SHORT SELLERS: VILLAINS OR SCAPEGOATS?

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Abstract

This paper discusses the role of short sellers and the concerns which are expressed in the news media about their activities. In particular, it examines the problem of optimism in analysts' forecasts which might initially lead to 'high' share prices and the limitations of both agency and stakeholder theory in providing short sellers with a legitimate role. With the help of the existing empirical literature, we argue that short sellers can be regarded as carrying out a useful information function in financial markets. Indeed, encouraging short sellers to operate more effectively in the market as well as requiring fuller disclosure of their activities could provide a useful antidote to some of the share price rises which have been seen in recent years in failing companies.

Keywords: Short sellers, corporate governance, agency theory.

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1. Introduction

Agency theory focuses on the interplay of the two main parties in the operations of a firm: principals and agents. In contrast, stakeholder theory attempts to move away from what is considered to be a too narrow focus on just two parties in the firm and seeks instead to examine the relationships between a wider group, extended to include parties such as employees, customers, suppliers and government. This paper examines the role of short sellers, but we find that neither agency theory nor stakeholder theory seem to comfortably accommodate it. Changes in stock prices are supposed to reflect the performance of the firm and accounting standards aim to prevent managers using creative accounting to support the company's share price. Problems arise when the stock price is excessively high in relation to underlying firm value; appropriate actions from the managers to remedy the overvaluation could have painful effects on the shareholders. On the other hand, in the case of a single firm, short sellers would maximise the return on their 'investment' if the shares of the firm fell to the lowest possible value. Indeed, short selling has been termed greedy, controversial and one of the causes of financial distress.

Instead, we argue that the activities of short sellers help to (at least partially) align the valuation of the firm with its fundamentals and, hence, assist the long term objectives of principals (i.e. shareholders) in the context of agency theory. Similarly, short sellers, by appropriately analysing available relevant information, can benefit not only stakeholders but other uninformed investors. We reach the view that the phenomenon of short selling is a *symptom* and not a *cause* of failing companies. Responsibility for company failure is more likely to lie with the agents (managers and boards of directors of commercial and financial companies) than with the hedge funds. But during times of financial instability, failing companies find it expedient to blame their problems on the activities of short sellers, and regulators find it convenient to show that they are trying to address the problem of depressed share prices by restricting the activities of short sellers.

The paper is organised as follows. We describe short selling activities, how they can be profitable and their relation to market efficiency. We then discuss concerns raised by the media about the activities and supposedly 'large' profits of short sellers. This prompts us to review the issue of optimism in analysts' forecasts and mispricing of shares. Bearing all this in mind, we discuss short sellers in the context of both agency and stakeholder theory and suggest policy implications in terms of corporate governance and reporting. The final section concludes.

2. Taking a short position

The basic principles of short selling are (in theory at least) relatively straightforward [14] and they can usefully be thought of as the opposite of taking a 'long' position. A long position is the traditional view of an investor who purchases, say, shares for cash, and at a later date, once the shares have risen in price, can realise a profit by selling them in the market. If one believes, ex-ante, that share prices are likely to fall in the future, an individual can always sell shares which are already owned and thereby minimise losses caused by a subsequent fall in the share price. But can individuals actually profit from a falling share price? They are able to do this if they adopt a short position. Thus an investor can request a broker to short N number of shares in company C. The broker carries out the instruction by borrowing N number of shares from another client and then selling them in the market. The short position can be maintained as long as the broker has access to shares which can be borrowed. Eventually the investor will close the position by purchasing an equivalent N number of shares in the market, so that the purchase and sale of shares is exactly matched. The motivation for such a transaction is the investor's belief that the share price of company C will be lower at the time of purchase than it was at the time of sale, thus generating a profit. Note that in the case of a short sale, the 'sale' effectively precedes the 'purchase' and the transaction can be closed when the investor returns the borrowed shares or the lender recalls the borrowed shares.

Short selling has been recognised for hundreds of years. Staley (1997) points out that at the beginning of the seventeenth century, directors of the Dutch East India Company blamed short sellers for sharp declines in the price of the company's shares on the Amsterdam Exchange. The company's directors complained that 'bear attacks, which generally assume the form of short selling, have caused and continue to cause immeasurable damage to innocent stockholders, among whom one will find many widows and orphans' (Staley, 1997, pp. 235-236). Short sellers were thus a convenient excuse for the company's problems. On the other hand the officials of the Amsterdam Exchange believed that the declining share price was due to unsatisfactory business conditions. This negative attitude to short sellers has persisted through the centuries and Shiller (2005) refers to the fact that short sellers were widely blamed for the US Stock Market crash of 1929.

