor group. Furthermore, these issues tend not to trade in the secondary market, making it difficult for the investor to liquidate his position at short notice. This in turn means that investors in private placements demand a discount price for bearing this additional risk.

The Secondary Market – the Exchange versus OTC Market

The secondary market consists of the buying and selling of already issued securities and represents by far the largest volume of activity by value on a day-to-day basis. This activity is effectively investor-to-investor trading via a financial intermediary (in the case of on-exchange and OTC activity) and directly with each other on a peer-to-peer basis.

The Exchange

Usually each developed country has at least one national stock exchange. Only members of the exchange are allowed to trade on it, and the membership is called a *seat*. Seats are owned by brokers and banks who in turn deal with their own clients (the investors). Members of the exchange charge a commission for executing trades on the exchange on behalf of their clients.

There are essentially two types of order for buying or selling stock on exchange:

- *Market order* – deal the stock at the current market price and size. If the order size is larger than the quoted size (e.g. 55.20 bid/55.25 offer in 1000 shares) then the order is executed at multiple successive prices until it is filled.

- *Limit order* – deal the whole order at a pre-fixed price. Variations on this include 'fill or kill', which means that the entire order must be filled immediately at this price in one go or not at all.

The market maker in each stock has a responsibility for maintaining the market in that stock (monitored by the exchange authority). Many transactions, however, will actually be 'crosses' from one broker (buying) to another broker (selling) at a price within the market makers' bid–offer spread. Frequently, very large orders called 'blocks' are traded. Some brokers specialise in taking the other side of such transactions at discounted prices to provide liquidity and to profit from (hopefully) unwinding the large position over time.

The Over-the-Counter Market

Transactions on exchanges all go via the central market maker(s) or specialists. In the OTC market, deals are done directly between broker/dealers who make two-way prices to each other in the stocks that they trade. Without a central market maker this means that the broker/dealer initiating the transaction has to search for the best price for the deal from a large number of potential counterparts.
In the USA the North American Securities Dealers Automated Quotation (NASDAQ) is an OTC market and brokers/dealers display their quotes via the electronic system, but must actually contact the dealer directly to obtain a firm quote and deal. A trading system called the Small Order Execution Service (SOES) exists alongside the NASDAQ and fills small trades at the stated ('screen') price.

In the UK, the Stock Exchange Automated Quotation System (SEAQ) and SETS perform similar, but not identical, roles.

By their nature OTC markets are diffuse and non-centralised and are therefore ideal for electronic information and trading platforms. This non-centralisation, however, sometimes means that deals are not done at the best market price since not all deals go through a central market maker or specialist. It also makes OTC markets potentially more difficult to monitor and regulate and they may not provide true *price discovery* (i.e. making sure that *all* potential participants have the opportunity to quote), which is a feature of a centralised market such as the exchange.

Trading Costs

The costs of buying and selling common stock are a combination of explicit costs, such as commissions and brokerage fees, and more hidden costs, such as the width of the bid–offer spread. There are also market impact costs, when the size of the transaction is sufficiently large that executing it moves the price away from the indicated quote. Total trading costs will therefore vary by market and indeed by stock, and may increase or decrease over time depending on market conditions. Trading costs are significant, not only from the point of view of reducing total return, but also in determining the viability of arbitrage trades such as stock-index/future arbitrage.

Commissions

The commission paid to brokers is normally negotiable and will depend on the size and volume of trades to be placed via the broker and the level of service expected. This can vary from an execution-only service for large volumes of large-value trades to a bespoke, 'full-service' fund-management process for a small investor, with information, detailed reports and analysis. The latter is clearly more expensive to provide. Typically, the execution-only broker charges a smaller fixed fee.

Bid–Offer Spread

A major cost difference between on-exchange and OTC deal execution is that on the former many trades will be crossed between brokers inside the indicated

market maker bid–offer spread. This is called *price improvement* because the actual deal price is below the initial quoted offer or above the quoted bid when struck – i.e. it is dealt 'inside' the spread and is therefore an improvement on the quoted price – whereas, on the OTC market, the client will pay or receive the dealer's quoted price and thus always be subject to the full bid–offer spread on any 'round trip' (buying and then later selling) in the stock. The client of course just 'sees' the price dealt at and may never explicitly recognise this cost..

