Insider Trading The effectiveness of financial market regulation in US, UK and the EU, and the effect on investors in Forbes 500 companies

Nikola S Georgiev
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I. Introduction

The debate surrounding insider trading (i.e., trading by corporate insiders or their associates, based on, private or price sensitive information) is both long-standing and inconclusive.¹ Many scholars argue that insider trading is efficient and public regulation is inefficient², while others argue the opposite.³ Although sometimes can be difficult to track insider trading, many laws were enacted in order to bring back confidence in investors, following the high profile scandals in the US involving many public corporations like Enron, WorldCom and so on.⁴ These scandals brought enormous wealth loss to the public, leading to a lack of trust and confidence in the US regulatory and financial system. However, recent studies in comparative corporate and securities law and finance suggest that the implications of these laws vary systematically with economic, legal, institutional and social differences across countries.

The aim of this paper is therefore to conduct an exploratory empirical analysis of the relationship between insider trading laws and financial structure and performance across countries. Thus, this paper will evaluate the effectiveness of financial market regulation on insider trading and compare, and evaluate the US financial market regulation with UK and Europe. In addition, the paper will examine how the different techniques used the management of earnings, influence company’s performance in light of the regulatory intervention (SOX, FSA). Hence, as a consequence of these analyses, the paper will evaluate the impact on investors in US public companies and examine comprehensive methods of earnings management signals that could have impact on the company performance. Following a rigorous discussion and examination of the topic, a conclusion will be drawn based on the analysis and facts discussed.

¹ See Bainbridge (1999) for a summary of the issues in the debate
² See Carlton and Fischel (1983); Manne (1966) - arguments for regulation inefficiency
⁴ See Clark and Gray (2002) for US litigation scandals
II. Regulations and Control on Insider Trading

The first and most significant US regulation on insider trading was the Securities Act of 1933. The law of insider trading has evolved through a series of judicial opinions in a process that closely resembles common law adjudication rather than the statutory interpretation of the law.\(^5\) This has been followed and amended by the Securities and Exchange Act of 1934. Both acts were enacted after the crash of the stock market in 1929. These regulations (like consecutive regulations) were intended to promote market integrity and level the playing field among market participants, company officers and institutional investors, and in particular the small investors who had been eliminated by the 1929 crash.\(^6\) After the 1987 stock market collapse in the US, the SEC took action on the breach of its existing insider trading regulation by imposing the Insider Trading and Securities Fraud Enforcement Act (ITSFEA) of 1988 that raised the penalty of illegal insider trading to 1 Million dollars and 10 years imprisonment.\(^7\) This act re-codified the Insider Trading Sanctions Act of 1984 as Section 21A of the Exchange Act. The Act has amended the language of the 1984 Act, stating that a penalty can be imposed against a person not only for trading in a security while in possession of material non-public information, but also that a person can be thought of having violated this Act by trading such information. The latest regulation is the Sarbanes Oxley Act of 2002 enacted after the high profile financial scandals.\(^8\) This Act mostly involves an amendment and the strengthening of previous insider trading laws. The most significant requirements to these regulations are being summarized in Table 1 below:

<table>
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<tr>
<th>Table 1</th>
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<tbody>
<tr>
<td>Filing requirement</td>
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<tr>
<td>Online reporting requirement</td>
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<tr>
<td>Profit recovery requirement</td>
</tr>
</tbody>
</table>

Source: SEC

\(^5\) See Bainbridge (2005)
\(^6\) See Markarian (2005)
\(^7\) See Fidrmuc et al. (2006)
\(^8\) See Gelband (2005),
\(^9\) The requirement before the SOX 2002 was that they report the sales and purchases of such stock to the SEC by the 10th of the following month
The regulations also provide straightforward definitions of several contextual issues that have been subject to ambiguity and hence regulatory arbitrage. The most important definitions to these regulations are being summarized in Table 2 below:

| Table 2 |
|------------------|---------------------------------|
| **Insider definition:** | Securities and Exchange Act of 1934 defined an insider as officers, directors, company’s vice presidents and owners of more than 10% of the corporation’s stock. |
| **Insider Trading Liability:** | Rule 10b5-1 addresses the issue of when an insider trading liability arises in connection with a trader’s “use” or “knowledge” of material non-public information. The rule posits that a trader trades on material non-public information when they purchase or sell securities while aware of such information. The rule further sets certain affirmative defenses that protect individuals and entities in situations where material non-public information was not a factor in the trading decision since the trade was presumably carried out pursuant of a pre-existing contract, situation or a plan. |
| **Misappropriation Theory**\(^{10}\) | Rule 10b5-2 addresses the issue of when a breach of a family or other non-business relationship may give rise to a liability under the misappropriation theory of insider trading. |