But in practice, such transactions can present complications. If at any time the broker is unable to borrow sufficient shares, then the investor will be short-squeezed and will be forced to close the position. Any dividend income received by the investor between sale and purchase is paid to the broker who passes it back to the original owner of the shares. The investor is also required to open a margin account with the broker into which are placed cash or marketable securities. In the event that the share price of company C increases after the sale, then the assets in the margin account will need to be increased.

Jones and Larsen (2004) point out that short selling of stocks which are thought to be overpriced has the potential to improve mean portfolio returns. In addition, the opportunities to short sell can effectively double the number of assets, which gives the potential to reduce portfolio variance. It should be noted that there are other strategies by which investors can benefit from future declines in a company share price. These strategies include the use of futures and options, but further discussion is outside the scope of this paper[15].

3. Short sellers and market efficiency

If, by stock market efficiency, we mean information efficiency (i.e. share prices reflect all available information in a timely and accurate manner, so buying and selling shares on average yields a 'fair' return after discounting transaction costs), then one of the main roles of short sellers is to increase the information content in stock prices. Note that in a frictionless market, short sellers may affect stock market prices by exploiting potential market opportunities and incorporating their beliefs on prices. But arbitrage activity might be prevented because of short sales constraints such as costs of shorting, risks of shorting, and legal and institutional restrictions. Therefore, the presence of short sales constraints could be associated with lower price efficiency i.e. prices may no longer incorporate all available information.

The literature on the impact of short sales on asset prices and market efficiency is extensive. However, given the lack of appropriate data, most of the empirical studies examine not the activities of shortsellers per se but the effect of short seller activities (measured by variables reflecting the market for borrowing and lending short) on stock prices. As we will illustrate next, there is wide

[14] See, for example, J.C. Hull (2006).

[15] The interested reader is referred to Fabozzi (2004) and Bailey (2005) for a useful review of such strategies and their relation to short selling.

agreement that short sales constraints decrease market efficiency (e.g. Saffi and Sigurdsson (2007); Bris et al (2007); Ali et al (2003); Lamont and Stein (2004); D'Avolio (2002) among others). However, the crucial questions regarding *how* and the importance of their effect remain under study.

For example, Miller (2004) shows that shares can potentially be overpriced because of restrictions on short selling. Prices are likely to be set by optimistic investors (taking a long position) rather than by pessimistic investors (taking a short position) and unfavourable opinions are prevented from being fully reflected in share prices. The important implication is that short selling constraints reduce the informational efficiency of prices. Ali and Trombley (2006) show that the magnitude of momentum returns are positively related to short sales constraints, that is, short sales constraints prevent arbitrage of momentum returns. Recent empirical studies by Reed (2007) for the USA and Saffi and Sigurdsson (2007) for a sample of 26 countries, found that shorting restrictions were associated with a reduction in the speed in which the information is incorporated in prices.

Lamont (2004a) emphasises the obstacles faced by investors who wish to sell short:

US equity markets are not set up to make shorting easy. Regulations and procedures administered by the SEC, the Federal Reserve, the various stock exchanges, underwriters and individual brokerage firms can mechanically impede short selling. Legal and institutional constraints inhibit or prevent investors from selling short (most mutual funds are long only). We have many institutions set up to encourage individuals to buy stocks, but few institutions set up to encourage them to short. The growth of hedge funds is a welcome correction to this imbalance'. (Lamont, 2004a, p. 182).

Furthermore, Lamont and Stein (2004) analyse short selling on the NASDAQ and the NYSE. They found that short interests in stocks decline when the stock index approaches its peak. This countercyclical movement appears to be explained by the nature of the open ended characteristic of professional arbitrage firms (i.e. funds could be withdrawn at any time) which restricts short sales in rising markets.

