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Market Reaction to the Class Action Fairness Act of 2005

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Market Reaction to the Class Action Fairness Act of 2005

A Dissertation

Submitted to the Graduate Faculty of the
University of New Orleans
in partial fulfillment of the
requirements for the degree of

Doctor of Philosophy
in
Financial Economics

by

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May, 2010

Dedication

This work is dedicated to my family:

past, present and future.

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Abstract

The Class Action Fairness Act of 2005 (CAFA) was signed into law on February 18, 2005. Prior to CAFA, plaintiffs found it easier for class action lawsuits to be tried in their preferred venue—state courts. Changes introduced by CAFA practically removed the majority of class action jurisdiction from state to federal courts. Since law and regulation might serve as an external corporate governance mechanism, an interesting question is whether CAFA has strengthened or weakened corporate governance. If CAFA improves corporate governance, associated marginal benefits would outweigh marginal costs. The opposite would be true if CAFA weakens corporate governance. This issue was hotly debated in the US Congress. The proponents argued that CAFA would reduce costs for the affected firms, while opponents argued the opposite.

The main purpose of this paper is to examine which side of the debate is reflected in market reactions to various events that either enhanced or reduced the chances of the passage of CAFA. We identify the firms that are most likely to be affected by CAFA and find that the overall market reaction for these firms is positive when the likelihood of CAFA passage increases, while the reaction has been negative when the chance of its passage diminishes. We also hypothesize that firms that are more likely to be exposed to product liability litigation would experience a significantly higher (positive or negative) abnormal return than firms that are more likely to be involved in contract liability law suits. The results support this hypothesis. We also examine potential factors that might explain cross-sectional variations in abnormal returns and find that duality of Chairmanship and CEO has negative impact, while the

firm's debt ratio and analysts' following have positive impact on abnormal returns. Finally, based on our findings that the transfer of class action jurisdiction from state to federal courts is favorably received by stockholders, we argue that state courts are unfavorable forums for corporate defendants. We test this proposition by examining market reaction to events of class action cases being remanded to state courts. Consistent with this proposition, we find significantly negative market reactions to this event.

Keywords: Class Action Fairness, Regulatory Event, SUR, Event Study

1.INTRODUCTION

The Class Action Fairness Act of 2005¹ (CAFA) that became effective as of February 18, 2005 has been the most significant change to United States class action law in over 40 years.² Prior to CAFA, two conditions had to be concurrently met to keep a class-action case from falling under the federal jurisdiction. The first condition stated that the amount in controversy must not exceed \$75,000 per class member, although the aggregate amount had no ceiling. The second required *complete* diversity, situations where plaintiffs and defendants must be citizens of different states. Proponents of CAFA successfully argued that the loopholes in the jurisdictional requirements allowed plaintiffs' attorneys to justify class-action cases being tried in "more friendly" state or local courts where corporate defendants were forced to settle claims out of court or risk large judgments in these courts. Consequently, consumers rarely benefited while the attorneys collected extraordinary fees. Certification requirements, as a result of CAFA, were changed to include class action litigation involving parties with *minimal* diversity or claims exceeding \$5 million in aggregate. These changes practically removed the majority of class action jurisdiction from state to federal courts.

Law and regulation serve as an external corporate governance mechanism by imposing discipline on the firm in order to protect stakeholders such as shareholders, consumers, employees and the environment (see Gillan, 2006).³ A relevant question,

¹ The bill passed the U.S. Senate on February 10, 2005 and the U.S. House of Representatives on February 17, 2005. President Bush signed the legislation into law.

² The Act also applies to mass actions. When referring to class action litigation, we are also referring to mass actions.

³ Gillan (2006) discusses corporate governance in terms of internal and external components. He then divides external governance into five broad categories: law and regulation; markets for corporate control;

therefore, is whether CAFA has strengthened or weakened this aspect of corporate governance. If stockholders of the firms that are more likely to be affected by CAFA believe that the act has strengthened (benefits outweigh costs) corporate governance, the market reaction to steps leading to (and including) the eventual passage of this bill will be positive. The opposite should be true if stockholders believe that CAFA would weaken (costs outweigh benefits) corporate governance.

Whether CAFA would make corporate governance more efficient (reduce costs) or less efficient (increase cost) was a hotly debated issue during the legislative deliberation process that eventually led to its adoption. The proponents argued that the rent seeking trial lawyers “game” the legal system by constructing class action litigation that would find its way into friendly state courts resulting in frivolous litigation that causes a drain on the economy.⁴ The argument goes on to suggest that Federal courts are more careful adjudicators, are less likely to certify class actions, and provide closer scrutiny of frivolous claims and therefore, CAFA would prevent *forum shopping* by class action trial lawyers.⁵ Consequently, CAFA should reduce costs by avoiding unnecessary litigations, thus benefitting all stakeholders. On the other hand, the opponents argued that the adoption of CAFA might weaken the corporate governance and result in higher costs. Their arguments go as follows. First, CAFA might actually weaken the power of litigation by potentially eliminating an extra layer of legal protection (i.e., removal of state

markets for capital information; markets for accounting financial and legal services; and private sources for external oversight such as media and external lawsuits.

