

INVESTOR PROTECTION, DISCLOSURE REGULATION AND FINANCIAL MARKET: INTERNATIONAL EVIDENCE

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Abstract

In this research, we are interested in financial market regulations protecting minorities across countries and especially disclosure rules of changes in ownership structure. Different disclosure policies around the world are set. The Sarbanes-Oxley act of 2002 in the USA requires the ownership reports and trading by officers, directors and principal securities holders. However, European directives require disclosure of significant crossing of shareholding thresholds. Despite similarities between the US rules regarding disclosure of insiders trading transactions and European large holding directive for crossing of shareholding thresholds in terms of protection of minorities' requirements, they are two different strategies. The American strategy focuses on the identity of the shareholder "insider" as opposed to European strategy which focuses on the threshold crossed by the shareholder (ownership concentration). However, recent regulatory developments in European Union have aligned insider trading regulation to US requirements in terms of disclosure policies. The questions we address are: Why did European countries adopt the American strategy of insider trading disclosure recently with the market abuse directive? Is it only by imitation, or is the American strategy protecting minorities more efficient than the European one? The objective of this research is to examine the efficiency of the investor protection regulations around the world. So, we compare alternative disclosure policies of the changes in ownership structure under different economy-wide regulatory environments. First, we compare the information content of insider trading disclosure policy for the ten first listed companies in the USA and in France. Second, the study contributes to the corporate governance literature by comparing two disclosure ownership structure policies: the insider trading disclosure and the crossing of shareholder thresholds disclosure. The results of the event study methodology, comparing market reaction to the insider trading and crossing shareholder thresholds in US and France context, shows that while the market doesn't react to the disclosure of insider trading in American context, the insider trading has a significant effect on the market reaction in French context. On the other hand, the market reacts more strongly to the insider trading filling than to the crossing thresholds.

Key words: insider trading regulation, crossing shareholding thresholds disclosure, event study, information content, the market abuse directive, the directive 2004/72/EC.

Introduction:

In this research, we are interested in financial market regulations protecting minorities across countries and especially disclosure rules of changes in ownership structure. The acquisition or the disposal of shares by controlling shareholders and managers has important implications for monitoring and reveals new information about the firm value. For this reason regulators require the disclosure of any changes in equity stakes held by those persons. Different disclosure policies around the world

are set. The American regulation enacted by the Sarbanes-Oxley act of 2002 requires the ownership reports and trading by officers, directors and principal securities holders. In Europe, since 1988, the large holding directive 88-627 is intended to assist the integration of securities markets in the European Union by harmonizing disclosure requirements for all issuers whose securities are publicly traded in the European Union. The directive seeks to harmonize the minimum thresholds for disclosing significant crossing of shareholding across European Union. The European council stated that this disclosure of changes in ownership structure is likely to improve investor protection and to increase investor confidence. Despite similarities between the US rules regarding disclosure of insiders trading transactions and European large holding directive for crossing of shareholding thresholds in terms of protection of minorities' requirements, they emerge from two different strategies. The American strategy focuses on the identity of the shareholder "insider" as opposed to European strategy which focuses on the threshold crossed by the shareholder (ownership concentration).

However recent regulatory developments in European Union have aligned insider trading regulation to US requirements in terms of disclosure policies. The market abuse directive specifies that persons with managerial responsibilities should notify competent authorities about transactions in their firm's securities which must then be disclosed to the public. The notifications of managers' transactions were introduced by directive 2004/72/EC which defined the persons required to report their transactions as administrators, managers or supervisors in the firm. Therefore, European countries implement insiders trading disclosure requirements in the same way as the US without breaking down the crossing threshold disclosure requirements.

Our principal contribution is to examine directly the financial market rules protecting minorities and to examine the efficiency of these rules. The questions we address are: Why countries adopt different investor protection rules? Why did European countries adopt the American strategy of insider trading disclosure recently with the market abuse directive? Is it only by imitation, or is the American strategy protecting minorities more efficient than the European one? How do investors evaluate disclosures of changes in ownership structure and how do changes in monitoring intensity affect investor wealth? By addressing these questions, we hope to evaluate the benefit of different strategies protecting minorities around the world.

The objective of this research is to examine the efficiency of the investor protection regulations around the world. To reach this objective, we compare alternative disclosure policies of the changes in ownership structure under different economy-wide regulatory environments. First, we compare the information content of insider trading disclosure policy for the ten first listed companies in the USA and in France. Second, the study contributes to the corporate governance literature by comparing two disclosure ownership structure policies: the insider trading disclosure and the crossing of shareholder thresholds disclosure. In order to do that, we test how financial markets react to the insider trading report and to the disclosure of the crossing of shareholding threshold in two different systems: the common law system and the civil law system. We choose one country from each system: the US as a common law country and France as a civil law and European country. We analyze also the differences in market reaction to announced insider trading regulation stemming from differences in country level corporate governance institutions (US and France). If disclosure rules matter, we should not expect the same market reaction for the two countries.

The literature puts forward two alternative hypotheses with opposite predictions. First, good corporate governance institutions have a positive effect on price adjustments after insider trading report. In countries with better corporate governance institutions, insider actions are more credible and therefore the precision of the information conveyed in insider trading announcements is higher and prices adjust more after insider trading disclosures. Second, better corporate governance may decrease market reaction to insider trading due to higher precision of information about underlying firm value just before insider trading announcements. In these countries, more information incorporated in prices just before insider trades is then associated with lower price adjustments after a disclosure of the trade (Fidrmuc et al (2009)).

The results of the event study methodology, comparing market reaction to the insider trading and crossing shareholder thresholds in US and France context, shows that while the market doesn't react to the disclosure of insider trading in American context, the insider trading has a significant effect on the market reaction in French context. On the other hand, the market reacts more strongly to the insider trading filling than to the crossing thresholds. We conclude that the insider disclosure

regulation has more information content, on average, than the crossing shareholder thresholds disclosure regulation.

1- Investor protection, corporate disclosure and financial markets: A conceptual framework

1-1- Investor protection: Identification of the problems and the solutions from the literature:

1-1-1- Information asymmetry:

Firms would like to attract investors to finance their business ideas. The problem of the efficient allocation of resources in a capital market economy consists of an optimal matching of savings to business investment opportunities. Investors lack sufficient information to evaluate the value of investment opportunities. In an uncertain environment, decisions and actions of managers are not directly observed by investors. Managers can justify the negative results of the firm by an uncertain economic environment. The problem is that investors cannot establish a link between the negative results of the firm and the decisions of managers through their own information for the reason that the decisions and acts of managers are not observable by investors. Therefore, a problem arises from the information difference or asymmetry between managers and investors. This 'lemons' problem can lead to a breakdown in the functioning of the capital market (Healy and Palepu 2001). Capital markets will undervalue some good investments and overvalue some bad investments due to information available for the investors. The lemon problem can be defined in a larger way between the insiders (managers and controlling shareholders) and the outsiders (minorities and other investors) because the controlling shareholders do not communicate to outsiders information on the firm activities, management competences, earning forecasts and investment opportunities.

There are several solutions to the information problem. First, the optimal contracts between insiders and outsiders will provide incentive for disclosure of private information. Second, regulation can mitigate the information problem and require a full disclosure of the private information. Third, financial intermediaries such as financial analysts, industry experts and financial press engage in private information

production to uncover insiders' superior information. In this research we are interested in the second solution to the lemons problem which is regulation of information disclosure by the competent authority such as the SEC, CMF, AMF...

These authorities require disclosure of changes in ownership structure. In fact, insider transactions which modify the ownership structure statement give investors relevant information regarding future opportunities of prosperity for the firm. This information is known only to insiders, and outsiders cannot directly observe these transactions. Therefore, the information asymmetry can be resolved through regulation of the disclosure of changes in ownership structure.

1-1-2- Agency problem-investor protection problem:

The agency problem arises from conflicting incentives between managers and investors. When an investor acquires an equity stake in a firm, his intention is to receive dividends without playing an active role in management. Management is delegated to the entrepreneurs who have conflicting objectives and interests with shareholders. For example, managers have no incentive to take on high risk projects. However, a high risk project can benefit shareholders and maximize their performance. Alternatively in the event of financial failure of the project, the debtholders will be harmed with negative consequences to the manager's career. The second source of conflict is the expropriation of shareholder funds. Managers have an incentive to use the firm's profits to benefit themselves. Managers can expropriate investor funds by acquisition of perquisites, payment of an excessive compensation or the sale of the assets to another firm they own at below market prices. The obvious agency problem between managers and shareholders can be extended in a larger way to the agency conflict between inside shareholders and outside shareholders. If a shareholder acquires an important equity stake in the firm he will intend to take his place on the board of directors and therefore participate in management decisions. In this situation his interest in the firm will be different from that of minority shareholders. The expropriation problem will arise again, and he may maximize his profit from the private benefits of control. The agency problem discussed between manager and shareholders will be defined between insiders and outsiders in a greater way as a problem of minority protection.

There are several solutions to the agency conflict or the minority protection problem between inside shareholders and outsiders. Optimal contracts such as compensation agreements and debt contracts seek to align the interests of insiders to the external equity and debt claimants. These contracts require the disclosure of relevant information that enables investors to evaluate the decisions and acts of managers and controlling shareholders. Another solution is that the board of directors whose role is delegated from the outside shareholders is instructed to monitor and discipline management. A third solution is for the financial intermediaries who produce information to evaluate the competence of the managers through their good or bad management decisions. The market for corporate control which includes the threat of hostile takeovers also plays an effective role in mitigating the agency problem.

The agency frameworks present a variety of mechanisms to eliminate the agency problem such as contracts, disclosure, financial intermediaries, corporate governance and market for corporate control. Healy and Palepu (2001) suggest that the effectiveness of these mechanisms is an empirical question “whether contracting, disclosure, corporate governance, information intermediaries and corporate control contests eliminate agency problem is an empirical question. A variety of economic and institutional factors determine their effectiveness, including the ability to write and enforce optimal contracts, potential incentive problems for corporate boards and intermediaries and the nature of the corporate control market”

In this research we focus on the effectiveness of the regulated disclosure and corporate governance in mitigating the agency problem or the investor protection problem and information asymmetry. Disclosure of the changes in ownership structure is intended by the competent authorities throughout the world to inform and protect the investors. Investors need information about the main shareholders and the management shareholders in the firms. The disclosure of any modification in ownership structure gives the investor the possibility to appreciate the control and the future perspectives of the firm.

1-2- Regulation of disclosure and financial markets

1-2-1- The role of disclosure regulations

In this research, we examine the role of corporate disclosure in financial markets. Firms provide disclosure through regulated financial reports such as financial statements, footnotes, management analysis and regulatory filings of changes in ownership structure essentially for publicly traded corporations recommended by the competent authority. The role of disclosure in the financial market emerges from the information asymmetry and agency problems.

There are important questions in disclosure regulation framework including: Is there a need for disclosure regulation in capital markets? What is the economic theory that justifies the regulation of disclosure? What types of disclosures should be regulated? What are differences between countries in disclosure regulation? How effective are disclosure rules in protecting minorities? Are there economic factors that make regulation more or less effective?

Two arguments are identified by researchers to justify the prevalence of disclosure regulations around the world (Healy and Palepu (2001)). The first argument is the market imperfections and externalities. By creating disclosure requirements, regulators improve economic efficiency. The second argument is other concerns of regulators different from the market imperfections such as ‘the welfare of financially unsophisticated investors’. Therefore, disclosure regulation can reduce the information gap between informed and uninformed and redistribute wealth.

The second question of what types of disclosures should be regulated remains an important debate. There are significant regulations requiring reporting and disclosure around the world: accounting, finance, corporate governance, insider trading...

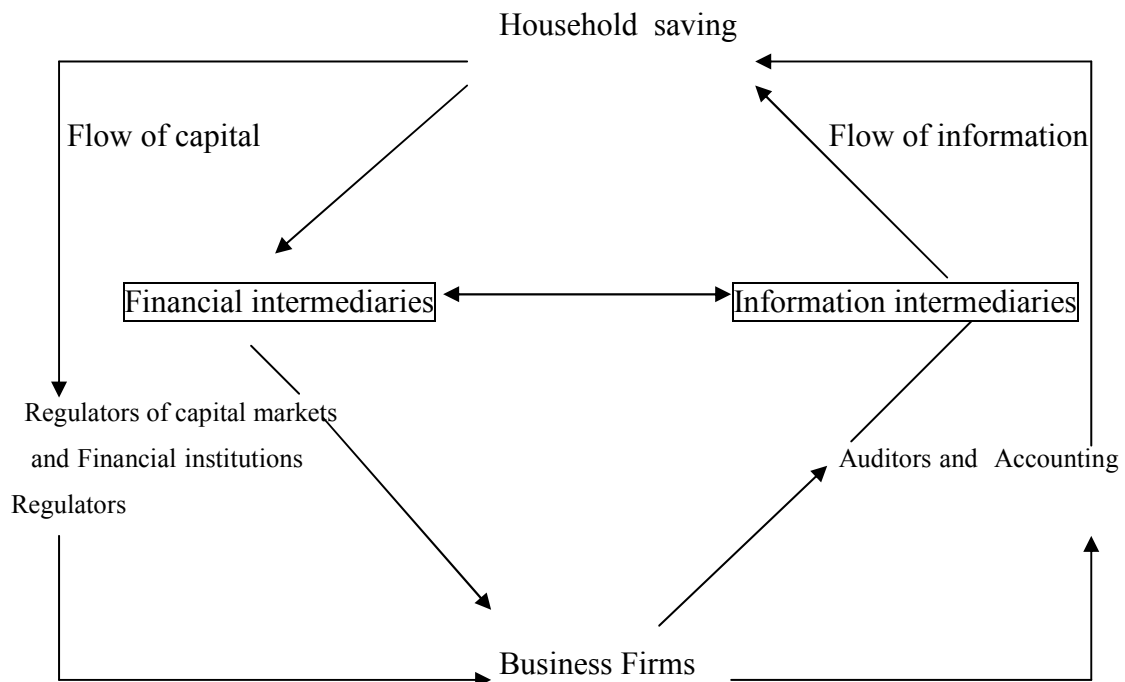
In accounting, regulators tend to provide financial reporting choices used by managers in presenting financial statements. Accounting standards will be an accepted language used by managers to communicate with investors. Much research arises in accounting

to examine the value added by the accounting standards for investors. The first branch of accounting research investigates the relationship between accounting information and security price (for more information Kothari 2001). They conclude that regulated financial reports provide relevant information to investors. However the informativeness of accounting information varies with firm and country characteristics (Ball et al 2000). The second branch of accounting research examines the value relevance of information presented under proposed new financial reporting standards. Association studies are used between earning and value relevance measured by stock price and returns. They conclude that the most recent standard gives value relevant accounting information (for more information Holthausen and Watts 2001).