Source: SEC

In an effort to limit non-trading, rules such as SOX have established guidance on pre-planned trading regulated through rule 10b5-1. While SOX does not change the primary definition of who is an insider, the Act decreases the filing time of SEC forms 4 from approximately 40 to 2 business days. Requirement to report trades from the 10th of the month following the trade to two business days after the reported transactions has also been imposed. SOX delegates the SEC new supervisory powers to seek any equitable relief that might be appropriate for the benefit of investors and all stakeholders.\(^{11}\)

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\(^{10}\) The misappropriation theory states that anyone who misappropriates (steals) information from their employer and trades on that information in any stock (not just the employer’s stock) is guilty of insider trading.

\(^{11}\) See Huddart and Ke (2007)
III. Additional Restrictions on Insider trading

Gains from insider trading can originate from different kinds of information. These range from ordinary insider information about a company and its operations to more complex information like those relating to rumored mergers and acquisitions. Usually, the type of insider trading information that normally leads to a lot of public attention involves information of the “bombshell” variety that includes mergers and acquisitions, mineral discoveries, IPO, high assets sales or purchases, etc.\(^{12}\) Despite the fact that most discussions have focused on trading gains, an insider might trade on inside information by just holding shares they had once wished to sell. For example, a company manager, who wanted to sell shares in a trading period might act on inside information maybe relating to a takeover and hold on to the shares. When the share price rises, he might reap significant profits at the expense of other investors.\(^{13}\) Non-trading based on insider information is apparently an abuse similar to active insider trading. However, it is difficult to impose criminal sanctions to acts of omission.

In addition, few firms do restrict insider trading beyond habitual SEC regulations.\(^{14}\) However, Bettis et al\(^{15}\) argued that recently, over 90 \% of S&P firms do impose trading restrictions on insiders. These facts make the argument that shareholders of firms are harmed by the trading of executives difficult to reconcile, due to the absence of widespread private restrictions on insider trading actions.

Several arguments have also been examined in favor of insider trading regulations. Laws enacted by regulatory bodies in financial markets have deterred insiders from trading with foreknowledge of next earnings announcement, particularly when future news is expected to be bad.\(^{16}\)

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12 See Carlton and Fischel (1983)
13 See Kelly et al. (1987)
14 See Easterbrook (1981)
15 See Bettis et al (2000)
16 See Weber (2005)
Since the SEC for example enacted the Insider Trading Securities Fraud Enforcement Act of 1988 (IFSAFEA), there has been limited insider trading prior to an earnings announcement, as this law targets top management, who is held responsible for employees illegal trading. The argument that insider trading should be regulated has emerged largely from its reliance upon private information that normally leads to an expropriation of uninformed investors. This is regarded as a form of self-dealing by senior management in breach of their fiduciary duties to their investors, while being less well informed than they are. On the grounds of fairness, arguments can be made that inefficiencies may arise due to the withholding of information leading to vulnerability. In addition, those who possess insider information have an unfair advantage over other market participants. Hence, if other shareholders think that Insiders of specific corporations do have an unfair advantage over other market participants, they might not be interested in investing in that corporation.