⁴ Anecdotal evidence was presented regarding the miscarriage of justice as small town pharmacists told of the stress and burdens placed upon them by being named as defendants in litigation directed at deep pocketed pharmaceutical firms.

⁵ Congressional testimony referred to the problem of “home cooking”, “jackpot justice,” and “judicial hellholes.” The term “judicial hellhole” comes from the name of an annual report published by the Americans for Tort Reform Association. Orleans Parish is hailed in past reports as a “judicial hellhole”. Source: Congressional Testimony from the *Legislative History of the Class Action Fairness Act*

court venues). Second, Federal judicial system has been and continues to experience a shortage of judges. As such, it may take longer to move cases through a backlogged federal judiciary. (Appendix A provides the list of pending cases with the Federal courts.) Senator Ted Kennedy spoke in opposition noting, “The difference in the amount of time it takes to adjudicate a State court age discrimination case compared to a Federal court case may be as much as 2 years. No wonder the corporate defendants are salivating over this opportunity to escape their wrongs” (Senate Floor Debate on S.5, Feb 8, 2005). Third, information asymmetries that exist between managers and stakeholders (such as shareholders or consumers) decrease as more information is divulged. CAFA, by potentially removing state venues, might impair such information flow as the legal discovery process diminishes. In this paper we examine which view of CAFA’s role as a corporate governance mechanism is reflected in the market reaction to various events surrounding the passage of CAFA.

Previous financial economics research documents market reactions to such events as changes in corporate regulatory environments and the filing or resolution of corporate litigation⁶. This paper contributes to the literature by subjecting CAFA to similar analysis. Our main purpose is to investigate the market reaction to events that we identify as likely to increase or decrease the likelihood of passage. The investigation begins by examining the market reaction of three groups of firms over the event days: (1) firms that actively lobbied for the act; (2) firms that are more likely to be impacted by the intent of the legislation; and (3) firms that are less likely to be impacted by the passage of the law. We hypothesize that the market reaction will be less pronounced for

⁶ See Chhaochharia and Grinstein (2007) for an analysis of Sarbanes Oxley and Haslem (2005) who examines the role of managerial opportunism in litigation settlement.

group 3 than group 2. We then investigate what firm characteristics (including internal corporate governance tools, information asymmetry and other pertinent firm characteristics) explain the cross sectional variations in firms' cumulative abnormal returns. Our final empirical examination involves testing the underlying premise of CAFA proponents, mainly that state courts are unfavorable forums for corporate defendants. We do this by examining pre CAFA price effects around forum changes when class action cases are remanded to state court.

The remainder of the paper is organized as follows. Section 2 provides a background on the developments leading to CAFA and compares the filing determinants before and after CAFA. Section 3 presents a literature review regarding abnormal returns around litigation events as well as regulatory changes. Section 4 develops hypotheses and Section 5 describes the methodology. Section 6 reports findings, while Section 7 summarizes the results and presents concluding remarks.

2.CAFA--BACKGROUND

CAFA made its first legislative appearance in 1997 and it was approximately eight years later that the final bill passed. It was the first piece of legislation addressed by Congress at the beginning of President Bush's second term in office. It was passed three months after the 2004 congressional elections that resulted in an increase in the republican senatorial majority.

2.1. Jurisdictional Determinants: Pre-CAFA period

Federal courts adjudicate cases related to federal statutes, or U.S. Constitution, or when the federal government is a litigating party. Generally, local issues and causes of action derived from state laws are adjudicated in state courts. However,

federal courts do have jurisdiction over state claims when actions are brought involving *diversity of citizenship*. This occurs when issues arise under state law between parties that are *citizens of different states*. Federal jurisdiction exists and applies state law in order to provide a safeguard against any bias that may exist between a local court and an out of state party.⁷ Prior to CAFA, two conditions had to be simultaneously met for a case to fall under federal jurisdiction. The first condition stated that the amount in controversy must exceed \$75,000. The second required *complete diversity*, situations where plaintiffs and defendants must be citizens of different states.⁸

Federal courts of appeal held previously to CAFA that the amount in controversy requirement applied to each class member. If each class participant claims less than \$75,000 in damages, other things equal, then federal jurisdiction would not apply. Supporters of class action reform vigorously asserted that plaintiffs' attorneys strategically game the system in the following way. An entrepreneurial attorney might come up with an idea for a class action or the cause of action may be derived from a claimant. Realizing the potential of the claim, the attorney would seek a representative class member from a state or a jurisdiction with a magnet court or a local defendant in a state with a magnet court. In order to allay federal jurisdiction, damages would be sought for less than \$75,000 per class member. Applying this theory, one may have a class action attorney from Pennsylvania filing a class action complaint against a defendant corporation domiciled in Delaware in an Illinois state court. Reformers were quick to point out the apparent contradiction in the system whereby the Louisiana

⁷ For example, a Louisiana resident involved in a slip and fall in Alabama may have the right to have their claim tried in either Alabama state court or a federal district court.