In corporate governance, regulation tends to provide information that reduces the agency problem and the information asymmetry between manager and shareholders and to establish investor protection. Rules protecting minorities such as board of director regulation (responsibilities and diligences), shareholders meeting rules (rules of quorum and majority required), financial market regulation, SEC rules, AMF rules...

1-2-2- The conceptual model of disclosure regulation

Healy and Palepu (2001) suggest that the critical challenge for any economy is the optimal allocation of resources. Firms would like to attract investor saving to finance their business ideas. The efficient allocation of resources in a capital market economy consists of an optimal matching of savings to business investment opportunities. Healy and Palepu (2001) provide a schematic of the capital flow and information flow in a capital market economy.



*Fig.1: Financial and financial flows in a capital market economy
Healy and Palepu (2001) p 408*

The matching of saving to business investment is complicated for two reasons: the information problem and the agency problem. Corporate disclosure plays an important role in mitigating the information and agency problems between insiders and investors. We try to develop the schematic of Healy and Palepu (2001) by adding the role of disclosure and corporate governance mechanisms in a capital market economy.

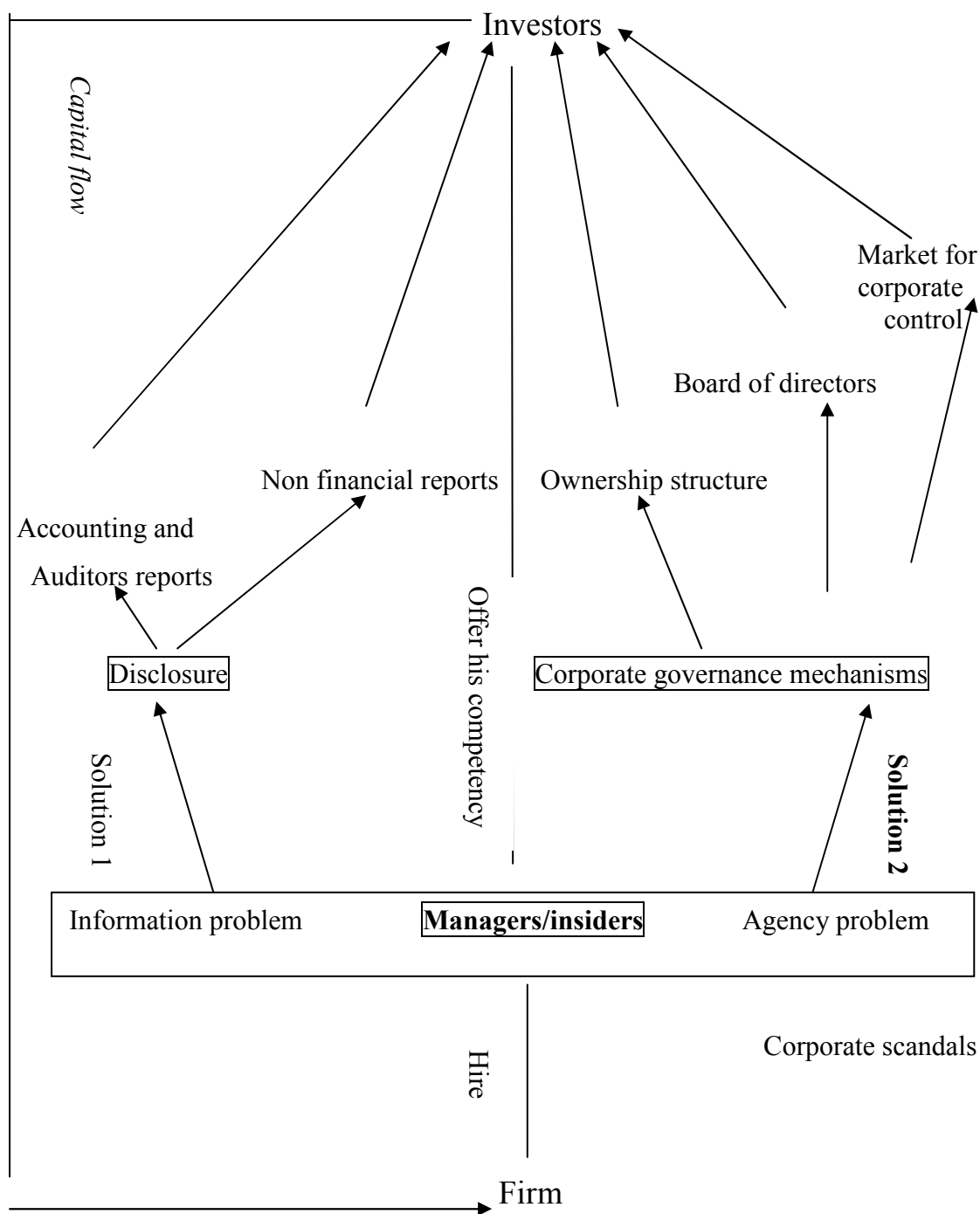


Fig.2: Role of disclosure and corporate governance mechanisms in a capital market economy

The left side of Fig.2 presents the flow of capital from investors to firm. When investors acquire an equity stake in a firm they have the intention to receive dividends without playing an active role in management. They hire entrepreneurs as managers of the firm who must offer their competency to investors. Only managers and large

shareholders (insiders) have control of the firm’s decisions and managements. They have superior information and can expropriate the investor funds. For these reasons, two problems appear, the asymmetry information and the agency problem between managers or insiders and investors, and lead to corporate scandals. There are two solutions to remedy these problems. The first solution in the left side of the schematic is the disclosure which can be financial or non financial. The second solution given in the right side is the corporate governance mechanisms. These mechanisms include ownership structure, board of directors and market for corporate control.

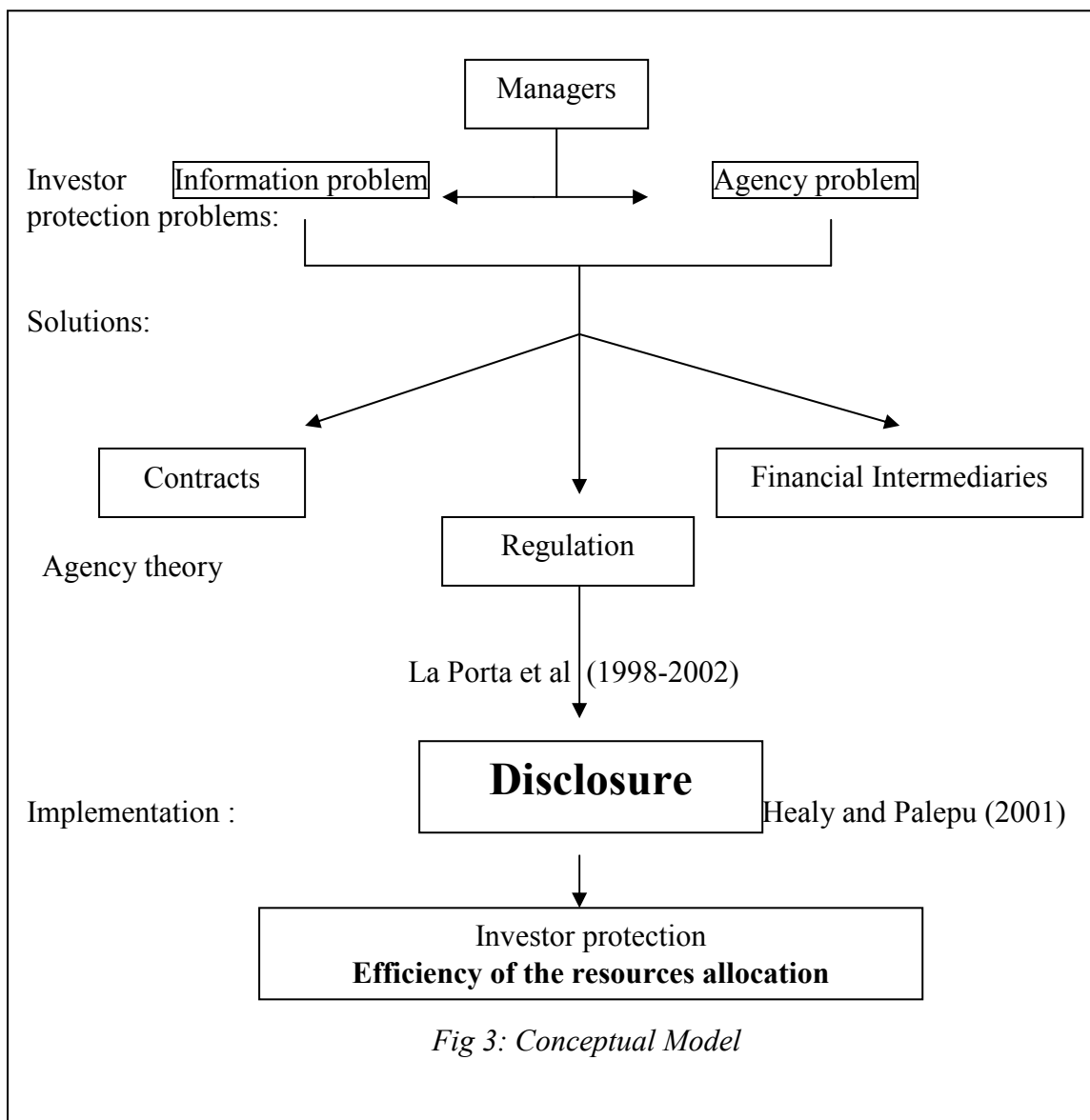


Fig 3: Conceptual Model

Healy and Palepu (2001) provide a framework for analyzing disclosure in capital market setting but they focus essentially on accounting and financial disclosure. They review the empirical research on financial reporting. Much research

concludes that regulated financial reports provide relevant information to investors (Kothari 2001). However, several recent studies document a decline in the level of the value relevance of earning and financial statement items over the last 20 years. Brown et al (1999) find that the relationship between stock returns and earnings and between stock prices, earnings and book values have deteriorated over time.

There is considerable research on the value provided by auditors in reviewing firms' disclosures. Studies of audit effectiveness examine whether audit qualifications add value for investors and whether auditors' actions are independent. They conclude that investors require firms to hire an independent auditor as a condition of financing, but there is no research that examines directly whether or not auditors enhance the credibility of the financial reports. Research regarding market reaction to audit qualifications indicates that qualified opinions do not provide new information to investors, because audit qualification confirms the information already available to investors (Dodd et al 1984).

The financial disclosure appears unfortunately insufficient in mitigating the agency and the information problems: First because the credibility of accounting information is contested; e.g., earnings management, accounting manipulation; Second because the value provided by auditors in reviewing firm disclosure depends on their credibility which is also contested. That is why non financial information plays an important role in filling the lack of accounting disclosure. Licht (2001) argues that companies need to disclose information beyond financial statements such as "soft information, immediate disclosure of material events, detailed personal breakdown of top management remunerations and the identity and the intentions of shareholders who cross certain holding thresholds. These issues are also relatively more critical to corporate governance".

We believe that non financial disclosure is a rich field of research. Investors need information other than financial, perhaps because the corporate scandals have shown how the accounting information can be manipulated and how managers and insiders can expropriate investor funds. For these reasons, information protecting investors is of great interest for outside shareholders. La Porta et al (1998-2002) suggest that investor protection rules are central for understanding corporate finance.

When investors finance firms, they look for the firm in which their rights are protected by law. Disclosure rules must give the investor the ability to appreciate how their rights are protected. In this research, we are interested in the non financial disclosure regulations and especially disclosure rules protecting minorities (insider trading disclosure requirements and large shareholders disclosure rules). The objective of this research is to examine the efficiency of the disclosure rules protecting minorities of insider trading and crossing shareholding thresholds in US and in France.

2- The information content of the ownership disclosure rules: a literature review

In the literature, we lack evidence on the information content of the crossing shareholding thresholds disclosure regulation. Jardak et al (2006) investigate market reaction to the crossing shareholding thresholds for Tunisian listed firms in the BVMT and find that market reacts only if the crossing shareholding threshold provokes a change in monitoring intensity or in the distribution of control within the firm¹.

In fact, most of the important research focusing on ownership disclosure rules has investigated the information content of the insider trading disclosure regulation. Insider transactions convey new information to outsiders. By purchasing (selling) shares in their firm directors communicate a positive (negative) signal about the value of the firm to the market.