Angel et al (2003) refer to the view of many practitioners who believe that short selling occurs infrequently in the NASDAQ or any US market. The reason is that 'such a risky, costly strategy attracts mainly the well-informed and aggressive, who short stock only when they expect large returns' (p. 67). Based on NASDAQ data in 2000, Angel et al find that short sales occur on average in approximately 1 in every 42 trades and involve 1 in every 35 shares traded. They also find that short selling occurs more often in actively traded shares. It is worth noting that the most actively traded shares are likely to be those of the largest and most well known companies. In addition, the finding that only a very small proportion of share trades involve short sales, means that short sales as a proportion of total issued share capital is probably extremely small. Hence it would seem that short sellers are likely to have very little downward influence on share prices for the market as a whole.

Dechow et al (2001) find a strong relation between the trading strategies of short sellers and ratios of fundamentals to market prices. They also find that short sellers target securities with low fundamental-to-price ratios and then unwind their positions as these ratios revert to normal levels. The evidence from Angel et al (2003) and Dechow et al (2001) is consistent with short sellers being informed investors who are able to pursue successful investment strategies. Recently, and using US firm level data, Karpoff and Lou (2009) examine if short sellers do really identify overpriced firms. They found that short interest was positively related to the severity of financial misrepresentation and that short sellers anticipate the discovery of financial misrepresentation. Similarly, Diether et al (2008) analyse short selling in US shares and found that short sellers correctly detected abnormal returns and reacted to short term deviation of prices from fundamentals.

Can the profits made by short sellers be justified? Choie and Hwang (1994) argue that short sellers have a rightful claim to profit since they deserve a reward for enhancing the efficiency of the stock market. 'Without short sellers, the market could become structurally biased against the ability to distinguish weeds from grass because many institutional investors are prohibited, legally or otherwise, from shorting stocks even if they know a firm is engaging in accounting gimmickry or fraud … short sellers, as a group, consistently make a substantial profit, and a majority of their positions yield a profit' (p. 33).

Aitken et al (1998) report evidence based on short sales on the Australian Stock Exchange and conclude that 'in a market environment in which short sales are fully transparent moments after execution, they are almost instantaneously bad news' (p. 2206). They argue that an absence of transparent short sales may potentially inhibit the market's ability to impound relevant information.

In summary, the available evidence seems to show that short sellers do tend to be successful, there is little reason for regulators to restrict their activities and in fact there are grounds for believing that reducing short sales constraints increases the information available to the markets and improves

market efficiency[16]. Therefore, short sellers' activities benefit not only shareholders (disclosure of short selling can provide a useful warning to long investors), but also other stakeholders such as employees who may be concerned about matters such as job prospects and security.

Nonetheless, short sellers are not always seen in such a positive way. Recall that for short sellers to be able to operate successfully, they also need overpriced shares and investors who are willing to buy those shares. Lamont (2004a) refers to attempts from Napoleon onwards to prevent or restrict the activities of short sellers and the harassment faced by short sellers, usually in times of crisis or following major price declines. Short sellers are "met with opprobrium by certain market commentators, regulators and politicians alike, usually as markets swing downwards after unsustainable excesses…" (Thomas, 2006, p. 617). The criticisms are mainly related to irregular investments and large profits. We illustrate these points in turn, first by describing events after September 11, 2001 as well as more recent turmoil associated with the sub-prime crisis which began in 2007. We also provide reasons why shares might be 'overpriced' in the first place.

4. Disquiet in the media about the activities of short sellers

4.1 September 11

Following the terrorist attacks of 11 September 2001, there was a marked increase in the number of stories in the media about the activities of short sellers and their consequences for stock markets. Table 1 compares the number of stories in the UK and US news media for periods before and after 11 September 2001. These data are taken from the LexisNexis Executive database. The search term used was 'short seller' and the UK news media represents a wide range of media, mainly newspapers, such as the *Financial Times*, *The Times*, *The Independent*, *The Daily Telegraph*, *The Daily Mail*, *Sunday Express* etc. US news media again represents mainly newspapers such as *The New York Times*, *The New York Post*, *The Washington Post*, *The San Francisco Chronicle*, *The Seattle Times*, *The Boston Globe* etc.

[16] Recently, this point has also been made by Grunewald et al (2010). Their paper examines recent short selling regulations and regulatory attempts by UK and US regulators and found no basis for such actions. Instead, they suspected (and we do too) that they were motivated by political pressure because of the financial crisis.