⁸ In the preceding example if the injured party pleads greater than \$75,000 in damages and each party is domiciled in a different state, federal jurisdiction would apply.

resident injured in Alabama claiming \$75,000 in damages would fall under federal jurisdiction, while the case of thousands of class members from different states with an aggregate claim in the billions of dollars would be decided in a state court.⁹

2.2. Jurisdictional Determinants: Post-CAFA Period

A major argument against the class-action law prevailing in the pre-CAFA period was that it allowed plaintiff's counsel to shop ("forum shopping") for the most advantageous venue. The venue is also described as "magnet" court¹⁰ because, the proponents of CAFA argued that, this court, where judges are elected, makes it easier for the plaintiff's attorney to obtain class-action certification.

Congressional proponents of class action reform cited four main abuses related to class action certification. The abuses were identified as (1) sympathetic state courts being predisposed to certify class action litigation; (2) state courts certifying national class actions and applying one state's law to all class members regardless of their home jurisdictions; (3) multiple "copycat" class action filings, and (4) class action settlements providing little or no relief to class members, but incurring considerable attorneys' fees. This argument ultimately prevailed and subsequently Congress chose to address the issue by altering the jurisdictional requirements for class action venues.

⁹ Class action litigation falls under Rule 23 of the Federal Rules of Civil Procedure. Rule 23(a) sets forth requirements regarding numerosity of the class, commonality of the questions of law and the adequacy of class representation as it relates to protecting the interests of the class. In addition to the conditions set forth in 23(a) at least one condition of 23(b) must be met. Rule 23(b) requires that (1) the individual prosecution of separate claims may lead to inconsistent adjudications with the potential to create incompatible standards of conduct for the opposing party to the class (2) the party opposing the class has acted or refused to act in a manner applicable to the entire class (3) questions of law or fact are found to be common to all members of the class and override any individual differences of class members. Most states have adopted rules similar to 23(a) and 23(b) above. If an action arises that meets the requirements set forth in 23(a) and 23(b) then class certification may be warranted. The ultimate forum for the adjudication of the class action depends on whether or not the members of the class exceed the amount in controversy and the degree of diversity between class members and defendants.

¹⁰ Magnet courts were usually located in counties with small populations with state court judges who were elected rather than appointed as in the federal judiciary.

CAFA brought about the expansion of federal jurisdiction by introducing three major changes to the Pre-CAFA law. First, CAFA adopted a *minimal diversity* threshold in contrast to *complete diversity*. Previously a requirement for removal of a class action from state to federal court was that all plaintiffs had to be diverse from all defendants, i.e. all plaintiffs and all defendants had to be citizens of different states. Minimal diversity allows class actions to be removed as long as at least one defendant is a citizen of a different state than one plaintiff. Second, in further expansion of federal jurisdiction, CAFA allows for removal when aggregate class claims exceed \$5 million. This was a departure from the Supreme Court's previous precedent disallowing the aggregation of individual claims to meet the amount in controversy criterion. Third, other characteristics of CAFA stipulate that the named defendant must be the "real" target of the action. For instance, naming a local insurance agent will not circumvent minimal diversity if the majority of potential damages come from an out of state parent firm. The changes enacted by CAFA practically remove the majority of class action jurisdiction from state to federal courts.¹¹ Figure 1 summarizes pre and post CAFA jurisdictional determinants.

¹¹ In order to keep class actions in state courts when state issues outweigh federal issues, the law allows two exceptions. One is referred to as the "Local Controversy" exception prohibiting removal when the "substantial majority" of class members and the "primary defendants" are both citizens of the state where the action is filed. In this case a federal district court may decline jurisdiction if (1) greater than two thirds of the proposed plaintiff class are citizens of the of the state where the action was filed and (2) at least one defendant is a defendant from whom significant relief is sought whose alleged conduct is the basis for the action and who is a citizen of the state where the action was filed and (3) principal injuries from the conduct of each defendant occurred in the state where the action was filed. The "Home State" exception declines federal jurisdiction if two thirds or more of the proposed plaintiff class and the primary defendants are citizens of the state where the action was filed.

Figure 1: Filing Determinants—State vs. Federal

Panel 1. The following diagram shows the filing determinants during the pre-CAFA period. All federal questions of law are filed in federal district courts. If there is a state issue there must be a determination made regarding diversity of citizenship. If all plaintiffs and defendants are citizens of different states then the matter falls under federal jurisdiction. If at least one plaintiff and one defendant are citizens of the same state, then a determination must be made regarding the amount in controversy. If the amount in controversy is less than \$75,000 per class member the issue is allowed to move forward in state court.