IV. The Sarbanes Oxley Act of 2002

The Sarbanes-Oxley Act of 2002 (officially titled the Public Company Accounting Reform and Investor Protection Act) has been enacted in July 2002 by the US Congress with the main aim to restore investor’s confidence after a series of corporate scandals, such as Enron and WorldCom. These scandals weakened the trust and confidence of stakeholders in accounting information. The Act brought CEO’S, CFO’s and auditors under intense pressure. The Act was named after its main architect’s Senator Paul Sarbanes and Representative Michael Oxley. The Act applies to certain US and foreign companies that are registered with the Securities and Exchange Commission. Following the scandals, the key concerns of the Securities and Exchange Commission and other institutional regulators was to implement reforms that were designed to produce more reliable financial reports. It has been designed to reduce fraud and conflicts of interests by increasing financial transparency and improving confidence and trust in financial markets. The Act related to a number of diverse issues ranging from wide corporate governance responsibilities by public institutions to enhanced criminal and civil penalties for the violation of securities laws. It included the threat of fines and imprisonment for senior executives from organizations that do not comply with specific provisions.

17 See Fidrmuc et al. (2006)
18 See Bainbridge (2002)
19 See Kelly et al. (1987)
20 See Clark and Gray (2002)
V. Why the Sarbanes Oxley Act of 2002 came into force?

The origin of the SOX can be traced from the high profile scandals in the US involving many public corporations like Enron, WorldCom, and so on. These scandals brought enormous wealth loss to the public leading to a lack of trust and confidence in the US regulatory and financial system. Those who recommended the quick enactment of the SOX appeared to be influenced by the fact that neither the contracting devices that were supposed to control managers, nor the efficient securities markets worked to prevent or spot the problem before the failures of those corporations.\(^2\) However, before this act, regulators have been concerned about the level of investor protection. Several of them had the opinion that US investors and firms need to be assured that there are strong security market regulations. In 1999 for example, the SEC chairman Arthur Levitt spoke publicly against widespread insider trading and earnings management practices and their impact on the trust and integrity of the US financial system. One major concern for the SEC was how to implement reforms that could effectively produce more reliable financial reports. After the failures of these major corporations, the prevailing concern was to look for ways of reducing fraud and conflicts of interests, thus increasing financial transparency and improving the confidence and trusts of investors in financial markets. This has led to the enactment of the SOX. All companies trading in the US, including their subsidiaries initiating initial public offerings have been required to comply with its provisions.

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\(^2\) See Ribstein (2002)
VI. SOX Regulations Relating to Insider Trading

The following Table 3 describes the SOX regulation on insider trading:

<table>
<thead>
<tr>
<th>Table 3</th>
<th>Section 403</th>
<th>Two main new provisions:</th>
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<tbody>
<tr>
<td></td>
<td>Provides two important changes that require earlier public notification of Insiders' transactions in their company's securities and the wider public availability of information relating to those transactions</td>
<td>1 - the first relates to the requirement that all trades must be reported within two business days following the date the transactions were executed. 2 - Section 403 (a) of the SOX requires that Insider’s file electronically all their transactions and provide online accessibility of such reports. To facilitate the implementation of this requirement, the Commission has created a new on-line filing system for these forms and insiders were required to report their trades on SEC forms 3, 4 and 5.</td>
</tr>
<tr>
<td>Section 306</td>
<td>Prohibits any director or executive officer of a company from purchasing or selling any equity security during a pension plan blackout period. This prevents plan participants and beneficiaries from engaging in transactions involving those securities for the specific period when their access price-sensitive information offers them an informational advantage.</td>
<td></td>
</tr>
<tr>
<td>Section 302</td>
<td>Emphasizes on corporate responsibility for financial reports</td>
<td>The section stipulates that each company should fill periodic reports under section 13(a) or 15(d) of the Securities Exchange Act of 1934. As in Section 302, the Chief Executive Officer(s) and the Principal Financial Officer(s), or persons performing similar functions need to certify each report (quarter or annual) filed with the Securities and Exchange Commission (SEC) that: 1-they have reviewed the reports. 2-the report does not contain any false statements of material facts, omissions, etc, under which such financial statements</td>
</tr>
</tbody>
</table>
can be considered misleading.
3- the financial statements correspond to the financial condition and results of operations for the published periods and does not contain material misrepresentations and are fairly represented the CEO and CFO are responsible for internal control problems, the CEO and CFO must report any deficiencies in internal accounting controls, or any fraud involving the management of the Audit Committee; and finally, they must indicate any material changes in internal accounting controls.