Table 1. Number of 'short seller' stories in UK and US news media before and after 11 September 2001

Days Before	UK News	US News	Days After	UK News	US News
7	5	7	7	9	19
14	9	12	14	32	35
21	14	20	21	40	44
28	18	27	28	59	57
60	30	51	60	72	83
90	48	72	90	85	117

Source: UK and US news media stories based on Lexis-Nexis Executive database.

For UK news media, stories about short sellers were averaging about 5 per week in the days leading up to 11 September 2001, while stories in the US media were averaging about 7 per week.

After 11 September 2001 the picture changed substantially. In the UK, in the first few days after the attacks, the number of stories began to increase and by weeks two, three and four after 11 September 2001 the weekly average of stories was running at about three times higher than before 11 September 2001. By the second and third months after 11 September 2001, the number of stories had more or less returned to the 'before' levels.

In the US, the news media were somewhat quicker to jump on the short seller bandwagon and in the first week after 11 September the number of news stories nearly tripled, compared with the 'before' levels. The first 28 days after 11 September 2001 saw over twice as many stories compared to 'before'. In months two and three after 11 September 2001, the experience was similar to that of the UK and the number of news stories began to return to the 'before' levels.

In the UK news media, 18 stories appeared in the 28 days before 11 September which contained the term 'short seller'. Many of the articles were relatively objective about the activities of short sellers. A few were more critical, such as the report[17] in the *Sunday Business* which referred to 'the "cyber smear", usually practised by "short" sellers – investors who sell borrowed securities in the expectation that prices will fall – to drive down a stock price on the basis of false information'. But in none of the 18 articles was the word 'terrorist' or 'terrorism' mentioned.

In the first few days following 11 September 2001, some stories did mention the terms 'terrorist' or 'terrorism' together with the term 'short seller' but these stories were often based on views that it might be unpatriotic to sell short in the (then) unusual circumstances. Also stories took a view that destabilisation of financial markets could be an objective of terrorists. Moreover there were stories to the effect that some leading investment banks, under pressure from regulators, had placed a ban on short selling in order to try to stabilise the markets and prevent a massive sell off of shares. Stories also discussed the possibility of economic recession and the *Sunday Times* in a report[18] on 16 September 2001 referred to recent profit warnings from Ford and General Electric blaming the terrorist attacks. But it might be asked whether these profit warnings used the terrorist attacks as a convenient excuse in order to distract attention from more fundamental and long term commercial problems.

But it was not until 18 September 2001 that an article in *The Guardian* made the connection that terrorists might actually have benefited from short sales of shares, especially in companies in the airline or insurance industry.[19] From then on the story was taken up in other newspapers. For example, on 23 September 2001, in a *Sunday Times* article[20] headlined 'Terror insiders may have made millions from stocks' it was suggested that unusually high levels of short selling took place before 11 September 2001 in companies such as American Airlines and insurance companies such as AXA and Swiss Re. The article also suggested (quoting 'German authorities') that the terrorist organisers could have made big profits by trading in oil and gold (commodities which would have been expected to increase in price following 11 September 2001). This raised the possibility that the terrorist organisers were not only buying long (oil and gold) but also selling short (airline and insurance stocks). If true, this would have represented a fairly sophisticated finance operation.

However, the *Sunday Times* article of 23 September 2001 acknowledged that the US airline industry was already experiencing financial problems before 11 September 2001 and a *Financial Times* report[21] of 22 September 2001 stated that many hedge funds were already betting on a fall in equity markets even before 11

[17] *Sunday Business*, 19 August 2001: 26.

[18] Sunday Times, 16 September 2001: Business Section.

[19] The Guardian, 18 September 2001: 23.

[20] *Sunday Times*, 23 September 2001: Overseas News.

[21] Financial Times, 22 September 2001: 15.

September 2001. So there may have been a perfectly innocent explanation (i.e. pre-existing commercial difficulties) for the apparently high levels of speculative trading activity before 11 September 2001.

Despite the adverse publicity given to short selling, especially in times of market downturn, there is no concrete evidence that terrorists benefited from short selling securities during this period (or for that matter, investing long in commodities).

4.2. Sub prime crisis

Sub prime mortgage defaults in early February 2007 triggered the financial crisis. The resulting depletion of bank capital led to disruptions in the market for interbank funds and severe liquidity contractions with world wide economy repercussions. Why were banks so vulnerable?