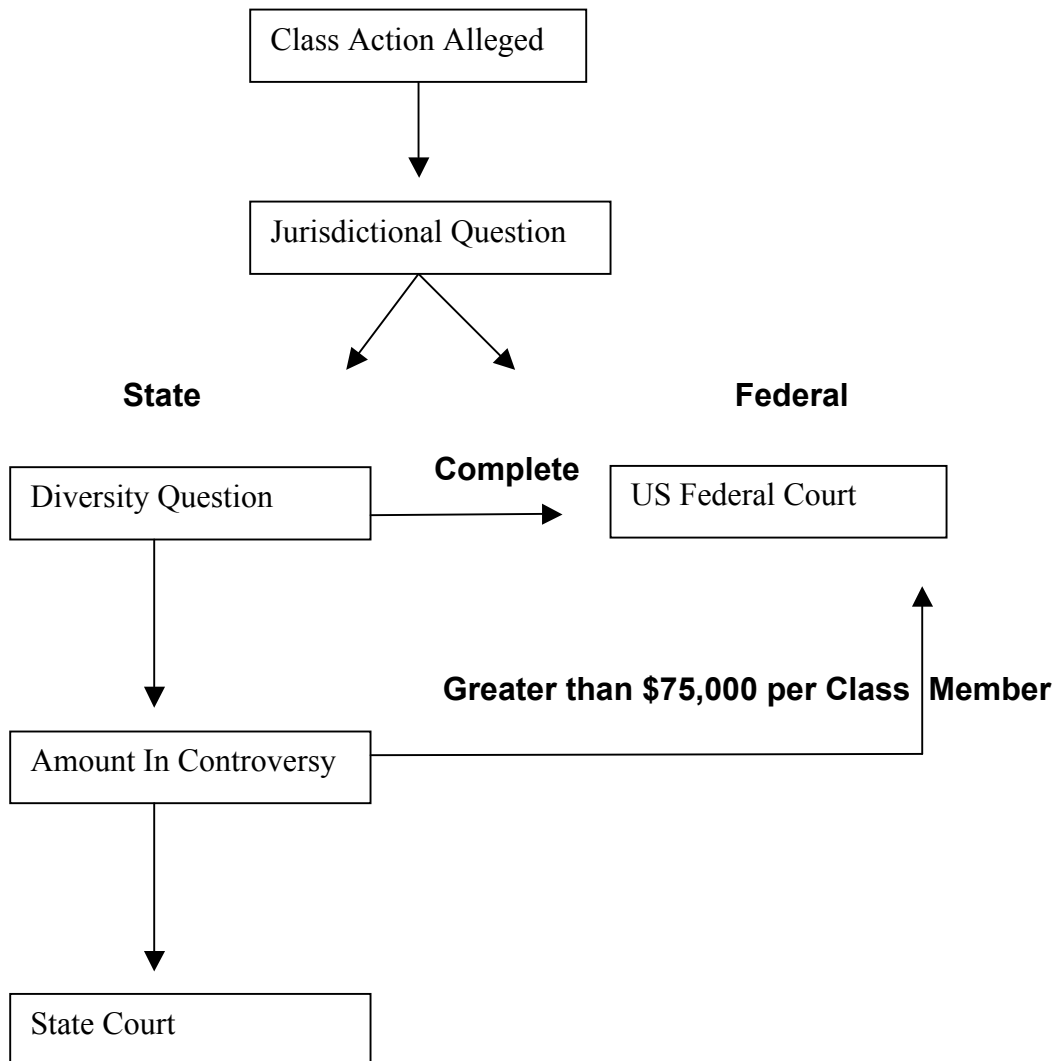
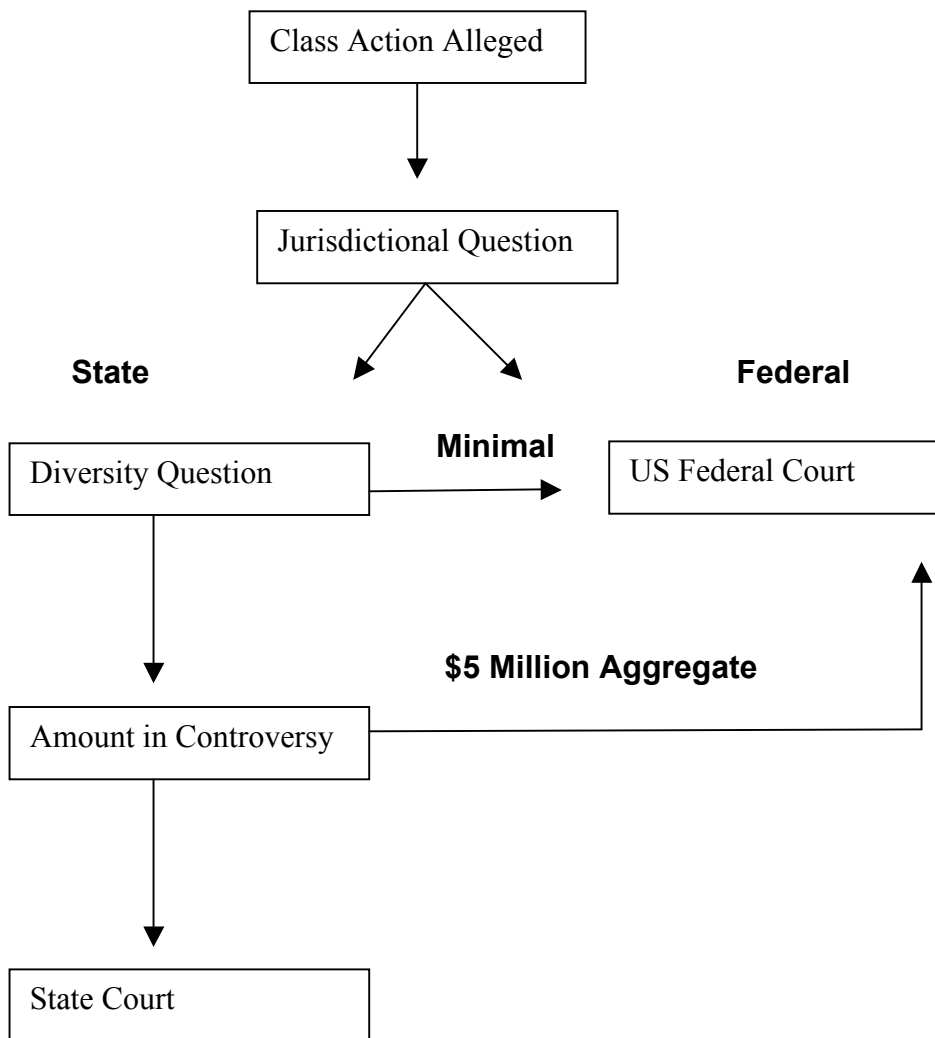