2-1- The information content of insider trading disclosure: Evidence from one institutional context

In the US, the evidence of the information content of insider trading regulation before SOX is mixed (Aboody and Lev 2000, Lakonishok and Lee 2001). Lakonishok and Lee (2001), Syhun (1986), Lin and Howe (1990), Chang and Suk (1998), find that

¹ Maha. KH. Jardak, Hamadi. Matoussi, and Adel.Karaa (2006) "Changes in the ownership structure and financial : Evidence from the crossing shareholding thresholds in the BVMT", EURO-MEDITERRANEAN ECONOMICS AND FINANCE REVIEW, Vol. 1, N°4, September 2006, p. 145 .

corporate insider trades are associated with abnormal stock market returns. Aboody and Lev (2000) document positive (negative) abnormal returns in the days following insider purchases (sales) but before their public filings. After SOX, Brochet (2009) investigates the information content of insider trading under the more timely disclosure rule introduced by the SOX. He finds that abnormal returns and trading volumes around filings of insider stock purchases are significantly greater after SOX than before. Abnormal trading volumes around filings of insider sales are also greater after SOX. The timely disclosure of corporate insider purchases generates significant market reaction in the US.

In the UK, Gregory et al (1997) find positive abnormal returns for the UK over the horizons of 6 to 12 months following director purchases. The research of Friederich et al (2002) on daily share prices corroborates this finding for short time horizons. Recently, Fidrmuc et al (2006) investigated the immediate market reaction to UK director transactions and found larger abnormal returns in the UK than those documented by Lakonishok and Lee (2001) in the US context before SOX reform because reporting of trades in the UK is speedier than in the US. This result confirms that the disclosure timeliness rule of insider trading introduced by SOX gives additional information content of insider trade filings as shown by Brochet (2009). Fidrmuc et al (2006)² find that the director transactions submit new information to the market even when preceded by news releases on the firm's prospects, corporate restructuring, changes in capital structure, board restructuring and other business news. The information content of trades is smaller when news on mergers and acquisitions precedes the trades. The results also demonstrate that the market takes into account ownership structure when reacting to director trades. The market reaction differs significantly depending on the degree of outsider ownership, director ownership and the type of the outsider ownership. Director trades in firms with outside blockholders who monitor the firm may have relatively less informational value than director's trades in widely held firms which suffer from higher information asymmetry. Firms controlled by other companies or by individuals have significant lower CAR. However director trades convey higher information when firms are

² Fidrmuc et al (2006), "Insider trading, news releases and ownership concentration", *Journal of Finance*, 61, P2931-2973

monitored by institutional blockholders. Also firms with little director ownership have stronger market reaction to the director purchases.

In Germany, a country with a bank dominated financial system; Betzer and Theissen (2005)³ analyze insider trading for Germanic listed firms between July 2002 and June 2004. They find that insider purchases (sales) are associated with positive (negative) CAR. They related the importance of CAR to the position of the insider within the firm (member of the executive board and member of the supervisory board) and to the ownership structure of the firm. Insider sales in firms with dispersed ownership structure have the larger price impact. However, the position of the insider within the firm has no impact on the magnitude of the CAR. CEO trades do not convey more information than trades by other insiders. Insider trades that occur prior to the earnings announcement have a larger price impact. This result is consistent with larger informational asymmetry between corporate insiders and capital market participants prior to earning announcements and provides a rational reason for the UK regulation that prevents insiders from trading 2 months preceding final and interim earnings announcements and one month prior to the quarterly earnings announcements. In Germany these rules do not exist.

2-2- The information content of insider trading disclosure: International evidence

Research in the international context of insider trading regulations and enforcements has investigated institutional corporate governance differences and their impact on insider trading effectiveness.

Durnev and Nain (2006)⁴ examine whether insider trading restriction laws achieve the primary objective for which they are introduced – protecting uninformed investors and reducing the incidence of private information based trading. Firms in countries with stricter insider trading restrictions are less subject to private information. Thus, insider trading reduces private information. They next examine whether this result varies across firms due to the differential effect of insider

³ Betzer and Theissen (2005) “insider trading and corporate governance- the case of Germany” working paper, 2005 EFM symposium on European corporate governance.

⁴ Durnev and Nain (2006) “The Effectiveness of Insider Trading Regulation Around the Globe” working paper, American Law and Economics Association Meetings, 2004.

trading restriction on the trading behavior of informed outsiders and use the concentration of control rights in a firm as a distinguishing factor. Fernandes and Ferreira (2007) have investigated the relationship between a country's first time enforcement of insider trading and the value of stock market information as measured by firm specific stock return variation using data from 48 countries over 1980-2003. They find that enforcement of insider trading laws improves price informativeness in developed markets. However, in countries with poor legal institutions, law enforcement does not improve price informativeness.

Fidrmuc et al (2009)⁵ investigate the effect of corporate governance institutions on market reaction to the insider trading across 15 European countries and the US. The results for over 100000 purchases and 144000 sales illustrate that corporate governance does matter for cross country differences in market reaction to insider trading. Insider purchases are associated with strong market reaction in countries with better corporate governance due to more credible information disclosure. However, market reaction to insider sales is weaker in good corporate governance countries.

3- Insider trading, crossing shareholding thresholds and disclosure ownership requirements in US and France: Securities law framework

3-1- Insider trading regulation:

Managers and directors who act on information about the company that has not been revealed to the public, so they can trade on the stock market based on that private information to benefit themselves are unfair to other investors. Thus securities markets regulators recognise the need to regulate insider trading.

⁵ Fidrmuc et al (2009) "insider trading, corporate governance and information disclosure: international evidence"

3-1-1- US insiders trading regulation :

The history of US insider trading regulation goes back to the 1934 Securities Exchange Act. The United States were interested in regulating insider trading because a well known American trader was implicated. The public discovered that the securities industry gave rise to criminal activities. In this case the instrument for profit was insider trading, a social practice turned into a crime to balance the consequences of a lack of information. According to regulation, illegal insider trading occurs when a person who possesses non public information trades in the securities market on the basis of that information.

Recently, this regulation was amended in 2002 after the Enron Scandal by the adoption of the Sarbanes-Oxley act section 403. The main clause in the US regulation is that insiders must not trade on the basis of non public information (Engle 2008). Regulatory authorities agree on the need for greater transparency and timely public information on insider trading. Such information, when disclosed, would have an impact on an investor's assessment of the situation of the firm.

The Sarbanes Oxley act addresses the issue of insider trading disclosure in section 403, which amends section 16(b) of the exchange Act of 1934 by requiring insiders specified as directors, officers and principal stockholders with more than 10% of equity to report their trades to the Securities and Exchange Commission (SEC) no later than on the second trading day following the transaction. Before SOX 2002, the deadline specified in the 1934 securities and exchange act was the tenth day after the month in which the transaction was executed and the SEC published the notifications online no later than the business day following the filing date. So section 403 of SOX has provided more timely and relevant information to market participants in the United States (Brochet 2009⁶).

⁶ Brochet (2009) "information content of insider trades before and after the Sarbanes-Oxley act", the accounting review.

3-1-2 -France insider trading regulation :

In France the problem of insider trading was raised by the Government at the end of the sixties. As had been the case in the US at the beginning of the thirties, this interest in securities regulation came in the wake of a stock market decline. The Government decided to regulate securities. The issue was the protection of regular citizens investing in the securities market. However it was during the eighties that this issue came to the forefront when two scandals were especially highlighted at the end of the decade because they involved people in the Government. The public discovered that insider trading gave rise to fruitful criminal activities, a social practice turned into a crime to balance the consequences of information scarcity. The regulation of insider trading is part of the macro-level policy implying that regulations must secure confidence in the market place and guarantee that investors will equally profit in the stock market. The relevant information should be evenly accessible. Although it is understood that informational disparity is inevitable in the securities market, the regulations are intended to restore some symmetry allowing each individual to make skilled decisions.

France was among the first Member States to introduce legislation controlling the use of inside information. The Ordinance of September 28, 1967 added a new provision to the 1966 Companies Act, instituting a requirement for all directors and company officers to report their securities dealings to the Commission des Operations de Bourse (COB). The COB regulation implements the EC Insider Dealing Directive, Directive 89/592⁷.

After that, insider dealing directive 89/592/EEC was replaced by a more comprehensive market abuse directive 2003/6/EC and directive 2004/72/EC that specified reporting of insider trading. These directives were greatly influenced by the US regulations. A set of rules are required by the directive, and the member states must transpose these rules into their national laws. The market abuse directive acknowledges that insiders must not trade on the basis of non public information and

⁷ Jane Welch, Matthias Pannier, Eduardo Barrachino, Jan Bernd, Philip Ledeboer (2005) 'comparative implementation of EU directives (I)- insider dealing and market abuse' city research series N°8, The British Institute of International and Comparative Law. p 43

that the public should have access to transparent information on insider transactions as a preventive measure against market abuse. The disclosure of insider transactions provides valuable information to investors. The market abuse directive specifies that persons with managerial responsibilities should notify competent authorities about transactions in their firm's securities which must be disclosed to the public. The notification of managers' transactions was introduced by directive 2004/72/EC which defined persons obliged to report their transactions as administrators, managers or supervisors in the firm. Notification of the trade should be made within five working days of the transaction. For smaller transactions, the member states may set a 5000EUR threshold for the total value of transactions within a calendar year, below which notification is not required, or the notification can be delayed until January 31 of the following year.

France has transposed the European directives into their national laws by publication of the AMF general regulation which replaced the COB regulation, instruction and recommendation and the CMF general regulation and decisions. The AMF regulation was promulgated November 24, 2004. Implementation of the market abuse directive has introduced a new series of articles in the monetary and financial code.

Article L.621-18-2 of the monetary and financial code is the implementation in French law of the relevant provision of the market abuse directive on disclosure of purchase and sales of securities offered to the public by the officers and directors of the issuers of such securities. Under such rules, certain officers and directors will be required to report to the AMF all transactions related to the shares of a company publicly offered, its securities, or to derivatives or any other financial instrument linked to them⁸. Notification of the trade should be made to the AMF within five working days of the transaction if the total amount of their transactions is more than EUR 5 000 in the calendar year. The AMF will publish the transaction reported to it on its web site. The formulary of disclosure is defined under the AMF instruction N°2006-05 in February 2006.

⁸ Dennis Campbell (2006), *International Securities Law and Regulation*, <http://books.google.com/>

3-2- The crossing shareholding threshold regulations

3-2-1- US regulation of beneficial ownership (schedule 13D-G)

In the American regulation ‘security exchange act 1934 schedule 13D’, any person who, after acquiring directly or indirectly, became the beneficial owner of more than five percent of any class of a company's shares shall, within 10 days after the acquisition, file with the SEC, a statement containing the information required by Schedule 13D. A person is a beneficial owner if he or she has or shares the power to vote or to sell securities directly or indirectly through any contract arrangement, understanding relationship or otherwise.

A short form reporting on schedule 13G is reserved for passive investors, or those who do not intend to "exert control" in a company. A Schedule 13G requires less information than a Schedule 13D and is available for institutional investors or any person who owns less than 20% of the outstanding equity securities.

Thus, a person already owning more than 5% of a company at the time the shares are initially registered under the Exchange act is ‘grandfathered’ and is not required to file schedule 13D until this person acquires beneficial ownership of an additional 2% of outstanding stocks in a period of 12 months⁹.

In American regulation, the ownership of over 5% in a publicly-traded stock is considered to be significant ownership, and therefore must be reported to the public.

This requirement may be explained by the fact that ownership in American firms is dispersed so that 5% is the only threshold which must be reported. The American ownership disclosure strategy is not focused on the large shareholding and crossing shareholding threshold toward concentration of control but, as we have

⁹Edward F. Greene “U.S. regulation of the international securities and derivatives markets”, V^o1, <http://books.google.com/>

mentioned earlier, it is focused on insider trading and the identity of shareholders who have made the transaction.

3-2-2- French regulation of the crossing shareholding thresholds

Under French regulations, French business law encourages faithful shareholdings and limits the influence of large foreign shareholders. Pyramid structures do exist in France but have not been systematically measured. Cross shareholdings in large groups are a characteristic of the French model. In 1989 the European large holdings directives of December 1988 has become part of French law to give safety and transparency to the financial market. Thus this 1989 law amends the French business law of July 1966 which already included disclosure rules. The European large holdings directive of 1989 imposes notification as soon as an owner either acquires a significant portion of the firm's capital or ceases to have one. The transposition of this directive to French law no.89-531 of August 2, 1989 requires any natural person or legal entity acting by himself or in concert who comes to own directly or indirectly more than 5%, 10%, 20%, 1/3, 50 % or 2/3 of the capital of a company listed on financial market or crosses one of these thresholds must notify the company itself within 15 days through the competent authorities.

Enacted in 2004, the European Union transparency directive enhances investor protection and harmonizes provisions of national law requiring periodic, accurate and transparent disclosure information regarding security issuers.

This EU transparency directive was implemented in France on 28 September 2006 by amending the AMF general regulation. The amendments were published and became effective on January 20, 2007. In March 2008, the AMF released the final amendments to the mandatory disclosure rules applicable to purchases or sales of equity securities in publicly traded French companies to implement the EU commission directive 2007/14/EC of March 8, 2007 which lays down detailed rules for the implementation of certain provisions of the transparency directive.

These amendments have modified disclosure thresholds. Because the French disclosure rules concern only companies whose registered office is in France, the

thresholds are straightforward: 5%, 10%, 15%, 20%, 25%, 33%, 50%, 66%, 90% and 95% (legal threshold notification; article 233-7 I and II of French commercial code).

In addition, a French publicly traded company may also impose more stringent threshold notification requirements in its by-laws for holdings of less than the 5% statutory notification threshold, in increments as small as 0,5% (by-laws notification threshold), which are independent of the legal thresholds. This notification is made only to the issuer and not to the AMF.

The filing of the crossing shareholding thresholds may be submitted to the AMF either in French or in English. The AMF has provided a model notification form under instruction N°2008-02 of February 8, 2008 regarding shareholder notifications (article 223- 14 of the AMF general regulation). Legal threshold must be notified within 5 trading days of crossing this threshold.

In the event that disclosure is not made as defined above, the voting rights attached to the shares exceeding the threshold and that should have been declared are suspended until such time as the situation has been corrected and for a period of two years after the date of due notification.