<table>
<thead>
<tr>
<th>Section 401</th>
<th>Focuses on the disclosures in periodic reports</th>
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<tbody>
<tr>
<td></td>
<td>Section 401(a) requires that each annual and quarterly financial report filed with the Commission should disclose all material off-balance sheet transactions, arrangements and obligations. Section 401(b) relates to Non-GAAP Financial Measures. It requires that public disclosures of any non-GAAP financial measure by a public company (that are customarily referred to as &quot;pro forma financial information&quot;) must be presented in a manner that: A-Does not contain any false statement of a material fact or omit to state a material fact necessary in order to make the non-GAAP financial measure, in light of the circumstances under which it is presented, not misleading; and B- Merge the Non-GAAP financial appraisal with Generally Accepted Accounting Principles (GAAP).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section 404</th>
<th>Focuses on the management’s assessments of internal control over financial reporting. It further requires that annual reports of public companies to file an annual internal control report as part of their annual report. It holds management directly responsible for internal control structures and must report any</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 409</td>
<td>Authorizes a &quot;Real Time&quot; Disclosure System</td>
</tr>
<tr>
<td>Section 902</td>
<td>Focus on frauds and conspiracies to commit offences. This section asserts that it is a crime to alter, destroy or conceal any document that might hinder fraud investigations or other official proceedings.</td>
</tr>
</tbody>
</table>

Source: SEC

**VII. Comparison of US, UK and EU Regulation of Insider Trading**

The insider trading laws in the United States are based on the common law practice of England, on which the US legal system is based.\(^\text{22}\) Fidrmuc et al.,\(^\text{23}\) suggests that like most EU countries, there are major differences between regulation of insider trading in the US and UK in relation to the primary definition of (illegal) insider trading, the core of the regulation and the length of time before which insiders must report their trades, and the level of the regulations enforcement. These variations of regulation explain how informative a director’s trades are likely to be.

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\(^{22}\) See Newkirk and Robertson (1998)  
\(^{23}\) See Fidrmuc et al.(2006)
Table 4 below summarizes some of the basic differences in the two sets of regulations.

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>US</th>
<th>UK</th>
<th>EU</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Regulatory Authority</strong></td>
<td>Security and Exchange Commission</td>
<td>The main regulator in the UK is the Financial Services Authority.</td>
<td>EU Systemic Risk Council</td>
</tr>
<tr>
<td><strong>Definition of an insider</strong></td>
<td>In the US, the 1934 Securities and Exchange Act defined a top level executive as either officers, directors, companies’ vice presidents and owners of more than 10% of the corporation’s stock of any equity class.</td>
<td>The Criminal Justice Act of 1993 defines an insider as a director, employee or shareholder of issuers of securities or someone who has access to inside information by virtue of their employment, office or profession.</td>
<td>In the EU, insider is considered a director, employee or shareholder of a company or someone who has access to inside information by virtue of their employment, office or profession. In addition focus is put on top senior level professionals.</td>
</tr>
<tr>
<td><strong>Reporting obligations</strong></td>
<td>All insiders listed above.</td>
<td>All insiders listed above.</td>
<td>All insiders listed above.</td>
</tr>
<tr>
<td><strong>Insider trading offence.</strong></td>
<td>An individual is guilty of insider trading when he 1) trades on confidential information about important events affecting the firm, thereby reaping profits or avoiding losses as a result 2) encourages another person who is not in a position to acquire this information to trade and 3) discloses this information to a third party.</td>
<td>An individual is guilty of insider dealing according to the Criminal Justice Act of 1993 when: 1) he deals in securities that are price affected in relation to the information 2) he encourages another person to deal in securities due to information that are price affected and 3) he discloses this information to another person.</td>
<td>An individual is guilty of insider dealing according to Directive 2004/39/EC (MiFID)</td>
</tr>
<tr>
<td>Objective of the rules</td>
<td>In the US, the essence of insider trading rules is that they should abstain from trading or undisclosed information or release this information to the entire public (Hu and Noe, 1997).</td>
<td>Insiders cannot trade within a two month window adjacent to disclosures of interim or finally announcements of earnings or 1 Month prior to a quarterly earnings announcement. Many companies impose a restriction on the Board members that they must only trade in a ten month window following an earnings announcement (see Hillier and Marshall, 2002)</td>
<td>EU regulators have more discretion in authorizing investment firms and intervening in their management since they can judge whether the managers of investment firms or Regulated Markets are sufficiently experienced and reputable; The EU Commission in addition is examining several courses of action for OTC derivatives: standardization, central data repository, central counterparty, clearing and moving trading to more public venues.</td>
</tr>
<tr>
<td>Disclosure time frame</td>
<td>Previously, the SEC allowed until the 10th day of the month following on from the month in which insiders traded to report their transactions. The Sarbanes Oxley Act of 2002 changed the laws in two ways: firstly, insiders were required to report all trades electronically and they should be reported within two business days after they have been executed.</td>
<td>UK disclosure requirements specify that directors must inform their companies without delay about any transaction no later than the fifth business day following the trading date. Subsequently the company must inform the Stock Exchange by the end of the following business day and also enter this transaction in the Company Register. Insider trading information is disseminated immediately to the London stock exchange via the online N/A</td>
<td></td>
</tr>
<tr>
<td>Regulatory News Service (RNS) who further disseminates it to data vendors (Hillier and Marshall, 2002).</td>
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<tr>
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</tr>
<tr>
<td>Primary disclosure site.</td>
<td>Edgar database compiled and hosted by the Securities and Exchange Commission. Insider trading data are on SEC forms 3, 4 and 5 And disclosed</td>
<td>London stock Exchange online regulatory news services</td>
<td>N/A</td>
</tr>
<tr>
<td>Potential penalties and sanctions</td>
<td>One million dollar fine and up to 10 years jail term, a civil fine and up to three times the profit gained or losses that has been avoided (Korczak and Lasfer, 2006).</td>
<td>Up to seven years jail term and unlimited fine.</td>
<td>Undisclosed time frame for jail imprisonment, unlimited fine and ban on future work.</td>
</tr>
</tbody>
</table>