Figure 1: Filing Determinants—State vs. Federal (continued)

Panel 2. The diagram below depicts filing determinants as a result of CAFA. All federal questions of law are filed in federal district courts. If there is a state issue there must be a determination made regarding diversity of citizenship. If any plaintiff and defendant are citizens of different states then the matter falls under federal jurisdiction. If the amount in controversy is greater than \$5 million in aggregate, then federal jurisdiction applies.



3. LITERATURE REVIEW

3.1. Market Reactions to Legislative Changes

Several studies exist in literature that examines the market reaction to regulatory changes. Although these papers are not directly related to CAFA, their results and methodology have implications for our study. Schipper and Thompson (1983) measure the economic impact of merger related regulatory changes from 1966-1970. They consider the Williams Amendments, the 1969 Tax Reform Act, the Accounting Principles Board Opinions 16 and 17 as well as SEC disclosure rules. They find that market reactions to the Williams Amendments are unequivocally negative.

In an examination of 20 regulatory changes from 1887 to 1978, Binder (1985) examines shareholder reaction to regulatory changes. The regulatory changes are described as classic price-entry type--job or consumer safety, environmental quality, and the nationalization of rail transportation. The regulatory events chosen occur over a long period of time and there are no clear demarcations as to when market expectations change regarding the regulatory events. He employs both daily and monthly return data. Excess returns are measured for all announcement months and also the most important announcement month. The null hypothesis is rejected about as often as if by chance. Similar results are found using daily returns. Binder points out difficulties in measuring abnormal returns when event periods are not clearly defined or when market expectations are such that the regulatory event is partially or completely anticipated. He finds that when events are not completely unanticipated in the methodology, the results will not reject some of the null hypotheses as might be warranted. Binder concludes that

finding no impact on stock prices does not warrant a conclusion that a regulation is ineffective.

Ali and Kallapur (2001) examine the impact of the Private Securities Litigation Reform Act of 1995 and focus on the computer, electronics, pharmaceutical, biotech and retailing industries. Their initial finding is similar to that of previous studies in that shareholders react positively to the act. However, after performing price reversal tests and taking into account additional confounding legislative events, they find that market reaction to this act is indeed negative. Griffin et al. (2004) study investor responses to news of class action securities fraud, the disclosure of the accounting restatement and the date that the fraud allegedly begins. Mean excess returns are -16.6%, -4.1% and 3.6% for the end of the class period date, the class action filing date, and the beginning of the class period date respectively.

Smith, Bradley and Jarrell (1986) use the OPEC increase in oil prices along with U.S. regulatory price controls to examine the effects of the 1973 oil crisis on portfolios of petroleum industry firms. They incorporate firm specific characteristics into a market model estimated using seemingly unrelated regression methodology. By incorporating firm operating characteristics into the estimation procedure they conclude they have removed a potentially confounding factor in estimating abnormal returns within an industry. Allen and Wilhelm (1988) investigate the inter-industry effects of The 1980 Depository Institutions Deregulation and Monetary Control Act on portfolios of non-Federal Reserve System Banks, Federal Reserve System Banks as well as Savings and Loans. They find that Federal Reserve System Banks have significantly positive abnormal returns, while non-Federal Reserve System Banks and Savings and Loans

had negative abnormal returns. In a similar vein, Cornett and Tehranian (1990) examine the impact of the Garn-St. Germain Depository Institutions Act of 1982. Specifically, they examine portfolios comprised of large and small savings and loans as well as large and small commercial banks. They find that shareholders of large commercial banks and savings and loans experienced positive excess returns while shareholders of small commercial banks and savings and loans experienced negative excess returns.