According to Brunnermeier (2009), the financial crisis could be explained by cheap credit and low lending standards coupled with banks' practices of off-loading risk by repackaging loans to other financial institutions and increasingly financing their assets with short term maturity instruments. The lack of regulation and the increase in sub prime mortgage defaults led to erosion of confidence and market illiquidity. In spite of the interventions of the European Central Bank, the US Federal Reserve and the Bank of England, many financial institutions were unable to carry on operating.

Were short sellers responsible for the fall in banks' share prices and the overall stock market decline? Short sellers borrow overpriced securities to return them later, informing the market of mispriced securities, preventing fraud and helping to preserve investors' capital. Note that they did not advocate low interest rates, nor regulations in the lending market. Nor did short sellers ask people to take mortgages when they should not. If this is the case, then two questions follow.

Firstly, were short sellers driving the price of shares down too rapidly and causing financial panic? This is not easy to answer because it involves disentangling the effects of short selling from other economic variables. This question can be asked in a different way: how much would prices have fallen if there was no ban? Again, it is very difficult to disentangle other effects causing problems in the stock markets at the same time.

In any case, what is known is that the short selling ban which aimed to restore stability and confidence in the market did not achieve these goals. Bris (2009) examined the effects of the July 2008 Emergency Order by the SEC. He tracked the performance of stocks of 19 companies (G19) covered by the ban prior to and after the ban, and compared it to a sample of US and non-US firms. Bris found that the stock performance of the G19 was worse in June/July 2008 than for comparable stocks. However, short selling activities had not been significantly higher relatively to comparable stocks between 2006 and 2008. Moreover, applying regression analysis, he concluded that, after controlling for short sales, the negative returns of the G19 was worse than for comparable firms. These results suggest that the G19 low performance could not be attributed to short sale activities. Instead, after the ban, the G19 stocks experienced a significant reduction in intra-day return and an increase in spreads, suggesting a deterioration of market quality.

Several articles from the *Financial Times* suggest the ineffectiveness of the short sales ban in stopping the deterioration of market shares. For example:

In Australia the short selling ban for all stocks was introduced on 22 September 2008. The non financial stocks ban was lifted on 13 November 2008. The financial stock ban was expected to be lifted in 6 March 2009, but it was extended three times after an aggressive lobbying campaign by banks and listed property trusts. This was despite the fact that from September 2008 to March 2009, financial shares lost more than 40% in value (Financial Times 6 March 2009).

In the UK, the the Financial Services Authority banned the short selling of 34 financial stocks in September 2008. This ban was subsequently lifted in January 2009. The *Financial Times* of 11 February 2009 quotes London Stock Exchange independent research as concluding that liquidity in the restricted stocks dropped 19% compared to a rise in 50% in trading volumes in the control sample and transactions costs rose by 150% compared to the control sample. Moreover, the article argues that the ban did not shore up share prices. Royal Bank of Scotland shares fell 78%, Lloyds fell 59% and Barclays 66%. Indeed, the *Financial Times* of 18 December 2009 argues not only that the short selling ban had minimal effects but that "markets have behaved in the same way as they would have without the ban, with markets worried about the weak economic activity and company loss of earnings".

Secondly, was the short selling ban a diversion from the underlying problems? Was it the need to find a scapegoat to blame for the loss of money, house repossessions and unemployment that led bankers, companies, politicians, regulators and even high official clergymen (see *Financial Times* of 26 September 2008) to lobby for the short seller ban? It is arguable that, rather than focussing on short sellers, politicians and regulators should focus on how to prevent loss of economic confidence and potential future crises.

5. Agency cost, excessive optimism and bias in analysts' forecasts

Short sellers have been criticised for making 'excessive' profits. However, it could be argued that this can happen only if shares are initially 'overpriced'. This prompts questions regarding the behaviour of managers and boards of directors, optimism in analysts' forecasts and mispricing of securities as well as the association (if any) between short sales, stock price decline and market instability.