Furthermore, the commercial court for the area in which the registered office is located may, at the request of the company's chairman, a shareholder or the AMF, suspend for a period of no more than five years all or part of the voting rights of the shareholder who failed to disclose the crossing of a threshold.

Independently of civil penalties, any person, chairman, director, member of the board, chief executive or other senior officer of a legal entity bound by the provisions of Article L.223-7 of the Commercial Code who fails to observe those provisions may be fined €18,000.

Furthermore, a shareholder whose ownership exceeds the thresholds of 10% and 20% of the shares or voting rights must also submit a statement of intent to the AMF and to the issuer, within 10 stock market trading days of crossing the threshold, describing the objectives he intends to pursue with respect to the company in the 12 months period following the notification (purchase additional securities, require

control or request appointment as a director). The AMF and the issuer must be notified of any change to the statement of intent (article 233-7 VII of French commercial code).¹⁰

4- Research Design

4-1- Variables:

La Porta et al. approached the investor protection concept by the antidirector right index. This measure is an aggregation of key rules protecting minorities. In this research, we choose an alternative view which consists of studying one rule protecting minorities: the statements of changes in ownership structure. We choose these statements because they are at the same time a corporate governance mechanism and a disclosure mechanism. Regulators require the disclosure of any changes in equity stakes held by those persons. Different disclosure policies around the world are required: insider trading report regulation of the SEC in the USA and the disclosure of the crossing of shareholding thresholds regulation of the European directive 88-627.

In the United States, Securities and Exchange Commission SEC issues information regarding the filing of ownership report by officers, directors and principal security holders under section 16 of the securities exchange act of 1934 enacted by the Sarbanes-Oxley act of 2002. Relative to this section, every person who is beneficial owner of more than 10% of any class of security and each officer and director (collectively, “insiders”) of the issuer of such security (upon becoming an insider), is required to present an initial report with the commission disclosing his beneficial ownership of all equity securities of the issuer. This section also requires insiders to report changes in such ownership, or the purchase or sale of a security-based swap agreement.

However in Europe, the European large holding directive 88-627 is intended to assist the integration of securities markets in the European Union by harmonizing disclosure requirements for all issuers whose securities are publicly traded in the European Union. According to this directive, a person who acquires or disposes of shares in a traded company is required to inform the company, and at the same time

¹⁰ Cafritz and Genicot (2008) « France completes implementation of shareholder notification requirements under EU transparency directive (updated)” WWW.friedfrank.com

the competent authority, where his holding exceeds or falls below one of the thresholds of 10%, 20%, 1/3, 50%, 2/3. This directive is intended to strengthen investor protection and to restore confidence of investors. The directive seeks to harmonize the minimum thresholds for disclosing significant crossing of shareholding across European Union. Member states need not apply the thresholds of 20% and 1/3 where they apply a single threshold of 25% and the threshold of 2/3 where they apply the threshold of 75%. In most European countries the legislatures implemented lower thresholds. The lowest threshold crossed in France, Belgium, Germany and Spain, is 5%, in the UK is 3% and in Italy is 2%.

The US rules regarding disclosure of insiders trading transactions and the large holding directive for crossing of shareholding thresholds seem to be similar in terms of protection of minorities' requirements, but they are two different strategies. The American strategy focuses on the identity of the shareholder "insider"; however, European strategy focuses on the threshold crossed by the shareholder (ownership concentration).

Recent regulatory developments in the European Union have aligned insider trading regulations in Europe with similar reporting requirements and legal definitions as applied in the US. The market abuse directive (2003/6/EC) specifies that persons discharging managerial responsibilities should notify competent authorities about transactions in their firm's securities and that the public should have access to that information as soon as possible. Further and more specific regulations regarding the notification of managers' transactions were introduced by Directive 2004/72/EC defining persons obliged to report their transactions as members of administrative, management or supervisory bodies of a firm.

The efficiency of the rules protecting minorities can be empirically investigated by the market valuation of these rules, which consist of the disclosure of the changes in ownership structure. The disclosure of these changes is intended to inform and to protect investors. Investors need information about the main shareholders in the firms and the management shareholders. The acquisition or the disposal of the shares by those persons has important implications for monitoring and reveals new information to the market about the firm value. When the acquisition of shares gives the purchaser a controlling relationship with the firm or puts the

purchaser on the board of directors, it affects the market assessment of the resources allocation within the firm and the probability of a takeover. We expect financial market reaction to announcement of the changes in ownership structure.

By purchasing (selling) shares in their firm, insiders communicate a positive (negative) signal about the future value of the firm to the market. We analyze market reaction to the insider transaction in the US and in France. We try to explain the efficiency of insider trading disclosure regulation and the effectiveness of the implementation of this regulation in France. The change of rules in the book and implementation of US regulation in other contexts: Does it give the expected results? This research contributes to the literature on the information content of disclosure rules of insider trading in the US and in France and provides a comparative study. So, what is the effect of corporate governance institutions on market reaction to insider trading? The literature provides two alternative hypotheses with opposite predictions. First, good corporate governance institutions have a positive effect on price adjustments after insider trading report. In countries with better corporate governance institutions, insider actions are more credible and therefore the precision of the information conveyed in insider trading announcements is higher, and price adjusts more after insider trading disclosures. Second, better corporate governance may decrease market reaction to insider trading due to greater precision of information about underlying firm value just before insider trading announcements.

Furthermore the research contributes to international corporate governance literature by comparing two strategies of protecting investors: insider trading and crossing shareholding thresholds.

4-2- Data and sample selection

Our sample consists of the 10 largest American firms listed on the NYSE, and the 10 largest firms listed on the Bourse de Paris. Insider trading and financial data were hand collected from the local stock exchanges securities commissions... Data were collected for the two years 2006 and 2007, thus after implementation of the market abuse directive and insider trading requirements disclosure in France. The 10

first listed US and French firms are classified by stock market capitalization in 2005. We collected French insider trading information from the AMF decision and financial information web site. And we collected US insider trading information from the SEC form 4 as reported by statement of changes in beneficial ownership. The information reported for all the transactions are: name of the company, transaction date, announcement date, transaction type (sell, buy), number of shares traded, price transaction and the insider position in the firm (director, officer, 10% owner). We exclude any transaction in derivatives, options exercise, stock grants, transfers... and maintain only common stock purchases or sales. The total number of insider transactions is detailed as follows:

Firm	Purchases	Sales	Total number of US insider transactions (2006-2007)
Exxon	1	12	13
General electric	13	31	44
Microsoft	1	172	173
Pfizer	1	22	23
Citigroup	3	15	18
Johnson and Johnson	2	20	22
Bank of America	10	49	59
AT&T	2	65	67
Procter and Gamble	1	35	36
Wal Mart Stores	3	24	27
TOTAL	37	445	482

Table.1: US insider transactions

Firm	Purchases	Sales	Total number of French insider transactions (2006-2007)
Carrefour	11	4	15
AXA	14	33	47
TOTAL	36	39	75
Sanofi aventis	3	6	9
Société générale	17	25	42
Vinci	6	29	35
France telecom	3	3	6
Renault	23	13	36
BNP Paribas	9	39	48
Suez	26	24	50
TOTAL	148	215	363

Table.2: French insider transactions

The crossing shareholding thresholds data are collected from the AMF web site only for French listed firms over the same period and for the same countries because this disclosure rule is not required in the American laws. The data specify the date of the transaction, date of announcement, the threshold crossed: 5%, 10%...., the nature of the transaction (crossing down of the threshold or crossing up of the threshold) and the identity of the shareholder. The total numbers of the crossing shareholding threshold is detailed as follows:

Firm	Crossing down	Crossing up	Total number of French crossing threshold (2006-2007)
Carrefour			

AXA	1	5	6
TOTAL	2	1	3
Sanofi aventis	1	0	1
Société générale	2	4	6
Vinci	5	6	11
France telecom	2	0	2
Renault	0	1	1
BNP Paribas	1	2	3
Suez	1	1	2
TOTAL	15	20	35

Table.3: French crossing shareholding thresholds

5- Empirical method

The objective of this research is to investigate market reaction to the disclosure rules protecting minorities and particularly the statement of changes in ownership structure (insider trading and the crossing of shareholding thresholds)¹¹. We intend to evaluate the benefits of alternative reporting policies around the world. We try to compare the market reaction to insider trading disclosure in the US and in France and to compare the information content of insider trading disclosure policy to the crossing shareholding thresholds disclosure policy. Fidrmuc et al (2009) put forward two alternative hypotheses with opposite predictions. First, good corporate governance institutions have a positive effect on price adjustments after insider trading reports. In countries with better corporate governance institutions, insider actions are more credible, and therefore precision of the information conveyed in insider trading announcements is higher, and price adjusts more after insider trading disclosures. Second, better corporate governance may decrease market reaction to insider trading due to greater precision of information about underlying firm value just before insider

¹¹ This statement is intended to strengthen investor protection and to restore financial security and the confidence of investors

trading announcements. In these countries, information asymmetry is smaller and prices reflect more public information (Bailey et al 2006)¹². Better corporate governance improves transparency and reduces the ability and motivation of insiders to distort information disclosure.

5-1- Measure of Variables:

5-1-1- Financial variables :

The one period returns on asset i at time t were calculated from the stock prices as follows:

$$R_{it} = \left(\frac{P_{it} - P_{i(t-1)}}{P_{i(t-1)}} \right)$$

where

P_{it} : Adjusted stock price on asset i at time t

$P_{i(t-1)}$: Adjusted stock price on asset i at time t-1

The returns on the market index were estimated as follows:

$$RM_t = \left(\frac{I_t - I_{t-1}}{I_{t-1}} \right)$$

where I_t et I_{t-1} are market indexes CAC40 and the S&P 500 at time t and t-1

5-1-2- Insider trading variables :

The insider trading report variables were estimated with two dummy variables written as:

- IAS_{it} : the insider's acquisition of securities

It takes the value one on the event period and zero outside these event days.

- IDS_{it} : the insider's disposition of securities

It takes the value one on the event period and the value zero, outside these event days.

¹² Bailey et al (2006) « The economic consequences of increased disclosure: evidence from international cross listings », Journal of financial economics, 81, P175-213.

5-1-3- Crossing shareholding threshold variables:

The crossing of shareholding thresholds variables were estimated with two dummy variables written as:

- I_{it}^h : the crossing up of shareholding thresholds

It takes the value one for the event period, and the value zero, outside these event days;

- I_{it}^b : the crossing down of shareholding thresholds

It takes the value one for the event period and the value zero, outside these event days.

5-2- Empirical model:

The event study is used to investigate the market reaction around the announcement of changes in ownership structure. The classical event study methodology exhibits a bias (Brown and Warner 1985). This paper addresses this bias by presenting a methodology that incorporates stochastic behaviors of the market that are documented to exist and which are assumed away by the classical event study methodology. Our methodology uses a market model that incorporates GARCH (generalised autoregressive conditional heteroskedastic) effect and time varying systematic risk parameter (Beta). Another important contribution is to address the problem in the classical event study of detecting the exact timing of the event.

5-2-1- The timing of the event :

In the classical event study we need to pinpoint the timing of the event. The study loses its validity when the exact event date is uncertain. The identification of this date in our study is ambiguous. We find two possible dates: the date of transaction, the date of announcement. A graph of stock returns a few days before and after the date of declaration can provide an indication concerning the point at which the market began to react to the event. We simulate the market reaction and the exact date of event. We find that the market may react since the day of

transaction, but the market reaction can be fully observed when the trading is officially disclosed to the market.

In the literature, Fidrmuc et al (2009) investigate the market reaction to insider trading across 15 European countries and the US and use the trading date as the event day because they do not have information on announcement dates for all countries in their sample. However they define the CAR windows to potentially cover the moment when the market received the announcement of the trading. The CAR is thus calculated over the 5th, 10th, 20th, and 100th trading day after the transaction. Brochet (2009) examines the market reaction to insider trading in the US after the introduction of the more timely disclosure regime by the SOX. He uses the filing day $t=0$ as proxy of the event day and he calculates the CAR over the 2nd and the 4th day after the filing date of insider sale and purchase.

So, we define our window to potentially cover the moment when the market receives the announcement of trading. The event days for the insider trading start with the transaction day and finish 5 days after the announcement (transaction, disclosure+5days), and the event days for the crossing thresholds start 10 days before the disclosure and finish 10 days after (-10days, +10days). However, we have found that in some cases the reporting lag, which is the number of days between the insider transaction and its announcement, is very big. Therefore, we have defined another window similar to Brochet (2009) which runs from the announcement date through the fifth trading day after the announcement. We define this window for insider transactions and similarly for the crossing shareholding thresholds (disclosure, disclosure+5).

5-2-2- The model selection :

Abnormal returns are the difference between the observed returns and the normal or expected returns based upon some model of the return generating process. Much of classical event study used a market model to measure the expected returns. This model relates the return on an individual asset to the return on a market index and an asset-specific constant. The market model can be written as:

$$R_{it} = \alpha_i + \beta_i RM_t + \varepsilon_{it(1)}$$

Where:

R_{it} is the one period return on asset i at time t

RM_t is the return on the market index at time t

ε_{it} is an uncorrelated error term with mean zero and constant variance.

Several studies found that the assumptions of the independence of error, the constancy of variance of errors, and the stability of the parameters in the market model are unreasonable.

Connolly (1989) and Schwert and Seguin (1990) conclude that financial series present a dynamic structure and that the returns are generated by an autoregressive process. The ability to form reliable statistical inferences can be compromised if we fail to consider this autoregressive process. They have analyzed the importance of adjusting for autoregressive conditionally heteroskedastic ARCH effects in the residuals term. In this paper we take into consideration this criticism by applying the generalized autoregressive conditionally heteroskedastic GARCH model to the residual term.

Chen and Keown (1981) have demonstrated that the coefficient Beta is non stationary, and the assumption of its being stationary in the market model can lead to an overestimation of the unsystematic risk and consequently a distorted evaluation of the abnormal returns.