A number of studies have examined the market reaction and shareholder wealth effects of the Sarbanes-Oxley Act (SOX) of 2002 including Li, Pincus and Rego (2008), Jain and Rezaee (2006) and Chhaochharia and Grinstein (2007). In pre-SOX studies involving corporate governance and firm value, critics cite an endogeneity problem involving the firm's choice of corporate governance. As an external corporate governance mandate, changes brought about by SOX provide a unique event to study the relationship between firm value and changes in corporate governance. Li et al. (2008) focus on the relationship between event period abnormal returns for events associated with SOX and the extent of earnings management. They find that the extent of earnings management and event abnormal returns are significantly and positively related. They conclude that the market anticipated that SOX would constrain earnings management and improve the quality of financial reporting of firms that had previously managed earnings extensively. Jain and Rezaee (2006) investigate the shareholder wealth implications of events associated with SOX and then regress measures of financial reporting, audit functions, corporate governance proxies and control variables on CARs. They find positive (negative) market reactions to events that increased

(decreased) the probability of passage of SOX. Firms with stronger corporate governance, financial reporting and audit functions prior to the Act were more positively impacted by the Act. Chhaochharia and Grinstein (2007) hypothesize that low compliance firms (in the pre-SOX period) outperform high compliance firms over the entire event period associated with SOX. They group firms into portfolios along the main provisional measures of the act. They use proxies for insider trading, financial reporting, related party transactions, internal control systems and board committee independence. Their results are consistent with the hypothesis: lower compliance firms outperform higher compliance firms along most provisional groupings. Also, large firms earn positive abnormal returns while small less compliant firms earn negative abnormal returns.

3.2. On Cross Sectional Variations in Price Reaction

Several studies report that price reaction varies depending on, among other things, the type of litigation and by the industry type of defending firms. Karpoff and Lott (1993) test abnormal returns involving corporate fraud and crime involving stakeholders, the government, financial reporting and regulatory violations. They focus on the kinds of events where there is potential for repeated interaction between the tortfeasor and the claimant. Cumulative abnormal returns are -1.58%. Furthermore financial reporting frauds have the largest negative cumulative abnormal returns -4.66% while they report insignificant findings for regulatory violations. The median loss in shareholder wealth is \$6.418 million. Estimated direct costs of litigation are 6.4% of shareholder wealth

losses. Common stock losses are 100 times greater than the reported U.S. Sentencing Commission's guidelines for fraud. The authors ascribe the excess to reputational loss. Bhagat, Bizjak and Coles (1998) examine the price reactions of defendant corporations by litigation type and by the industry type of defending firms. They find that on average defendants lose .97% of their market value of equity or approximately \$15.96 million upon the reaction to filing and settlement announcements. However, firms involved in environmental, product liability and shareholder lawsuits experienced greater than average negative abnormal returns (-3.08%, -1.46%, and -2.71% respectively) have greater negative shareholder wealth implications than anti-trust or breach of contract (-.81% and -.16 respectively). They also report that government plaintiffs tend to elicit the largest negative impacts to shareholder wealth at -1.73%, while inter-firm and other non-firm party reactions are -.75% and -.81% respectively.

In a later paper, Karpoff and Lott (1999) find statistically significant negative average abnormal returns when announcements occur that indicate defendant firms are involved in a lawsuit seeking punitive damages. In their analysis they examine how firms engaged in litigation with punitive damage claims react when Supreme Court¹² decisions addressing punitive damages are rendered. They find that while there are some significantly positive results to firms engaged in litigation when legislative action might impair the likelihood of punitive damages, they find punitive damages are difficult to predict and have an insignificant effect on firm value. In some instances they find firm value increases when an event decreases the likelihood of punitive damages, however they also find evidence to the contrary.

¹² Karpoff and Lott (1999) examine seven Supreme Court decisions involving punitive damage issues.

Prince and Rubin (2002) find negative abnormal returns occur around the announcement of lawsuits and initial market reactions approximate worst case scenarios in product liability lawsuits. There is no evidence of reputational losses in the sense that initial losses are greater than the potential costs of the litigation. Brown et al. (2004) investigate events surrounding the deliberation and passage of the Terrorism Risk Insurance Act of 2002. They find negative abnormal returns in the banking, construction, insurance, real estate investment trusts, transportation and public utilities. Abnormal returns in property and casualty insurance are found to be value neutral at best.

Haslem (2005) reports that abnormal returns are more sensitive for firms involved in product liability lawsuits than those involved in contract lawsuits. That is firms in product liability lawsuits have more positive abnormal returns for positive litigation events and more negative abnormal returns for negative litigation events than firms in contract litigation. Koku (2006) compares the abnormal returns associated with a sample of non-class action litigation announcements with class action litigation announcements and finds that class action litigation abnormal returns are twice those of non-class action abnormal returns.