24 In the UK, not all shareholders are considered insiders regardless of the size of their holdings. For example, commercial bankers, brokers, insurance companies, investment banks, investment advisers, employee benefit plans, pension funds, and mutual funds are not viewed as insiders (Fidrmuc et al., 2006).
VIII. Trading by corporate insiders

“Our markets are a success precisely because Americans enjoy the world’s highest level of confidence. (...) Investors trust that the marketplace is honest. They know that our securities laws require free, fair and open transactions.”

Trading by corporate insiders (company directors, officers, and employees) refers to the buying and selling of shares of one’s own company or that of one’s employing company. The Securities and Exchange Commission (SEC), which regulates such trading in the United States under the powers granted to it by the 1934 Securities and Exchange Act define an insider as:
- Any officer with the authority to influence the entire company, in other words, makes policies for the company;
- A director;
- An owner of more than 10 percent of any equity class of stock (This includes not only executives working for a corporation, but also other entities such as mutual funds, hedge funds or institutions who hold an amount equal to or greater than 10% of issued and outstanding shares).

Academic research in this area has focused on evaluating the sources and consequences of an insider’s informational advantage. Hence, the various researches have investigated whether insiders earn abnormal profits from their trades at the expense of outside investors. Previous studies have examined the types of information that insiders are privy to, the sources of the informational advantages that they enjoy and the extent of the advantages and disadvantages to the market of any regulation of their privileged position. Frequently, insiders sell (buy) after an increase (decrease) in prices and their trades are frequently followed by a partial price reversal.

It is a generally held belief in security markets that when insiders are buying their own stock, it is because they believe the stock is set to increase in value. However, when they sell, that could be so, for a number of reasons and not simply because they believe the value of the firm’s share price may drop.

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26 See Ke et al. (2003)
This suggests that insider buying may be a good signal regarding corporate prospects, but insider-selling motive may be a more difficult indication to interpret. Insider trading has been a term that most investors associate with illegal conduct as it may involve short-term market timing. Scholars and regulators have often differentiated aspects of the trade that may be regarded as illegal. The SEC defines illegal insider trading as being the buying and selling of securities involving a breach of fiduciary duty, or some other relationship of trust and confidence. Such violation involves trading while in control of material non-public information about a security.