Schwert and Seguin (1990) propose a time-varying coefficient Beta in their market modeling process. The coefficient Beta varies with the level of aggregate volatility. In this paper we adopt the time-varying coefficient Beta of Schwert and Seguin (1990) which can be written as follows:

$$\hat{\beta}_{it} = \beta_i + \frac{\beta_{i1}}{\sigma^2(RM_t)}$$

Otherwise, the classical event method supposes that the event does not affect the parameters of the model estimated. We adopt in this paper the approach of varying event (Schipper and Thompson (1983), Thompson (1985)). We estimate the model over the period of observation without excluding returns relative to the event period.

This approach consists of adding to the market model the variable event which indicates the event period.

We add two variable events for the crossing up of shareholding thresholds I_{it}^h and the crossing down of shareholding thresholds I_{it}^b . The market model can be expressed as follows:

$$R_{it} = \alpha_i + \left(\beta_i + \frac{\beta_{i1}}{\sigma^2(RM_t)}\right)RM_t + \lambda_{i1}^h I_{it}^h + \sum_{k=1}^p \mu_{ik} Ri(t-k) + \sum_{k=1}^q \delta_{iq} \varepsilon_{i(t-k)} \quad (2.1)$$

$$R_{it} = \alpha_i + \left(\beta_i + \frac{\beta_{i1}}{\sigma^2(RM_t)}\right)RM_t + \lambda_{i1}^b I_{it}^b + \sum_{k=1}^p \mu_{ik} Ri(t-k) + \sum_{k=1}^q \delta_{iq} \varepsilon_{i(t-k)} \quad (2.2)$$

The coefficients λ_{i1}^h et λ_{i1}^b measure the effect of the declaration of the crossing up and down of shareholding thresholds on the returns.

We add two variable events for the insider's acquisition of securities IAS_{it} and the insider's disposition of securities IDS_{it} . The market model can be expressed as follows:

$$R_{it} = \alpha_i + \left(\beta_i + \frac{\beta_{i1}}{\sigma^2(RM_t)}\right)RM_t + \lambda_{i1}^h IAS_{it} + \sum_{k=1}^p \mu_{ik} Ri(t-k) + \sum_{k=1}^q \delta_{iq} \varepsilon_{i(t-k)} \quad (2.3)$$

$$R_{it} = \alpha_i + \left(\beta_i + \frac{\beta_{i1}}{\sigma^2(RM_t)}\right)RM_t + \lambda_{i1}^b IDS_{it} + \sum_{k=1}^p \mu_{ik} Ri(t-k) + \sum_{k=1}^q \delta_{iq} \varepsilon_{i(t-k)} \quad (2.4)$$

The coefficients λ_{i1}^h et λ_{i1}^b measure the effect of the insider's acquisition or disposition of securities on the returns.

We take into consideration the adjustment for generalized autoregressive conditionally herterskedastic GARCH effects in the residual terms.

$$h_{it}^2 = V(\varepsilon_{it}) = \gamma_{oi} + \sum_{j=1}^m \gamma_{ij} h_{i(t-j)}^2 + \sum_{j=1}^n \eta_{ij} \varepsilon_{i(t-j)}^2 \quad (3)$$

The returns were modelled by ARMA(0,1) ARMA(0,1) ARMA(1,1) process. The Box-Jenkins method was adopted for the statistical treatment.

5-3- The measure of abnormal returns:

The market reaction to the announcement of changes in ownership structure is measured by the detection of abnormal returns generated in the event period. Abnormal returns are the difference between the observed returns and the normal

or expected returns based upon the market model developed which can be written as:

$$AR_{it} = R_{it} - \alpha_i - \left(\beta_i + \frac{\beta_{it}}{\sigma^2(RM_t)} \right) RM_t \quad ; t=1, 2, \dots, T \quad (4)$$

Applied for the two models (2,1) and (2,2), the abnormal returns calculated for the crossing up of shareholding thresholds and the crossing down of shareholding thresholds can be expressed as follows:

$$AR_{it} = a^h_0 + a^h_1 I^h_{it} + v_{it}; t = 1, 2, \dots, T(5.1)$$

$$AR_{it} = a^b_0 + a^b_1 I^b_{it} + v_{it}; t = 1, 2, \dots, T(5.2)$$

However, applied for the two models (2,3) and (2,4), the abnormal returns calculated for the insider's acquisition of securities and the insider's disposition of securities can be expressed as follows:

$$AR_{it} = a^h_0 + a^h_1 IAS_{it} + v_{it}; t = 1, 2, \dots, T(5.3)$$

$$AR_{it} = a^b_0 + a^b_1 IDS_{it} + v_{it}; t = 1, 2, \dots, T(5.4)$$

The effect of the variable event on the abnormal returns is positive or negative when the coefficients a^b_1 and a^h_1 are statistically positive or negative. We estimated the equations (5.1), (5.2), (5.3) and (5.4) with GARCH effect in the residuals v_{it} .

5-4- Statistical analysis of the market reaction

The measure of the abnormal returns for every firm is not sufficient to detect the whole market reaction. For this reason, we need to make aggregations to all the abnormal returns for all the firms. So, we calculate the cumulative average abnormal returns from the disclosure day to 5 days after, for American market and for French market separately as follows:

$$CAAR_t = \frac{1}{N} \sum_{i=1}^N AR_{it}, \quad t \in (0, +5) \quad (6)$$

N : country number of events for all the firms

CAARt: country cumulative average abnormal returns over the event window, after insider sales, insiders purchases and crossing up and down of shareholding thresholds

Finally, to test the market reaction we define the hypothesis test:

$$H_0: E(CAAR_t) = 0$$

$$H_1: E(CAAR_t) \neq 0$$

The null hypothesis rejected at 5% level proves the existence of market reaction to the event.

6- Results

6-1-The effect of the crossing of shareholding thresholds on the stock returns:

In the first stage of the empirical analysis, we have estimated the equations (2.1) and (2.2) for the French firms to detect the effect of the crossing shareholding thresholds on the stock returns. The results of the regression analysis for the two windows are shown in table 3.4. The coefficients of the variables crossing up (I_{it}^h) and down (I_{it}^b) of shareholding thresholds are statistically significant at the 5% level of confidence only for Suez, Vinci, Carrefour, Sanofi-aventis and at 10% level of confidence for France telecom.

Firm	Window	The crossing down of shareholding thresholds (coefficient)	t-test Z-test	The crossing up of shareholding thresholds (coefficient)	t-test Z-test
AXA	(trans, disc+5)	0.195992	0.969892 (0.332) NS	0.054944	0.433158 (0.665) NS
	(disc, disc+5)	0.336341	0.840024 (0.4013) NS	0.137234	0.685456 (0.493) NS
France Telecom	(trans, disc+5)	0.217054	0.866035 (0.3869) NS		
	(disc, disc+5)	0.580254	1.690658** (0.0915)		
Suez	(trans, disc+5)	0.403276	1.955670*** (0.0505)	0.498112	2.4415*** (0.0146)
	(disc, disc+5)	0.321453	0.733360 (0.4633) NS	-0.183924	-0.317995 (0.7505) NS
Total	(trans, disc+5)	-1.175070	-0.512242 (0.6087) NS	-4.048616	-0.974285 (0.3304) NS
	(disc, disc+5)	-1.018937	-0.242447 (0.8085) NS	-2.674512	-0.430532 (0.6670) NS
PNB Paribas	(trans, disc+5)	0.246506	1.201680 (0.2301) NS	0.255117	1.453082 (0.1468) NS
	(disc, disc+5)	0.312682	0.842585 (0.3999) NS	0.343781	1.303150 (0.1931) NS
Société générale	(trans, disc+5)	-0.084472	-0.659175 (0.5098) NS	0.049024	0.401650 (0.6879) NS
	(disc, disc+5)	0.164214	0.644072 (0.5195) NS	-0.050629	-0.248982 (0.8034)

					NS
Carrefour	(trans, disc+5)	-0.092582	-0.178336 (0.8585) NS	0.549942	2.523997 (0.0116)***
	(disc, disc+5)	0.200014	0.122925 (0.9022) NS	0.723629	1.686369 (0.0917)**
Renault	(trans, disc+5)			-0.156280	-0.651947 (0.5144) NS
	(disc, disc+5)			-0.114733	-0.267409 (0.7892) NS
Vinci	(trans, disc+5)	1.006270	1.982976 (0.0479) ***	1.229694	2.230269 (0.0262)***
	(disc, disc+5)	0.066161	0.000690 (0.9995) NS	0.070187	0.079806 (0.9364) NS
Sanofi- aventis	(trans, disc+5)	0.332689	2.234338 (0.0255) ***		
	(disc, disc+5)	0.567633	2.378327 (0.0174) ***		

Table.4: The estimation of the crossing shareholding threshold effect on the stock returns [regressions (2.1) and (2.2)]

Table.4 provides support of the positive impact of the crossing up shareholding thresholds on the stock returns (4 coefficients over the two windows are significant with the expected positive sign). This finding confirms the idea that when the shareholder increases his stake in the capital of the firm, he expects an improvement of the firm's future performance or he has the intention to take control of the firm or to sit on the board of directors. The returns increase when the market expects these intentions. The same table does not provide support of the negative effect of the crossing down of the shareholding thresholds on stock returns (5 coefficients over the two windows are significant and with unexpected positive sign).

6-2- The effect of the insider trading on stock returns:

We have regressed the equations (2.3) et (2.4) for all the 10 first listed companies in American stock exchange to detect the effect of insider trading on the stock returns and we have found that all the coefficients of the IAS and IDS are not significant over the two windows. We have chosen other windows related closer to the event day (just two days after the transaction date or the disclosure date), but the results are unchanged for any firms of the sample (results for American firms are not reported).

For French firms, we have estimated also, the equations (2.3) and (2.4) to detect the effect of insider trading on stock returns for the 10 companies listed first in the French stock exchange. The results of the regression analysis for the two windows are shown in table.5. The coefficients of the variables insider acquisition of securities (IAS_{it}) and insider disposition of securities (IDS_{it}) are significant at the 5% level of confidence only for AXA, France telecom and at 10% level of confidence for PNB Paribas. These results are disparate and do not provide support of the positive effect of the insider acquisition and the negative effect of the insider sales of securities on stock returns (only 5 coefficients over the two windows are significant and not with the expected sign).

Firm	Window	The insider acquisition (coefficient)	t-test Z-test	The insider sale (coefficient)	t-test Z-test
AXA	(trans, disc+5)	0.174506	1.861034 (0.0627)**	0.133790	1.665075 (0.0965)**
	(disc, disc+5)	-0.058745	-0.353810 (0.7236) NS	0.196840	1.960335 (0.0505)***
France Telecom	(trans, disc+5)	0.291240	1.004680 (0.3155) NS	-0.052701	-0.268770 (0.7882) NS
	(disc, disc+5)	-0.400017	-0.838328 (0.4023) NS	0.756493	2.229673 (0.0262)***
Suez	(trans, disc+5)	0.033022	0.251370 (0.8015) NS	0.147584	0.967012 (0.3335) NS
	(disc, disc+5)	-0.189542	-1.225288 (0.2205) NS	-0.010633	-0.044704 (0.9643) NS
Total	(trans, disc+5)	-1.868816	-1.501985 (0.1337) NS	-1.173420	-0.863317 (0.3884) NS
	(disc, disc+5)	-1.184007	-0.744523 (0.4569) NS	-1.134514	-0.773 (0.373) NS
PNB Paribas	(trans, disc+5)	-0.088262	-0.582375 (0.5603) NS	0.032940	0.379665 (0.7044) NS
	(disc, disc+5)	-0.269651	-1.704579 (0.088)**	-0.042729	-0.409290 (0.6825) NS
Société générale	(trans, disc+5)	-0.021005	-0.192580 (0.8473) NS	-0.027481	-0.299216 (0.7648) NS
	(disc, disc+5)	-0.042237	-0.386634 (0.6990) NS	-0.135227	-1.045099 (0.2960) NS
Carrefour	(trans, disc+5)	-0.059670	-0.468003 (0.6398) NS	-0.198247	-0.665929 (0.5055) NS
	(disc, disc+5)	0.008457	0.055807 (0.9555) NS	-0.244714	-0.681422 (0.4956) NS
Renault	(trans, disc+5)	-0.116906	-0.938779 (0.3478) NS	-0.068835	0.503858 (0.6144) NS
	(disc, disc+5)	0.087391	0.551908 (0.5810) NS	0.029569	0.162354 (0.8710) NS
Vinci	(trans, disc+5)	-0.248970	-0.429237 (0.6679) NS	-0.303049	-0.719845 (0.4720) NS

	(disc, disc+5)	-0.326015	-0.404923 (0.6857) NS	-0.281457	-0.536595 (0.5918) NS
Sanofi- aventis	(trans, disc+5)	0.030389	0.164002 (0.8698) NS	0.082693	0.360772 (0.7184) NS
	(disc, disc+5)	0.051428	0.162122 (0.8712) NS	0.103262	0.318105 (0.7504) NS

Table.5: The estimation of the insider trading effect on stock returns [regressions (2.3) and (2.4)]

6-3- The effect of the crossing of shareholding threshold and the insider trading on the abnormal returns:

The regression analysis is completed by an examination of the impact of the event variables on the abnormal returns. The equations (5.1) and (5.2) are estimated for the French firms. The abnormal return is calculated using the market model with a time-varying coefficient beta and the variable event (equation 4). For sensibility analysis, we have also used the abnormal returns adjusted by the market return. The results for the French firms over the two windows are presented in the table.6. The coefficients of the variables crossing up (I_{it}^h) and down (I_{it}^b) of shareholding thresholds are statistically significant for France Telecom, Carrefour, PNB Paribas, Société Générale, and Vinci (2 significant coefficients for the crossing down of shareholding and 5 significant coefficients for the crossing up) but not with the expected sign.