3.3. Literature Summary

The major findings based on our literature survey may be summarized as follows:

- 1.Regulatory changes impact firm value and the direction of impact depends on what the legislation purports to accomplish.
- 2.The impact of regulatory changes may vary depending on a firm's industry affiliation, type of law suits, and type of plaintiff.

4. HYPOTHESES DEVELOPMENT

4.1. On the Direction and Sensitivity of Price Reaction to CAFA

The existing literature establishes that the stock market responds to regulatory changes. Thus we expect to find market reaction in response to CAFA as well. However, the direction of this reaction is uncertain. On one hand, opponents argue that CAFA might weaken an important weapon in the external corporate governance arsenal by removal of state court venues. The opponents also argue that CAFA might induce inefficiency in the legal system by 1) increasing delay in the judicial process as the Federal judicial system, which is plagued by a shortage of judges, will further be backlogged with additional cases (see appendix A), and 2) potentially impairing the flow of information between firm management and its stakeholders as the process of legal discovery is curtailed. If shareholders of CAFA-affected firms share this viewpoint, they are likely to react negatively to the passage of CAFA.

On the other hand, proponents contend that CAFA will instead improve the external corporate governance. They maintain that Federal courts are more careful adjudicators and provide closer scrutiny of frivolous claims. The jurisdictional changes in CAFA decrease the likelihood of corporate defendants finding themselves in state courts which are more likely to certify class actions. This in turn will reduce the number of unnecessary litigations and, therefore extensive litigation costs faced by defendant firms. If shareholders of CAFA-affected firms share this viewpoint, they are likely to react positively to the passage of CAFA. Thus, the direction (positive or negative) of price impact in response to events leading to CAFA is uncertain and needs to be empirically determined.

Some firms are more sensitive than others to a specific type of lawsuits.

Literature provides ample examples of this asymmetric impact. For example, Bhagat, Bizjak and Coles (1998) find the reaction to filing and settlement announcements is significantly greater for firms involved in environmental, product liability and shareholder lawsuits than those involved in anti-trust or breach of contract. Prince and Rubin (2002) examine product liability lawsuit filings and reactions in the automobile and pharmaceutical industries and find sympathetic decreases in firm value for competitors in the automobile industry and positive reactions from competitors in the pharmaceutical industry. Brown et. al. (2004) examine the impact of the Terrorism Risk Insurance Act of 2002 in six industries and find negative abnormal returns in the banking, construction, insurance, real estate investment trusts, transportation and public utilities but no abnormal returns in property and casualty insurance.

It is reasonable to expect that firms that are prone to class-action suits are more likely to be affected by CAFA events. Of the major type of lawsuits that a firm might be exposed to--environmental, product liability, shareholder-related, contract liability, and anti-trust--- CAFA is not applicable in anti-trust matters and is limited in such that it does not apply to shareholder lawsuits. Also, CAFA contains the "Local Controversy" and "Home State" exceptions which may effectively limit its reach in environmental class actions. Therefore, firms more exposed to product liability or contract liability cases are more likely to feel the impact of CAFA.

Haslem (2005) shows that firms in product liability lawsuits have more positive abnormal returns for positive litigation events and more negative abnormal returns for negative litigation events than firms in contract litigation. For example, firms in product

liability lawsuits experience more positive or less negative abnormal returns upon litigation settlement, firm wins and firm losses. Based on Haslem's findings, we expect firms more exposed to product liability suits are likely to be more sensitive to CAFA than firms more exposed to contract liability suits. This leads us to formulate the following hypothesis:

Hypothesis 1. *Price reaction to CAFA has to be empirically determined.*

Hypothesis 2. *Price reaction to CAFA is more sensitive (more positive or more negative) for firms that are principally involved in product liability cases than those that are primarily involved in contract liability cases.*

4.2. On the Cross-sectional Differences in Market Reaction for Firms within the Same Industry

Abnormal returns resulting from CAFA are likely to vary among firms within the firms involved in product liability (and contract liability) lawsuits depending on firm characteristics. In this context, a firm's internal corporate governance mechanism might play an important role along with a tool of external corporate governance (regulatory reform, such as CAFA). In this vein, Chhaochharia and Grinstein (2007) compare the abnormal returns over the entire event period associated with SOX between low compliance and high compliance firms. They form groups using proxies for the main provisional measures of the act---insider trading, financial reporting, related party transactions, internal control systems and board committee independence.

Chhaochharia and Grinstein report that lower compliance firms outperform higher compliance firms along most provisional groupings. Also, large firms earn positive abnormal returns while small less compliant firms earn negative abnormal returns. This leads us to to develop the following hypothesis:

Hypothesis 3. *Other factors, including internal corporate governance structure, are likely to explain the cross-sectional differences in abnormal returns for firms within the same industry.*

5. EVENT, SAMPLE, METHODOLOGY, & DATA

5.1. Defining Event Dates

The Legislative History of The Class Action Fairness Act of 2005 provides a 2,654 page summary of the Class Action Fairness Act from its initial filing through its final passage in February of 2005. This document contains all Congressional deliberations, discussions, hearing, and testimony for the 1999-2005 period. Table 1 compiles legislative action dates based on this document. Panel 1 of Table 1 lists the pertinent dates for the US Senate, while Panel 2 does the same for the US House of Representatives. We use Table 1 and perform a Lexis-Nexis search to determine the final list of event dates for our paper. We choose only those events that either increase or decrease the chances of CAFA being passed.