The recent corporate scandals and in particular, the collapse of Lehman Brothers illustrate the type of rollercoaster problems that a firm might experience. Recall that an agency cost arises from conflict of interests between the principal (i.e. shareholders) and the agents (i.e. managers of corporations) and reduces the value of the firm. An appropriate system of incentives and corporate governance are normally put in place to overcome this problem. Both principals and agents aim for a high stock valuation but problems surface when stock prices are overvalued to the extent that the firm's performance cannot justify such valuations. One solution is for the company's agents to maintain a pretence that value is being created in the hope that future prospects will improve. Shareholders are unlikely to object, since they do not want to see a reduction in the value of their shares. It is this short term vision of the firm that leads to the continued practice of maintaining excessively high share valuations. Jensen (2004) illustrates all these points examining the failure of Enron and eToys. He stresses that the solution to these agency problems and overvaluation of stock prices requires good control and corporate governance systems and not only compensation incentives. Jensen suggests that one way Boards can protect the firms they serve is by establishing regular contacts with short sellers and evaluating the information they possess. In this way, the board can exercise control and eliminate the overvaluation before it becomes too large.

In addition to the manipulative behaviour of the principal, inflated optimism might be attributed to analysts' forecasts. Indeed there is a substantial body of empirical studies providing evidence regarding optimism and bias in analysts' forecasts[22]. For instance, Lim (2001) suggests that analysts following poorly performing companies refrain from fully revising their estimates downwards and that analysts working with smaller brokerage firms produce more optimistic forecasts. McNichols and O'Brien (1997) find evidence consistent with the hypothesis that analysts report selectively when they have relatively favourable information. Analysts will tend to drop coverage of firms for which they have pessimistic expectations but they will initiate coverage for firms about which they have optimistic expectations. Their evidence 'is at least a partial explanation for the commonly observed phenomenon that analysts' forecasts of earnings are generally and persistently overoptimistic' (p. 197). Daniel et al (2002) also document evidence that analysts are biased in their forecasts and examine how psychological biases (e.g. over confidence) affect investor behaviour and prices. The reasons for analysts' optimism are debatable and several plausible explanations have been put forward. For example, analysts could have an incentive to issue optimistic forecasts because of concerns about their career prospects if they are associated with pessimistic forecasts. On the other hand, optimistic forecasts might help their firm to gain services such as investment banking and to gain increased access to information from management.

More optimistic forecasts might also help to secure investment business. In 1997 WorldCom gave Salomon Smith Barney the exclusive right to administer the WorldCom stock option plan. Several years later, in May 2004, Citigroup (which controlled Salomon Smith Barney) announced that it would pay $2.65 billion to settle an investor lawsuit which had alleged that Jack Grubman (an analyst with Salomon Smith Barney) 'had deliberately painted too positive a picture of WorldCom's prospects before an accounting misstatement drove it into bankruptcy'.[23]

There might also be reasons why analysts are *not pessimistic*. The threat of legal action may make analysts cautious about issuing a pessimistic forecast or recommendation. In the case of the collapse of Robert Maxwell's business empire in 1991 (Wearing, 2005), it later transpired that some analysts who had tried to warn of Maxwell's business activities had been subjected to threats of legal action. In 2002 LVMH sued Morgan Stanley on grounds of bias and defamation in a French court. In 2006 the French court of appeal overturned a lower court finding of bias but upheld the defamation finding on the grounds that Morgan Stanley did not properly disclose its corporate relationships. As argued in a *Financial Times* editorial ' … it is absurd to allow a company to sue a critical analyst for defamation … analysts need no encouragement to puff up shares, since nobody is likely to contest a glowing report'.[24]

Lamont (2004a) examined long term returns of a large number of firms who accused short sellers of illegal activity or false statements. He found that these firms experienced very low returns in the years subsequent to taking the anti shorting action which is consistent with the view that short

[22] See Kothari (2001) for a survey.

[23] *Financial Times*, 11 May 2004: 21.

[24] *Financial Times*, 1 July 2006: 14.

sale constraints allow substantial over pricing. He also found that many of these firms were subsequently found to be fraudulent which 'suggests that short sellers play an important role in detecting not just overpricing, but also fraud' (p. 193).

With regard to share price decline and share price volatility, Charoenrook and Daouk (2005) investigate the effect of market wide short seller restrictions and 'find no support for the short-selling opposition's argument that short sellers disrupt orderly markets by causing panic selling, high volatility and market crashes' (p. 21). Also Karpoff and Lou (2009) [need ref in refs section] found no evidence that short selling aggravates the downward stock price spiral when financial misconduct by firms is publicly revealed.