Generally, possession of information might not be a crime as mandated by the SEC, especially when the information is not a factor in the decision of the trade. If the information is material, then it is the responsibility of Insiders to report to other investors rather than engage in trading based on such knowledge. In most class litigation actions, the type of insider trading frequently discussed is the illegal insider trading that involves material non-public information. This relates to trading in securities that takes place when insiders are privileged to confidential information about important events affecting the firm and use the information to gather profits, or to avoid losses, on the stock market.

This is done to the detriment of other investors who buy or sell their stock without the advantage of knowing the information the insider possesses. Legal prohibition of UK insider trading was recently adopted in securities regulation, as it did not become a criminal offence to trade while in possession of firm specific information until sometime in the 1980’s. Thus the Criminal Justice Act (1993) and the Financial Services and Market Act of 2001 were enacted, prohibiting insider trading in the UK. The Act stipulates that it is a criminal offence to deal or encourage another person to trade or disclose inside information. While, insider trading was not specifically forbidden by the Securities and Exchange Act of 1934, improvements of US security laws dating back to the 1960’s have identified aspects of insider trades that can be considered a criminal offence.27

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27 See Jaffe (1974)
IX. The impact of regulations

The impact of financial reporting regulations to improve earnings quality has also been investigated by scholars. After the accounting scandals at Enron and WorldCom and the certification requirements imposed by the Sarbanes–Oxley Act, managers’ preferences for the mix between accruals accounting versus real actions to manage earnings may have changed.\footnote{28 See Graham et al. (2003)} The basis for the Act was filled by concerns relating to the integrity of financial statements, which caught the attention of investors and policy makers charged with protecting the investment community.\footnote{29 See Jenkins et al. (2006)} Since real earnings management activities are often difficult to understand, when managers are faced with stricter financial reporting regulations like the SOX, they are more likely to swap accruals with real earnings management.

A bulk of research papers have provided evidence that is consistent with the expectation that SOX has made accrual-based earnings management more costly, with managers substituting from accrual to real earnings management.\footnote{30 See Cohen et al. (2004) and Cohen and Zarowin (2008)} The arguments above suggest that, under stricter regulations and with managers exposed to different techniques that can be substituted under competing circumstances, the ability of investors to manage earnings is questionable. In the US, the SEC has the mandate to regulate information motivated trading by insiders (not necessarily illegal trades) and aspects of earnings management. Specifically, the 1934 Securities and Exchange Act and their subsequent amendments have consistently imposed different restrictions on insider trading and earnings management relationship. After several meetings, the Sarbanes-Oxley Act was enacted in October 2002, aimed at improving the integrity of financial statements and to suppress insider trading based upon foreknowledge of price sensitive information. Section 302 of the SOX 2002 requires insiders to accept responsibility for the integrity of financial statements and they are obliged to certify that financial statements are not misleading and fairly represent the company’s operations.
Additionally, section 16b of the Securities and Exchange Act requires all insiders to return to their corporation any capital gains made from a purchase or sale of their company’s stock, if both dealings took place within a six month period (also referred as to short swings profits). The short swing rule was implemented to prevent insiders, who have better access to non-public material information, from taking advantage of such information for the purpose of making short term profits. Apart from regulatory mechanisms by the SEC, a significant number of US firms do impose extra legal (company policy) trading restrictions on insiders.\(^{31}\) In general, the restrictions on the US system on insider trading surrounds the fact that, insiders must either abstain from trading on undisclosed information or release this information to the public before they execute their trades.\(^{32}\)

**X. Changes after the enactment 0f Sarbanes Oxley Act 2002**

SOX have imposed significant financial and other penalties on those who violate security laws. In addition, insider trading has been banned during pension fund blackouts. The speed of reporting has also changed and this is likely to have major implications on the ability of insiders to earn abnormal returns at the expense of outside investors. Before the SOX legislation, the SEC has given insiders to report their trade transactions until the 10th day of the month following the month in which the trade has been executed. This suggests that they had effectively up to 40 days to report their trades after the earnings announcement. After the SOX, insiders were required to electronically report their trades after its execution within two business days.