The equations (5.3) and (5.4) are estimated for the American firms over the two windows. The results for the American firms show no effect of the insider trading variables on the abnormal returns (results are not reported).

Firm	Window	The crossing down of shareholding thresholds (Coefficient)	The crossing up of shareholding thresholds (Coefficient)	The insider acquisition of securities (Coefficient)	The insider sale of securities (Coefficient)
AXA	(trans, disc+5)				
	(1) ¹³	-0.000413 NS	0.011989 NS	-0.043291 NS	1.56E-17 NS
	(2) ¹⁴	0.243444 NS	0.081001 NS	0.155242 **	0.170227 ***
	(disc, disc+5)				

¹³ estimation of abnormal returns calculated with regressions (5.1), (5.2), (5.3) and (5.4)

¹⁴ estimation of abnormal returns adjusted by the market return (AR=Rt-Rmt)

	(1)	0.033519 NS	0.001506 NS	-0.003865 NS	-0.760698 ***
	(2)	0.442271 NS	0.184528 NS	-0.054261 NS	0.207452***
France Telecom	(trans, disc+5)				
	(1)	-0.004735 NS		0.000775 NS	-0.017520 NS
	(2)	0.293883 NS		0.111870 NS	-0.089906 NS
	(disc, disc+5)				
	(1)	3.93E-17 NS		0.000918 NS	-0.051377 NS
	(2)	0.629211 **		-0.439350 NS	0.571954 **
Suez	(trans, disc+5)				
	(1)	0.138242 NS	0.230365 NS	-0.085308 NS	-0.053088 NS
	(2)	0.259535 NS	0.400960 NS	-0.087552 NS	0.053474 NS
	(disc, disc+5)				
	(1)	-0.971337 NS	-1.106438 NS	0.032402 NS	-0.021827 NS
	(2)	0.167168 NS	-0.146154 NS	-0.172281 NS	-0.040144 NS
Total	(trans, disc+5)				
	(1)	-0.112783 NS	4.807743 NS	0.602185 NS	-0.468976 NS
	(2)	-0.964121NS	-0.659019NS	-0.860309NS	-1.209806NS
	(disc, disc+5)				
	(1)	-0.176252 NS	3.472523 NS	0.060945 NS	-0.119209 NS
	(2)	-0.751929 NS	-0.690189NS	-0.725517 NS	-0.848951 NS
PNB Paribas	(trans, disc+5)				
	(1)	-0.000600 NS	-0.916148 ***	-0.021892 NS	0.055287 NS
	(2)	0.166382 NS	0.220056 NS	-0.112818 NS	0.023284 NS
	(disc, disc+5)				
	(1)	-0.000775 NS	0.015195 NS	-0.188525 NS	-1.077989***
	(2)	0.350506 NS	0.230292 NS	-0.229005 NS	-0.051316 NS
Société générale	(trans, disc+5)				
	(1)	0.015296 NS	-0.785139 ***	-0.036435 NS	-0.038193 NS
	(2)	-0.066391 NS	0.065786 NS	-0.058118 NS	-0.065036 NS
	(disc, disc+5)				
	(1)	-0.014584 NS	0.069596 NS	-0.052155 NS	-0.135227 NS
	(2)	0.073353 NS	0.027914 NS	-0.109216 NS	-0.199131 NS
Carrefour	(trans, disc+5)				
	1	-0.000524 NS	-0.012130 NS	0.007144 NS	-0.029012 NS
	2	0.002588 NS	0.582388 ***	-0.099835 NS	-0.208921 NS
	(disc, disc+5)				

	(1)	0.288898 NS	0.072196 NS	0.065534 NS	0.002687 NS
	(2)	0.432884 NS	0.879111***	-0.027163 NS	-0.181456 NS
Renault	(trans, disc+5)				
	(1)		0.002328 NS	-0.010334 NS	-0.007385 NS
	(2)		-0.157705 NS	-0.117579 NS	0.066307 NS
	(disc, disc+5)				
	(1)		-0.008046 NS	0.020462 NS	0.021003 NS
	(2)		-0.105607 NS	0.094715 NS	0.036323 NS
Vinci	(trans, disc+5)				
	(1)	0.025855 NS	0.033829 NS	-0.004147 NS	-0.006503 NS
	(2)	1.006540***	1.229148***	-0.249206 NS	-0.304270 NS
	(disc, disc+5)				
	(1)	0.049986 NS	-1.060005 NS	-0.003882 NS	-0.004466 NS
	(2)	0.002958 NS	0.072879 NS	-0.326193 NS	-0.283264 NS
Sanofi-aventis	(trans, disc+5)				
	(1)	-0.025837 NS		0.004625 NS	0.003750 NS
	(2)	0.324057 NS		-0.004586 NS	0.078659 NS
	(disc, disc+5)				
	(1)	0.119574 NS		0.035752 NS	0.014881 NS
	(2)	0.511413 NS		0.011206 NS	0.110128 NS

Table.6: The estimation of the crossing shareholding threshold and the insider trading effects on the abnormal returns

6-4- Statistical analysis of the market reaction:

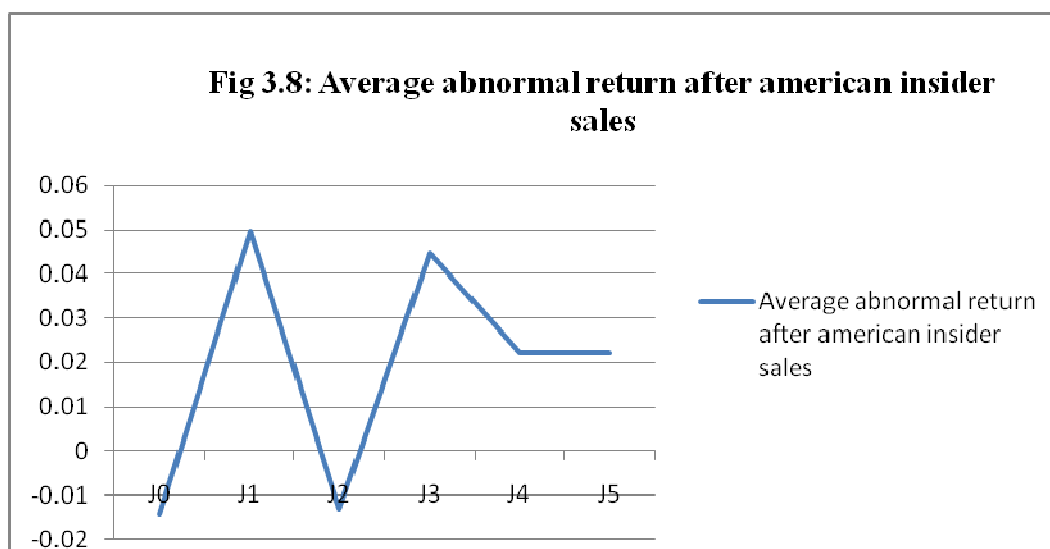
The results of the statistical market reaction to insider sales and to insider purchases are given in the table.7 and.8 respectively. It appears that while the market does not react to the disclosure of insider sales in American context, there is a very minor reaction (T-test is significant at 10% level) to insider purchases on the third day after the disclosure. The abnormal returns are positive as expected after purchases. These results fail to provide great support for the market reaction to insider trading disclosure in American context.

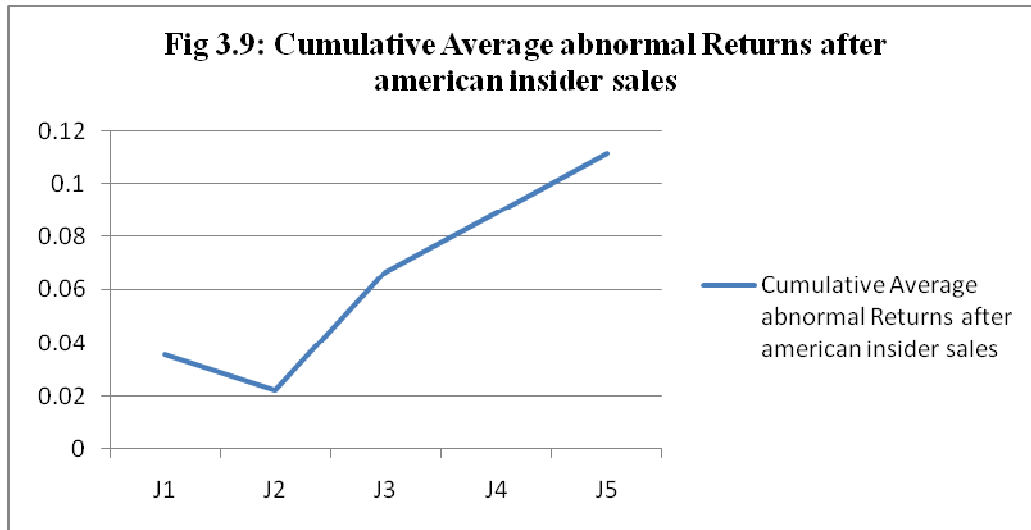
We find two possible explanations from the literature. The first is that better corporate governance may decrease market reaction to insider trading due to higher precision of information about underlying firm value just before insider trading

announcements. In USA, information asymmetry is smaller and prices reflect more public information (Bailey et al 2006). Better corporate governance in USA improves transparency and reduces the ability and the motivation of insiders to distort information disclosure. The second explanation is that these results could be due to the sample choice. Because we have chosen only the biggest firms (10 first listed companies), this fact can distort our results. If market participants have relatively more information about large firms and firms with good analyst's coverage, as is the case of our sample, insider's trades in these firms with relatively less information asymmetry should have less potential to trade on superior information. Fidrmuc et al (2009) find that CAR for purchases is larger in smaller firms and firms followed by fewer analysts. The absence of market reaction may also be due to the lower managerial ownership in US firms. These two explanations need to be empirically validated in future research.

Day	Average abnormal return after American insider sales	S.dev	Student test T test	P value	Cumulative Average Anormal Returns
0	-0,014334654	0,78071608	-0,308332	0,7581	
+ 1	0,049717685	0,83495177	0,99994	0,3182	0,035383031
+ 2	-0,013129859	0,78707336	-0,280136	0,7796	0,022253172
+ 3	0,044624498	0,75406561	0,993777	0,3212	0,06687767
+ 4	0,02230526	0,76905274	0,487052	0,6266	0,08918293
+ 5	0,022064967	0,75676963	0,489626	0,6248	0,111247898

Table .7: Average abnormal return after American insider sales (N=282)





Day	Average abnormal return after American insider acquisitions	S.Dev	Student test T- test	P value	Cumulative Average Abnormal Returns
0	-0,093277	0,536851	-0,998112	0,3257	
+ 1	0,156515	0,838493	1,072294	0,2916	0,063237751
+ 2	-0,051577	0,740202	-0,400282	0,6916	0,01166043
+ 3	0,180429	0,571052	1,815047	0,0789*	0,192089557
+ 4	0,037803	0,449657	0,482946	0,6324	0,229892269
+ 5	0,083697	0,647659	0,742368	0,4633	0,313589059

Table.8: Average abnormal return after American insider acquisitions (N=33)

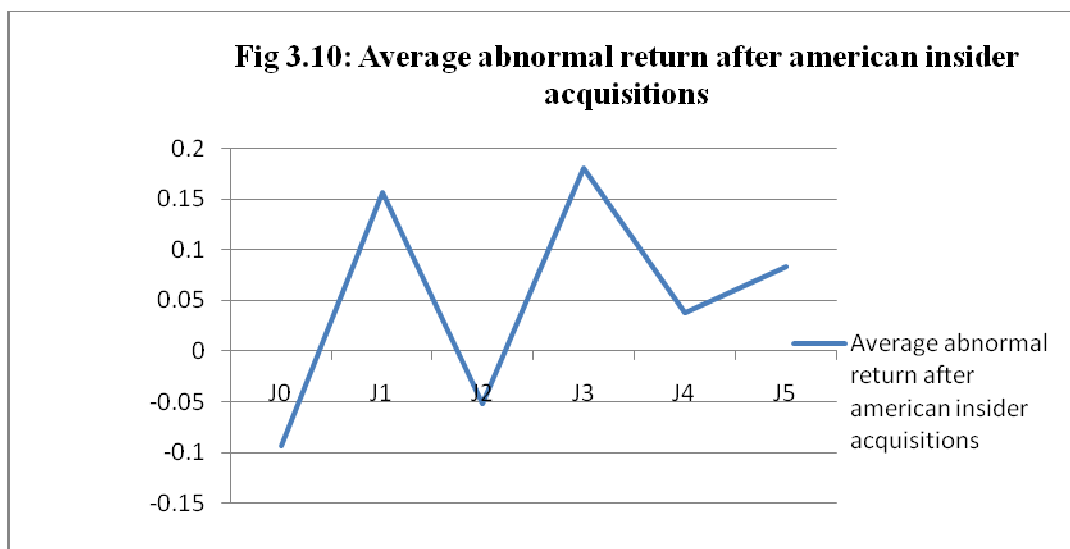
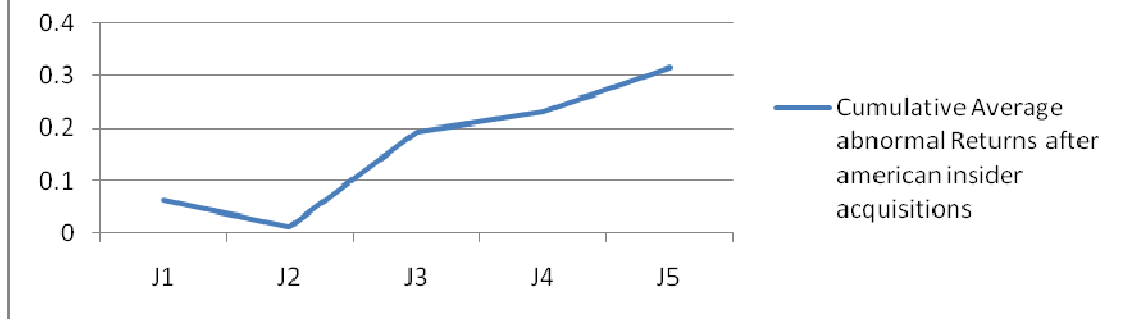