To summarise, short selling can be viewed as a natural reaction to overpricing. In fact, constraints on short selling allow overpricing to persist. Regulators should, therefore, address the causes of overpricing (incompetent and/or fraudulent management), rather than the symptoms.

6. Short sellers, agency theory and stakeholder theory

If short sellers can provide timely information to the market and help to offset the equity overvaluation problem, why are they disliked so much? What role can we attribute to them?

In practice, corporate governance has been devised to protect and maximise shareholders' wealth. In doing so, it focuses on agency problems and adopts mechanisms and incentives to solve them. Stakeholder theory, by extending the objective of the corporation to all stakeholders, does not make maximisation of shareholders' wealth its primary (or only) focus of attention. The emphasis is, instead, on broadly maximising value creation of the firm in a social context.

Within agency theory, it seems that short sellers are disliked because they can detect and signal stock price overvaluation, and as explained before, this is not in the interest of the manager and the current shareholders. Moreover, the incentive system is perverse in the sense that, once shares are overvalued, it is in the interest of the manager to keep share prices high (to enhance remuneration and for job security). We concur with Jensen (2004) who argues for effective corporate governance systems which recognise the implications of short sellers' actions.

In contrast, stakeholder theory stresses the importance of all parties who are affected either directly or indirectly by a firm's operations. The term 'stakeholder' is normally seen as referring to any party who has a 'stake' in the company, and while this can obviously include the shareholders and directors (principal and agent in agency theory) it can also include parties such as employees, government, customers, suppliers, bankers etc[25].

But defining the term 'stakeholder' is in itself problematic. For example, Sternberg (1997) argues that "Stakeholder theory provides no effective standard against which corporate agents can be judged. Balancing stakeholder interests is an ill-defined notion, which cannot serve as an objective performance measure; managers responsible for interpreting as well as implementing it are effectively left free to pursue their own arbitrary ends' (p.5). To solve this conflict, Letza et al (2004) and Gamble and Kelly (2001) argue for a modified view of shareholder theory, in favour of corporate pluralism and a more formal recognition in company governance of the investment and risks incurred by stakeholders (not just shareholders). This view is also consistent with Jensen (2001) who stresses that in the *long run*, for a firm to be successful, 'managers must pay attention to all constituencies that can affect the firm' (p. 304). Recently, Mahoney (2007) has emphasised that stakeholder theory requires that the *entire* value of the firm be considered and hence, the need to identify 'the role of each stakeholder group in the creation and distribution of that economic value' (p.25).

Such a view would encompass short sellers, since the activities of short sellers can be seen as beneficial to a company in the long run and their actions could, conceivably help to prevent corporate collapse and increase market efficiency. Indeed, it could be argued that fewer constraints on short sellers in cases such as Enron and WorldCom in the US and possibly Maxwell and other cases in the UK might have prevented unreasonably inflated share prices and could have limited the losses of some shareholders, especially those who were encouraged to buy at the peak. Lamont (2004b) suggests that short sellers are able to identify firms which have inflated share prices relative to fundamental value. Therefore, the problem of share prices being driven down is not due to short selling per se, but instead due to existing financial difficulties. Although the return to short sellers would be largest where the share price falls to its lowest possible value[26], it is worth remarking that what is important is the *long term* survival of the firm and therefore all the stakeholders. As we have argued above, short sellers are only a symptom of the problem and in fact their actions are *more likely* to bring share prices in line with fundamentals.

[25] The subject of who should be considered a stakeholder has long been debated. See for example, Friedman and Miles (2006) and Deegan and Unerman (2006).

[26] That is, almost on the verge of liquidation. Delisting would involve additional costs to the short seller.

And if short sellers are to operate effectively then they need access to financial information of equivalent quality to that demanded by traditional shareholders, institutional investors and banks etc. This would seem to indicate that short sellers have rights to information commensurate with other, recognised stakeholders. In addition, timely disclosure of short sales information by stock exchanges attenuates potential problems of information leakages and insider trading which undermines market integrity.[27]

7. Conclusions

Our analysis leads us to believe that where share prices are unreasonably higher than economic fundamentals would dictate, the activities of short sellers would help to bring share prices into line with economic fundamentals. At this point, potential investors wanting to take a 'long' position would find their activities more profitable and the activities of short sellers would become less profitable or loss making.