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31 See Bettis et al. (2000)
32 See Hu and Noe (1997)
XI. Legal rights of outside investors

Leuz et al,\(^{33}\) examining the extent to which Insiders overstate performance to outside investors established that, when legal protection for outside investors is low, this may act as an incentive for insiders in publicly-traded firms to overstate performance to outside investors. The legal rights accorded to outside investors and the qualities of their enforcement are both associated with the properties of firms’ accounting earnings. Ball et al,\(^{34}\) argues that an improvement in the legal rights of all stakeholders, modification of accounting standards and enforcement actions weakens the demand for timely and conservative accounting income, and equally increases the demand for an income variable with low volatility. In these countries whose legal system originates from code-law, the strong political influence on accounting occurs at national and firm levels. Governments launch and enforce national accounting standards, usually with representation from major political groups and external stakeholders such as labor unions, banks and business associations. Such a setting makes sure the rights of every stakeholder are respected. Thus, there are variety of penalties that can be imposed, such as financial and criminal, but also mediate penalties, such as market, reputational and personal penalties.

XII. Firm performance and earnings

SOX have been designed to improve the quality of financial reporting, thus investors and analysts need to be more cautious and recognize material weaknesses in financial reports. SOX need to provide more credibility to financial reporting and provide investors with more confidence. Hence, the purpose of this chapter is to empirically assess the relationship between a comprehensive set of earnings management signals and future firm performance. Its prime purpose is to verify whether there have been substantial benefits to investors from recent legislation enacted as a response to the corporate scandals through improvements in earnings quality as a result of the SOX and if investors are able to discount the level of earnings management in the financial statements.

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34 See Ball et al. (2000)
According to Dechow et al., firms subject to SEC investigation for earnings management showed an average stock price decline of 9% at the day of the announcement of the earnings management. There is further evidence of significant negative stock market responses to allegations of earnings management by the financial press or the SEC, which is an indication that investors do not always investigate financial reporting impropriety. Assuming there was a large decline in earnings quality before the enactment of the SOX, an important question might relate to how SOX can constrain earnings management practices and how investors can avoid huge loses if earnings management is discovered and must be unraveled.

After the SOX enactment, stocks of suspect firms (firms with low earnings quality as measured by the probability of manipulation, abnormal changes in the various accruals and real earnings management items) show negative stock price performance, while those of non-suspect firms (firms with high earnings quality) show positive stock price performance.

An examination of the relationship between earnings and performance during the period 1997 to 2006 based on a sample of Forbes 500 firms has been performed and illustrated in Appendix 1. The results suggest that the quality of earnings has improved after the introduction of the SOX and even without the use of accruals, insiders do not trade based on the knowledge of future returns. Overall, the results suggest that market participants detect and react to insider trading and earnings management practices under an effective regulatory regime.

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35 See Dechow et al. (1996)
XIII. Conclusion

As stated in the beginning of this paper, many scholars argue that insider trading is efficient and public regulation is inefficient, while others argue the opposite. Hence, this paper vastly examined and compared the regulatory framework in USA, UK and Europe concerning insider trading. In addition, the impact of the enacted regulations and the consequences, and changes has been further examined in order to determine the results of pre and post regulation implementation.

All in all, the results suggest that the variety of legislation and most significantly – the SOX 2002 has improved the integrity of the US financial market. Based on the new laws enacted in the USA, UK has followed the implementation of new financial market regulation legislation. Hence, strict insider trading regulations makes it risky for managers to trade and manage earnings to benefit from prior insider trading. In normal business conditions, insiders’ private information (as disclosed by their trades) plays an important role in forming expectations about their earnings. However, when regulations are enforced, insiders are less likely to use their superior information for their own benefit and in breach of other investors’ expectations.
XIV. References

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Earnings vs. Performance

Pre and post SOX 2002

Sample Selection

The original sample is the Forbes 500 firms as at March 2007 for the period 1997-2006. To estimate earnings management, the researchers collected different accounting and insider trading data for the respective firms from the period 1997-2006. Insider-Trading data has been collected from two sources. Between the periods 1997-2000, the data has been collected from the US National Archives & Records Administration. From 2001-2006 the data has been collected from the Edgar filings compiled by the Securities and Exchange Commission (SEC). Nevertheless, all the data collected is a summary of filings in the SEC form 3, 4, and 5 by insiders to the Security and Exchange Commission and there are no differences in the data. The file summarizes insider trading transactions in all publicly held firms.