Market Impact
When a trade is executed it represents new information in the market and the market price reacts. Buying stock should drive up the market price, all else being equal. If the deal is large and the stock is illiquid, the actual trade execution price will be higher than the indicated bid–offer price due to its 'market impact'. Market impact is a function of the 'depth' (number of potential buyers and sellers outside of the bid–offer) of the market at the time of execution and will vary over time and by stock.

Buying on Margin
Essentially, buying stock on margin consists of taking a loan from the broker (a *broker call loan*) to buy more stock than his own funds would allow. The investor *leverages* his position in a stock through a combination of his own and borrowed funds. Once purchased, the stock remains with the broker as collateral for the loan. The investor has to pay interest on the loan and a fee or commission to the broker for the arrangement.

Leverage
Leverage is the use of borrowed funds to allow an investor to take a larger risk position than he would ordinarily be able to do with his own funds. An investor with $10,000 who buys a position in securities worth $20,000 is leveraged two times and has borrowed $10,000 (typically from his broker) in order to achieve this. Some regulatory authorities set limits on the amount of leverage that can be offered by margin trading.

Percentage Margin and Maintenance Margin
Once the loan has been agreed, subject to the maximum leverage not being exceeded, the money is invested in the stock. The value of this stock may rise or fall and this will affect the amount of the investor's 'equity' or 'own funds' in the position.

If the value of the stock falls sufficiently far that the investor's equity is close to zero, the broker makes a *maintenance margin call*. That is, the broker requires that the investor *top up* his account so that his percentage margin is above a minimum value (say, 10%). This is known variously as the *trigger* or *margin call rate*. If the client does not pay the margin call immediately (in cash or by pledging securities) the broker could liquidate or close out the position in the stock to protect her collateral on the loan. Clearly the more volatile the stock price, the more urgent the margin call can become and sensibly the higher the trigger rate should be set.

Short Sales and Stock Borrowing Costs
Short-selling is the process of selling a security that the investor does not own with the intention of buying it back more cheaply later to make a profit. The *short sale* is the method by which an investor can speculate on the fall in share prices rather than their rise. In order to sell short it is necessary to *borrow stock* for delivery in the initial sale trade. Then, when the position is to be closed out, the shorted shares are bought in the market and returned to the counterparty who lent the stock. This is called *covering the short*. Clearly, the lender of the stock demands a fee for this service, and this is known as the *stock-borrowing cost* or *repo* cost.

Short Sale

In some markets, notably the USA, there are restrictions on when a short sale can occur. The so-called *up-tick* rule prevents a short sale unless the last price move in the stock was positive. This rule is designed to limit the volatility of market swings. Further rules prevent brokers/dealers from investing the proceeds of the short sale in other positions, thus limiting the amount of leverage that can be generated this way.

In other markets (e.g. the UK) the up-tick rule does not apply and overall leverage of the firm is controlled via capital adequacy. Under the Capital Adequacy Directive rules, firms calculate their potential loss exposure to investors using either a simple rules-based approach or a more complex risk model (which simulates movements in the value of collateral) and then allocate capital against this requirement. As a firm's capital is finite, this places an upper limit on the total risk the firm can take and in turn the degree of leverage it can offer to clients. In some markets short selling is restricted or may not be allowed at all from time to time in an attempt protect the market.

An investor selling short via a broker/dealer is required to post margin. This is due to the fact that a rise in the stock price will leave the investor exposed to a mark-to-market loss, which the broker/dealer will need to cover. Hence the usual leverage, initial margin and maintenance margin considerations apply in short selling as well as margin trading.

Stock Borrowing

Typically, stocks are lent by brokers/dealers from securities that are pledged or held in custody on behalf of their clients. Large investors who hold their own stocks (e.g. insurance companies) may lend directly in the market. The loan may be at *call*, which means that it may be terminated at any time by the lender (which is the market standard), or a *term* loan for a predefined period (e.g. one month). The loan is for a specific number of shares, not for a specific value. Stock borrowing is normally a secured loan activity so that, when shares are lent, cash or more likely securities are pledged in return as collateral. When stocks are borrowed over a dividend payment date the stock has to be returned to the lender along with a payment for the dividend paid while on loan.

Usually the arrangements for stock borrowing, collateral and fees are handled directly by the broker/dealer for the investor. All the investor sees are the net interest costs on his account and the margin calls.