The positive view of short sellers and their activities which is put forward here envisages a scenario where short sellers effectively act as a safety valve for companies in distress. Instead of curbing their activities (which only exacerbates the problem) short sellers should be encouraged, in order to bring share prices back to realistic levels. In other words, short sellers can 'correct' market prices and therefore effectively neutralise 'irrational exuberance'[28] in the economy. In terms of agency theory, their activities can be viewed as a mechanism to discipline the principal, yet also consistent with preserving the interests of stakeholders.

Take for example a company with a highly inflated (relative to economic fundamentals) share price. The beneficiaries of this scenario will be the shareholders who sell out at the top, leaving future shareholders and other stakeholders to face the effects of a rapidly declining company. Recall that at the heart of stakeholder theory is the creation and long term value of the entire company by all the stakeholders. Then, short selling activities might help by signalling possible financial problems and even fraud in the company.

Our main argument is that short selling is a *symptom* and not a *cause* of failing companies. In this sense, short sellers are *scapegoats.* Responsibility for company failure is more likely to lie with the agents (managers and boards of directors of commercial and financial companies) than with the hedge funds. One of the problems with the current situation is that there are arguably too many vested interests in favour of relentlessly increasing share prices. These vested interests include government (who often see buoyant share markets as an indicator of economic success), life assurance companies and pension funds (who need to satisfy the claims of their clients) and companies themselves who need a buoyant share price in order to attract additional funding and thereby improve their prospects of taking over other companies.

In the case of WorldCom it was reported that even short-sellers, who had been profiting in the market from WorldCom's falling share price were surprised at the scale of the accounting disclosures. *The New York Times* quotes one short-seller as saying that (long) investors cheered WorldCom's acquisition binge when its stock was rising and paid little attention to how the company generated its profits. That attitude encouraged the company to stretch accounting rules and take ever-bigger risks in an effort to keep its stock rising, and 'the executives, the money managers, the auditors, the CFOs, the CEOs, the ones that got ahead were the most reckless, the least ethical'[29].

Chief executives can be quick to criticise short sellers for bringing about the collapse of their companies, but less ready to acknowledge that *short sellers can only make abnormal profits when company shares are unreasonably overpriced.* Kenneth Lay who created Enron was convicted in May 2006 on charges of fraud and conspiracy in connection with the Enron bankruptcy in 2001. But in his defence Lay chose to portray Enron as a successful company which failed as a result of sceptical news reports and aggressive short selling by hedge funds which led to a collapse in investor confidence[30].

We can also refer to the sub-prime crisis which first became evident in the US in 2007 and subsequently set in motion a global financial crisis. Firms in the US which have either filed for bankruptcy or received substantial government funding include Bear Stearns, Lehman Brothers, Merrill Lynch, Fannie Mae and Freddie Mac. In the UK, Northern Rock was the first significant casualty and was effectively nationalised, while HBOS, and Bradford and Bingley have been taken over by competitor banks with state encouragement.

A fairly predictable response from regulators in the US and UK (as well as a number of other countries) has been to impose restrictions on short sellers. In September 2008 the US banned short selling in a wide range of financial companies. In June 2008 the UK Financial Services Authority had imposed tighter disclosure

[27] See Khan and Lu (2009) who empirically examined the relation between short sellers, large insider sales and front running made possible by leakage of information.

[28] A phrase attributed to Alan Greenspan, former chairman of the US Federal Reserve (see R. Shiller (2005)).

[29] *New York Times*, 26 June 2002: 1.

[30] *Financial Times*, 6 July 2006: 27.

requirements on hedge funds short selling rights issues in banks. This was followed in September 2008 by an outright ban on short selling in a number of financial stocks. Australia imposed a total ban on short selling of stocks while Canada and Germany imposed restrictions on short sales of financial stocks.

So should short sellers be encouraged or discouraged? Although in the short term it might be thought that their actions are harmful to companies, the conclusion from this paper is that encouraging short sellers to operate more effectively in the market as well as providing fuller disclosure of their activities could provide a useful antidote to some of the share price rises which have been seen in recent years in failing companies. And although short sellers have been criticised for making 'excessive' profits, these profits are likely to be dwarfed by the hundreds of billions of dollars which represent the cost of recent state intervention in the markets. The financial turmoil which began in 2007 is little different from earlier financial instability in the sense that short sellers have, unfairly, been seen as a convenient excuse for failings elsewhere in the system.

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