Table 5 below reports descriptive statistics for the overall sample period for the pre and post SOX period.

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Table 5: Descriptive Statistics for the differences in Mean in the Pre and Post SOX period

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean Pre SOX</th>
<th>Mean Post SOX</th>
<th>Differences in Means (Post SOX - Pre SOX)</th>
<th>T-statistics.</th>
</tr>
</thead>
<tbody>
<tr>
<td>TA</td>
<td>-0.0590</td>
<td>-0.0410</td>
<td>-0.0185</td>
<td>-5.35</td>
</tr>
<tr>
<td>NDA and DA</td>
<td>-0.0220</td>
<td>-0.0020</td>
<td>-0.0193</td>
<td>-5.10</td>
</tr>
<tr>
<td>Non-Discretionary Accruals</td>
<td>-0.0421</td>
<td>-0.0401</td>
<td>-0.0020</td>
<td>-0.82</td>
</tr>
<tr>
<td>M-Score</td>
<td>-3.0900</td>
<td>-3.2940</td>
<td>0.2044</td>
<td>4.19</td>
</tr>
<tr>
<td>Net Income</td>
<td>0.0584</td>
<td>0.0628</td>
<td>-0.0045</td>
<td>-0.90</td>
</tr>
<tr>
<td>Annual Returns</td>
<td>0.2250</td>
<td>0.1410</td>
<td>0.0842</td>
<td>4.58</td>
</tr>
<tr>
<td>Leverage</td>
<td>1.0210</td>
<td>1.0290</td>
<td>-0.0077</td>
<td>-0.37</td>
</tr>
<tr>
<td>Size</td>
<td>26312676</td>
<td>44429384</td>
<td>-18116708</td>
<td>-5.75</td>
</tr>
<tr>
<td>Market to Book Value</td>
<td>4.4000</td>
<td>3.8000</td>
<td>-0.6190</td>
<td>1.37</td>
</tr>
<tr>
<td>Net Shares Traded</td>
<td>-0.0075</td>
<td>0.0022</td>
<td>0.0096</td>
<td>-4.18</td>
</tr>
</tbody>
</table>


**TA, NDA and DA** are the total, non-discretionary and discretionary accruals as measured by the modified Jones (1995) model.

\[ TA = \frac{(DCA_t - DCL_t - DCash_t + DSTD_t - DEPt)/(A_{t-1})}{}, \]

On average, the data illustrated in Table 5 shows that discretionary accruals under the modified Jones Model reduced from the pre SOX rate of -2.2000 percent of total assets to the post SOX rate of -0.2200 percent of total assets. The difference of mean between these periods is statistically significant and is -0.0193 with t stats of -5.1000. The Non-Discretionary 125 estimates suggest that in the pre SOX era firms employ negative non discretionary accruals - 0.0421 and in the post SOX era - 0.0401. The difference of mean between the Pre and Post SOX period is -0.0022 and t-statistics of -0.8200. In the Pre (Post) SOX era, the M-Score is -3.0900 (-3.2941) suggesting that overall, the probability of earnings manipulation is low. The difference in mean is 0.2044 and the t stat is 4.19. The net income in the Pre (Post) SOX period is 0.0582 (0.0628) suggesting that firms are more likely to be profitable before the SOX era. The difference in mean is -0.0045 and the t stat are -0.90. The annual returns in the Pre (Post) SOX era is 0.2255 (0.1414) suggesting that in both period, investments are more likely to be profitable. The differences in mean between the Post and Pre SOX period is 0.0842 and the t-stats is 4.58. The net shares traded for the Pre SOX period is -0.0075 suggesting that insiders are more likely to be net sellers before the passage of the SOX Act, however, in the Post SOX period, the net shares traded is 0.0022 suggesting that after the SOX period, insiders are more likely to be net buyers. The differences in mean between the Post and Pre SOX period is 0.0096 and the t stat is -4.18.