Fig 3.11: Cumulative Average abnormal Returns after american insider acquisitions

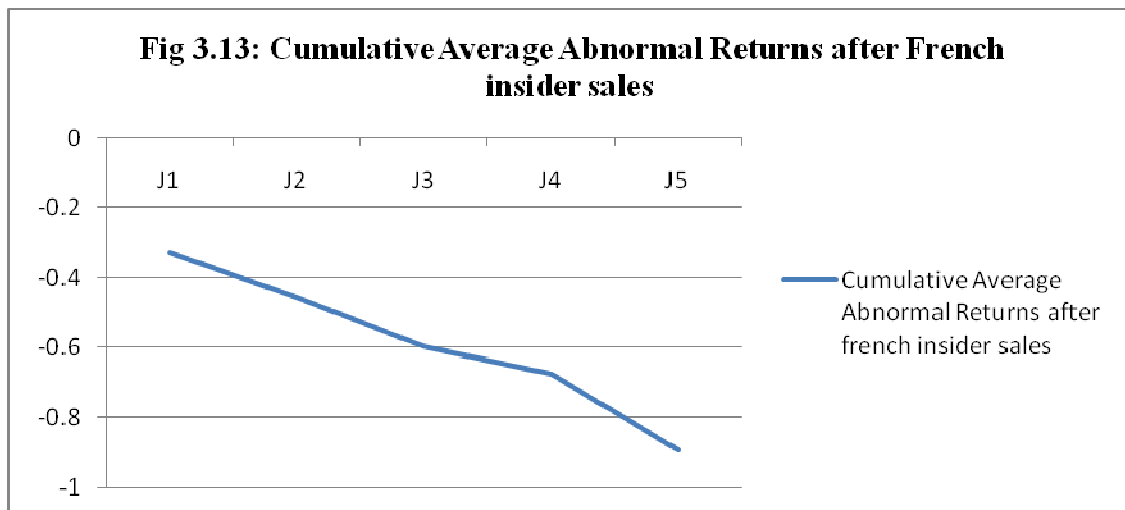
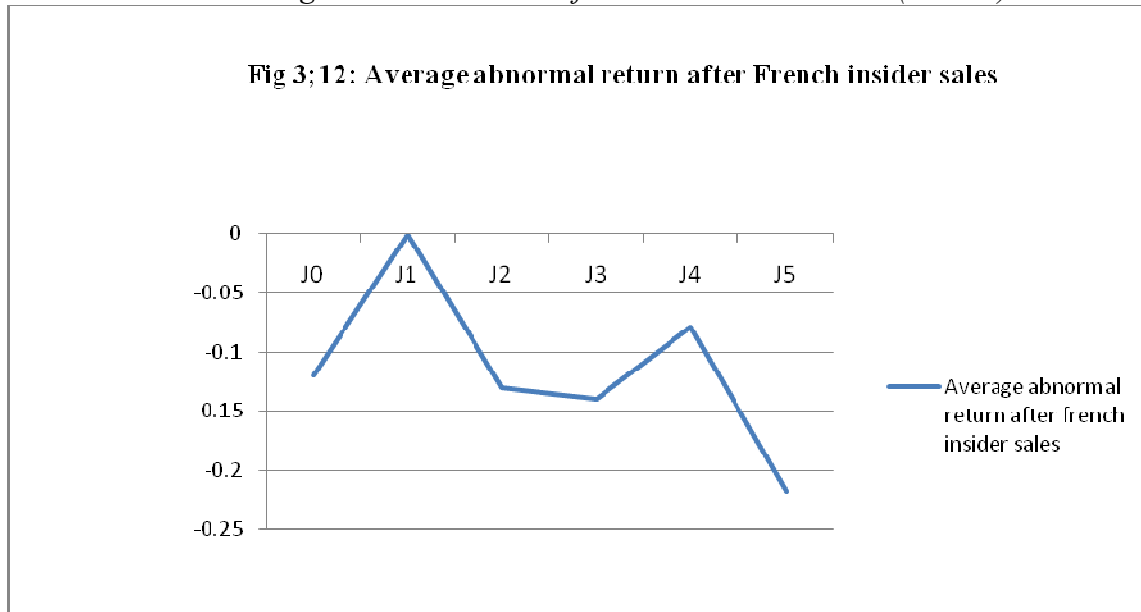


In the French context, the question remains important: does France need to adopt the insider trading disclosure as applied in American context? What is the real effectiveness of the modification of the French law and the adoption of the market abuse directive and the directive 2004/72/EC.

The results presented in the table.9 and.10 show that the French market reacts sensitively to the disclosure of insider trading. In fact, after disclosure of insider sales, investors perceive negatively this transaction 5 days after the disclosure. The CAAR decreases in the fifth day with 1.74% after the disclosure date (table.13). However, after disclosure of French insider purchases, the market reacts positively and more rapidly. A pronounced reaction appears one day after the disclosure and as often in the third day. The CAAR increases in the third day with 1.05% and fifth days after disclosure with 1.36% (table.13). The adoption of the directive 2004/72/EC concretizing the alignment of the French law with the American regulation is really effective in the French context.

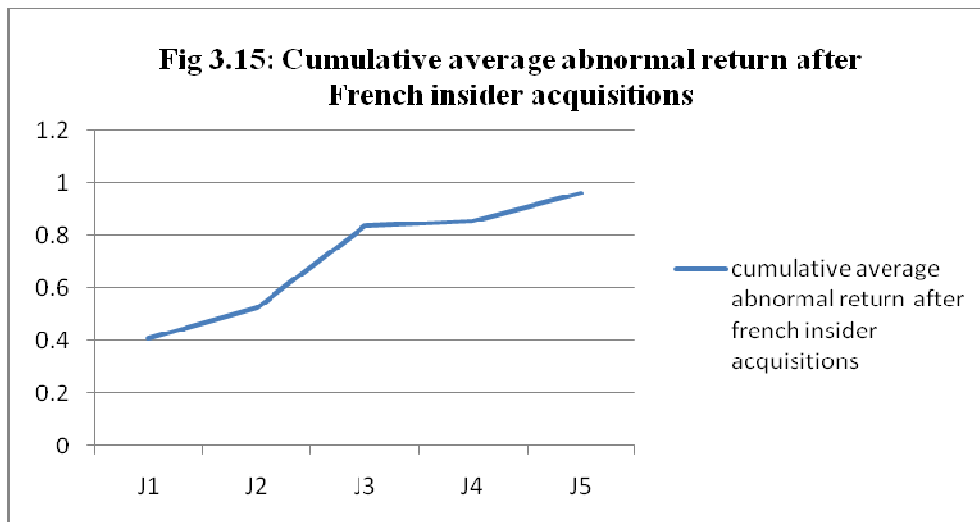
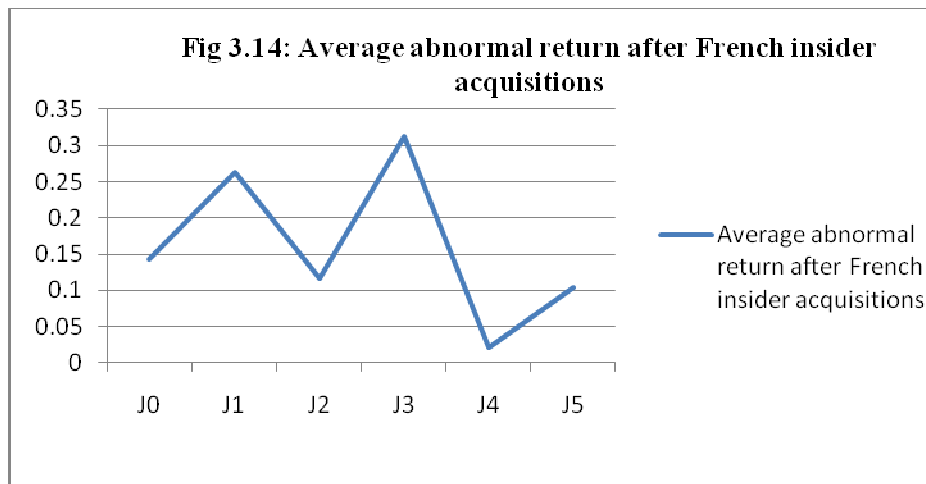
Day	Average abnormal return after French insider sales	S.dev	Student test T-test	p value	Cumulative Average Abnormal Returns
0	-0,119457	1,246035	-1,080401	0,282	
+ 1	0,206503	1,242013	-1,873705	0,0633*	-0,325960008
+ 2	-0,130115	1,215232	-1,206623	0,2298	-0,456075451
+ 3	-0,139979	1,232221	-1,280198	0,2028	-0,596054829
+ 4	-0,078987	1,207789	-0,736998	0,4625	-0,675041823
+ 5	-0,217459	1,079645	-2,269854	0,0249***	-0,892500689

Table .9: Average abnormal return after French insider sales (N=127)



Day	Average abnormal return after French insider acquisitions	S.dev	Student test T-test	p value	Cumulative Average abnormal Returns
0	0,143864	1,206203	1,1502	0,253	
+ 1	0,262384	1,041654	2,429153	0,0171***	0,40624779
+ 2	0,115772	1,211494	0,921557	0,3592	0,52201942
+ 3	0,311976	1,251718	2,40357	0,0182***	0,83399586
+ 4	0,0207	1,070404	0,186498	0,8525	0,85469631
+ 5	0,103761	0,933687	1,071705	0,2867	0,95845748

Table.10: Average abnormal return after French insider acquisitions (N= 93)



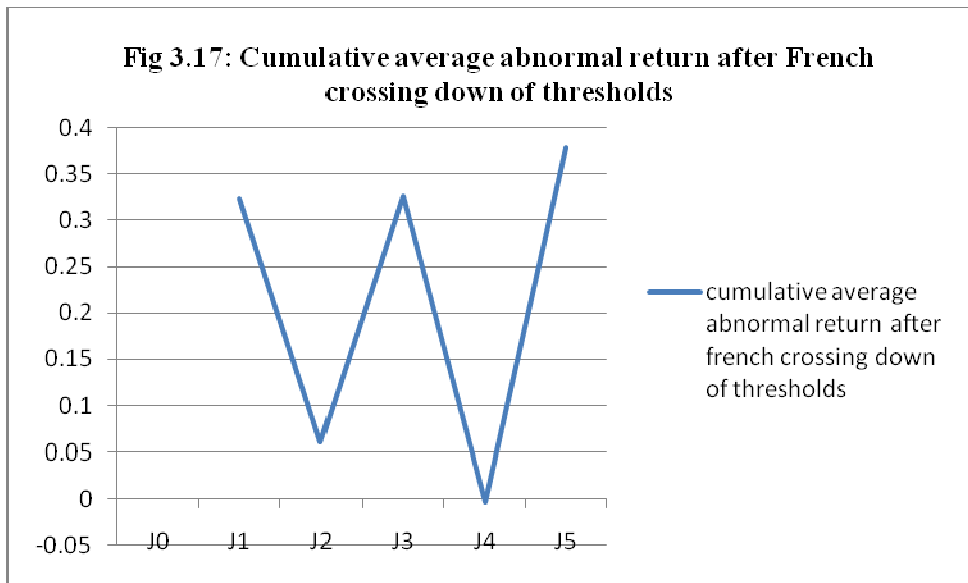
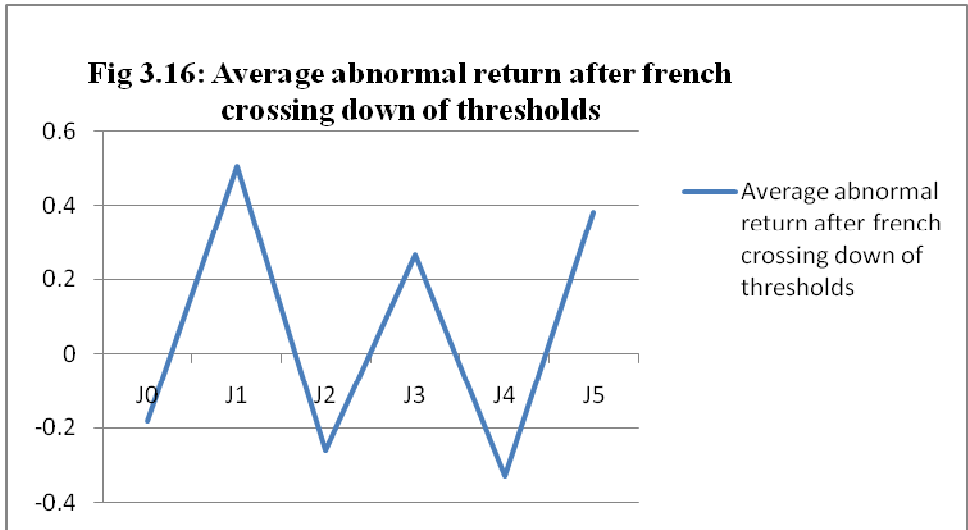
The results of the market reaction to the crossing down and crossing up of shareholding thresholds are given in tables.11 and.12 respectively. The student test is not appropriate because the number of observations for crossing down and crossing up is lower than 30. The use of student test supposes the normality of the distribution. Or, the normality is verified, neither for crossing up nor for crossing

down variables. So, we use a non parametric test, specifically the Wilcoxon test. The results show that the market does not react significantly to the crossing down of shareholder thresholds. However, the market reacts to the crossing up quickly and sensitively on the day of the disclosure with unexpected negative sign.

Thus, the crossing down of the shareholder thresholds doesn't give any additional information to the market; on the other hand disclosure of the crossing up of shareholder thresholds increases scrutiny of suspicious investor behaviour inducing a transfer of control to new shareholders or a modification of the board structure. That is why investors react sensitively to sale transactions that could induce negative market reaction. Some days after the disclosure, the market regains confidence.

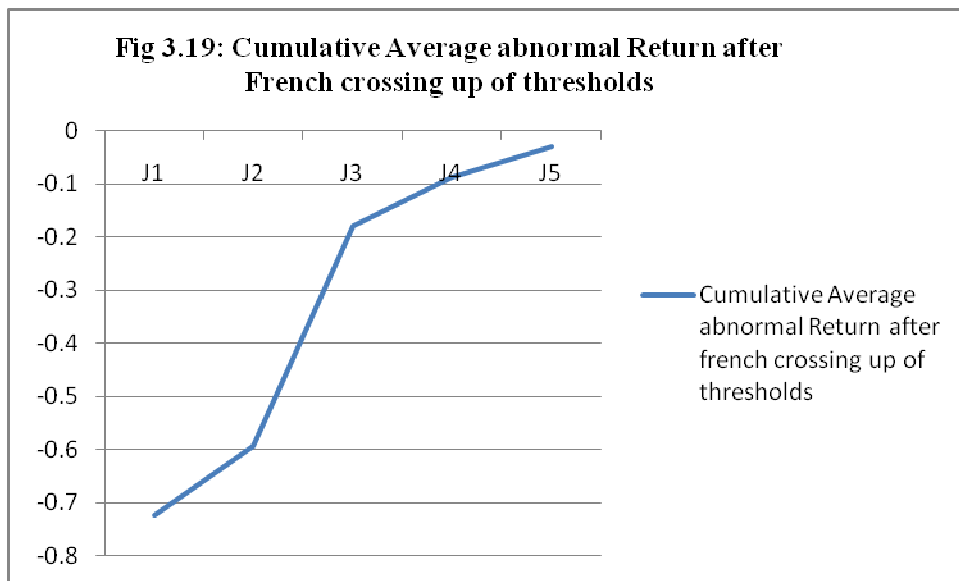
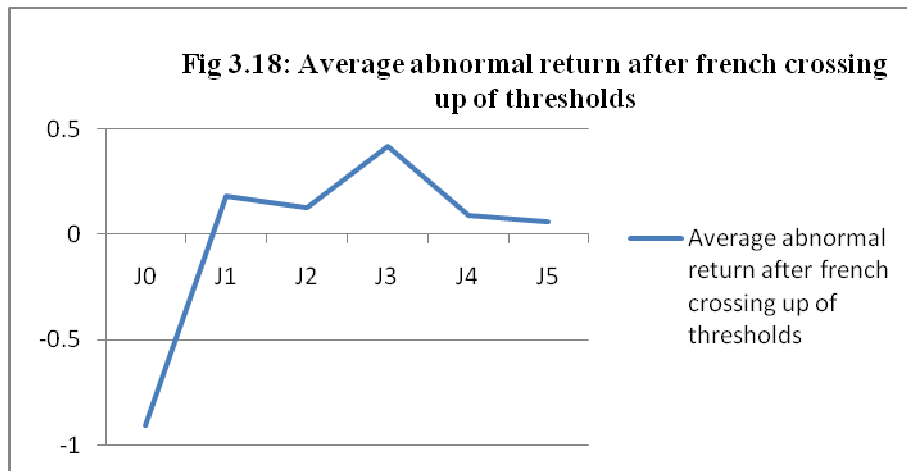
Day	Average abnormal return after French crossing down of thresholds	S.dev	T test (Student test)	Z-test (Wilcoxon test)	Cumulative Average Abnormal Returns
0	-0,180939	1,158139	-0,644165	1.183453	
+ 1	0,50451	1,493243	1,393042	1.372805	0,323571
+ 2	-0,262726	0,904717	-1,197334	1.467481	0,06084474
+ 3	0,264877	0,861538	1,267637	1.136115	0,32572208
+ 4	-0,329193	1,30408	-1,040808	1.656834*	-0,00347071
+ 5	0,382692	1,57972	0,998836	0.568057	0,37922157

Table.11: Average abnormal return after French crossing down of thresholds (N=17)



Day	Average abnormal return after French crossing up of thresholds	S.dev	Student test t-test	Wilcoxon test z-test	Cumulative Average Abnormal Returns
0	-0,903477	2,033732	-1,936423*	1.991988***	
+ 1	0,180969	1,291456	0,610804	0.100605	-0,72250785
+ 2	0,128995	1,244042	0,451975	0.181090	-0,59351303
+ 3	0,41541	1,59292	1,136738	0.663996	-0,17810262
+ 4	0,089431	1,912348	0,203844	0.865207	-0,08867185
+ 5	0,059455	1,645933	0,157455	-0.020121	-0,02921652

Table.12: Average abnormal return after French crossing up of thresholds (N=19)



In this step of the research, we need to compare the effectiveness of the insider trading and the crossing of shareholding thresholds disclosure policies. Table 3.14 provides Z- statistic for differences between average abnormal returns after insider acquisitions and crossing up of shareholder thresholds. There are significantly greater abnormal returns after insider acquisition than after crossing up shareholder thresholds. Z-statistic is significant for the differences in medians between the insider acquisition and the crossing up thresholds on the next day following disclosure. We conclude that the insider disclosure regulation has more information content, on average, than the crossing shareholder thresholds disclosure regulation. The market reacts more strongly to the insider trading filing than to the crossing thresholds.

Day	Cumulative average abnormal return after French insider acquisitions	Cumulative Average abnormal Return after French crossing up of thresholds	Cumulative Average Abnormal Returns after French insider sales
+1	0,40624779	-0,72250785	-0,32596001
+2	0,52201942	-0,59351303	-0,45607545
+3	0,83399586	-0,17810262	-0,59605483
+4	0,85469631	-0,08867185	-0,67504182
+5	0,95845748	-0,02921652	-0,89250069
% CAAR variation (0,+5)	1,35929279	-0,95956235	1,73806807

Table.13: The percentage of CAAR variation over the window (0, +5)

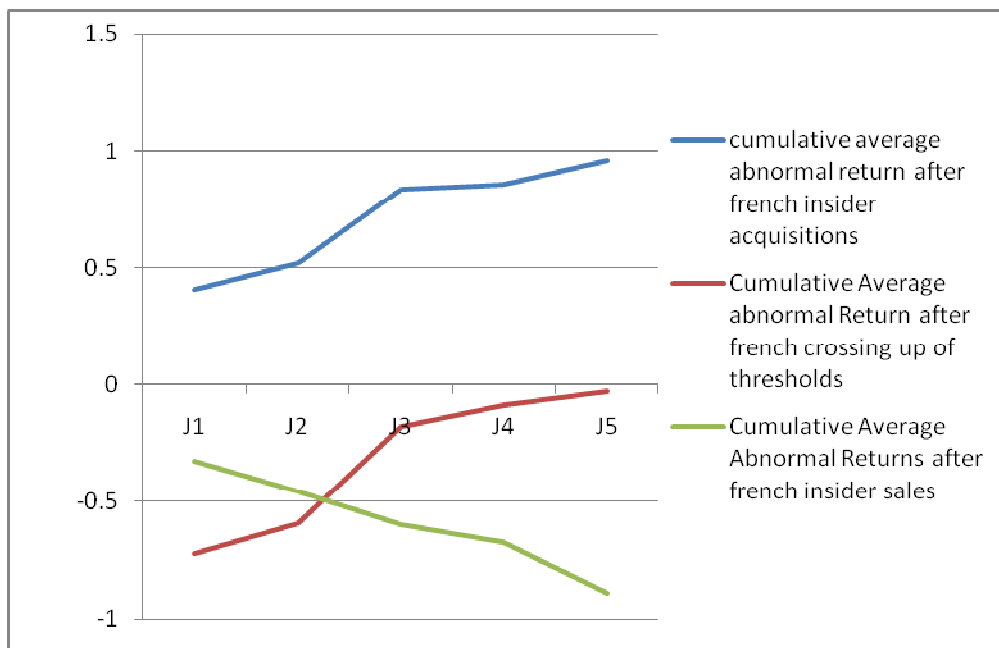


Fig.20: Comparative analysis of the cumulative average abnormal returns of insider trading and crossing shareholding threshold in French context

Day	Average Abnormal Return after French crossing up shareholder thresholds	Average Abnormal Return after French insider acquisition	Student T-test	Wilcoxon Z-test
+1	-0,90347701	0.14386409	-2.244767**	1.991988**
+2	0,18096916	0.262383700486054	-0.274789	0.140848
+3	0,12899482	0.11577162921362	0.046332	0.422543
+4	0,41541041	0.311976442197759	0.283039	0.301816
+5	0,08943077	0.0207004436835043	0.156660	0.985933
+1	0,05945533	0.10376117834793	-0.117334	0.261574

Table.14: comparative analysis of the average abnormal returns after the crossing up shareholder thresholds and the insider acquisitions in French context

Student test and Wilcoxon test are reported for the differences in means or medians

H0: $E(\text{AAR after crossing up thresholds}) = E(\text{AAR after insider acquisition})$

H1: $E(\text{AAR after crossing up thresholds}) \neq E(\text{AAR after insider acquisition})$

In this paper, we have provided a comparison of US and French security regulations dealing with disclosure of changes in ownership structure and we have investigated empirically market reaction to the disclosure of insider trading in US and in France and to the crossing of shareholding thresholds which is regulation specific to France and European countries. The results show that the French market reacts significantly and positively to insider acquisitions and negatively to insider sales. This finding could be due to the country-specific market microstructure and analyst survey and to the country-level corporate governance institutions (Fidrmuc et al (2009)). The study contributes to the literature by comparing two disclosure ownership structure policies: insider trading disclosure and the crossing of shareholder thresholds disclosure. The disclosure of the crossing shareholding thresholds strategy is based on the necessity to disclose ownership concentration concretized by the crossing of certain thresholds to prevent market from a hostile takeover. However, the insider trading disclosure strategy is based on the identity of the insider, because public access to information on transactions by insiders is a preventive measure against market abuse and provides investors with a valuable source of firm performance information. The results of this study show that the French market is more concerned about the trading of insiders than the ownership concentration.

Conclusion

Recent scandals led regulators, academicians and professionals to focus on corporate governance as a solution to managerial misbehaviour. Various laws and reports around the world came in response to restore confidence and reinforce investor protection against opportunistic behaviour of managers, enhance corporate responsibility and combat corporate and accounting fraud.

Most research in international corporate governance discusses a set of key rules protecting shareholders and aggregates these rules into one measure of investor protection. An alternative view is to document legal rules protecting minorities in different countries and choose to study one of them. In this research, we are interested

in financial market regulations protecting minorities across countries and especially disclosure rules of changes in ownership structure. We have provided a comparison of US and French security regulations dealing with disclosure of changes in ownership structure. Different disclosure policies around the world are set. The Sarbanes-Oxley act of 2002 in the USA requires ownership reports and trading by officers, directors and principal securities holders. In Europe, since 1988, the large holding directive 88-627 fixed the minimum thresholds for disclosing significant crossing of shareholding across European Union. These two disclosure policies denote two different strategies. The American strategy focuses on the identity of the shareholder “insider” as opposed to European strategy which focuses on the threshold crossed by the shareholder (ownership concentration).

However European Union countries have changed their rules, inspired by US reform, to better protect investors. Recent European directives have aligned insider trading regulation to US requirements in terms of disclosure policies. The market abuse directive specifies that persons with managerial responsibilities should notify competent authorities about transactions in their firm’s securities which must be disclosed to the public. The notification of managers’ transactions was introduced by the directive 2004/72/EC which has defined persons obliged to report their transactions as administrators, managers or supervisors in the firm. Therefore, European countries implemented the insiders trading disclosure requirements as in the US without breaking down the crossing threshold disclosure requirements.

The objective of this research investigates the usefulness of insider trading disclosure policy and the crossing of shareholding thresholds. We analyze empirically the market reaction to the disclosure of insider trading in US and in France and to the crossing of shareholding thresholds which is regulation specific to France and European countries. We analyze data for the 10 first listed companies in USA and in France over two years: 2006 and 2007. We hand-collected 482 insider transactions for US firms and 363 insider transactions and only 35 crossing shareholding thresholds for French firms.

We attempt to compare alternative disclosure policies of the changes in ownership structure under different economy-wide regulatory environments. First, we compare the information content of insider trading disclosure policy in the USA and in France. This setting enables us to benchmark the US based results for the 10 first listed companies against the French market in which the insider trading disclosure

was recently introduced by the market abuse directive. The event study shows that while the market does not react to the disclosure of insider trading in American context, conversely in French context, insider trading has a significant effect on market reaction. The absence of market reaction to insider trading filing for the 10 first American listed companies can be explained by the country-market specific microstructure and to the country-level corporate governance institutions (Fidrmuc et al (2009)). Better corporate governance institutions in US improve transparency and reduce the ability and the motivation of insiders to distort information disclosure. These results could also be due to the sample choice that could distort our results. If market participants have relatively more information about large firms and firms with good analyst's coverage, as is the case with our sample, insider trades in these firms with relatively less information asymmetry should have less potential to trade on superior information. Second, the study contributes to the corporate governance literature by comparing two disclosure ownership structure policies: the insider trading disclosure and the crossing of shareholder thresholds disclosure. The results of this study show that the French market is more concerned about the trading of insiders than the ownership concentration. The insider disclosure regulation has more information content, on average, than the crossing shareholder thresholds disclosure regulation. The market reacts more strongly to the insider trading filing. The crossing of shareholder threshold disclosure is insufficient and the adoption of the insider trading disclosure could remediate the lack of informativeness of the crossing shareholder disclosure.

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