Table 1: Legislative History of the Class Action Fairness Act

This table enumerates the legislative history of the Class Action Fairness Act of 2005. The analysis that follows focuses on the period subsequent to October 23, 2003 when the legislation focused to address forum shopping.

Panel 1: U.S. Senate	
Date	Event
October 30, 1997	Senate Judiciary Subcommittee on Administrative Oversight and the Courts Hearing
September 28, 1998	“Class Action Fairness Act of 1997” approved by the Subcommittee on Administrative Oversight and the Courts, S.2083 introduced by Senators Grassley (R-IA) and Kohl(D-WI)
February 2, 1999	“The Class Action Fairness Act of 1999” introduced by Senators Grassley and Thurmond (R-SC) S.353
May 4, 1999	Legislative Hearing
June 29, 2000	Senate Judiciary Committee Approves S.353
November 15, 2001	S.1712 Introduced
July 30, 2002	Senate Judiciary discusses S.1712 during a hearing on class actions
February 4, 2003	“The Class Action Fairness Act of 2003” introduced as S.274
April 11, 2003	Judiciary Committee reported favorably on S.274
October 17, 2003	“The Class Action Fairness Act of 2004” S.1751 introduced
October 23, 2003	Senate failed to invoke cloture 59-39
February 10, 2004	“The Class Action Fairness Act of 2004” S.2062 is introduced
July 7, 2004	Motion to proceed on S.2062 filed
July 8, 2004	Senate failed to invoke cloture 44-43
January 25, 2005	“The Class Action Fairness Act of 2005” introduced as S.5
February 3, 2005	Senate Judiciary Committee reports favorably on S.5
February 10, 2005	Senate passes S.5 72-26
Panel 2: U.S. House of Representatives	
Date	Event
June 27, 2001	Rep. Goodlatte filed H.R. 2341
February 26, 2001	Hearings were held on H.R. 2341 by the House Committee on the Judiciary
March 6, 2001	Committee Markup
March 7, 2001	H.R. 2341 amended
March 12, 2002	House Report No. 370 issued on H.R. 2341
March 13, 2002	H.B. 2341 debated and passed
March 6, 2003	H.R. 1115 “The Class Action Fairness Act of 2003” introduced
May 15, 2003	Hearings on H.R. 1115 by House Committee on the Judiciary
May 21, 2003	The House Committee of the Judiciary holds a markup session
June 12, 2003	H.B. 1115 debated and passed
February 2, 2005	H.R. 516 “The Class Action Fairness Act of 2005” introduced
February 17, 2005	The House of Representative passes S. 5 279-149

According to Sherman (2006), December 2003 is when CAFA's sole focus turned to forum shopping as other issues such as coupon settlements had already been addressed. Therefore, we focus on the period subsequent to December 2003. If two events occur on successive dates, (for example the introduction of the bill in the house on February 2, 2005 and the favorable judiciary report in the senate on February 3, 2005, we choose the earlier event as the event date. From the legislative event dates shown in Table 1 we choose February 10, 2004 (the Senate introduction of S.2062), July 8, 2004 (failed cloture in the Senate); February 2, 2005 (H.R. 516 introduction); February 10, 2005 (Senate passes S.5) and February 17, 2005 (the House of Representative passes S.5). An additional Lexis-Nexis search reveals events that are not defined as official legislative actions. These include the Presidential election on November 2, 2004 giving the GOP a majority in the senate, Senator Frist's decision to remove the legislation from the agenda in June of 2004¹³ and Senator Frist's press conference of January 17, 2005 outlining the senate's legislative priorities¹⁴. The final event dates we choose are listed in Table 2.

¹³ Bestwire, 06-07-2004:"Congress Honors Reagan's Death, Delays Class Action Reform" by Chris Grier.

¹⁴ Bestwire, 01-24-2005:"Insurer Lobby Cheers Return of Class Action Legislation" by Chris Grier.

Table 2: Event Study Event Dates

This table shows event dates in the legislative history of the Class Action Fairness Act of 2005 that are examined in this paper.

Date	Event
February 10, 2004	“The Class Action Fairness Act of 2004” Introduced as S.2062
June 8, 2004	Senator Frist Removes CAFA from the Senate Agenda
July 8, 2004	Cloture Failed 44-43
November 2, 2004	U.S. Elections Give GOP Majority in Senate
January 17, 2005	Senator Frist Press Conference Outlining CAFA as a Top Priority
February 2, 2005	H.R. 516 “The Class Action Fairness Act of 2005” Introduced
February 10, 2005	The U.S. Senate Passes S.5 72-26
February 17, 2005	The House of Representatives Passes S.5 279-149

Sources: Table 1 and Lexis-Nexis

5.2. Sample

Two of the CAFA’s major substantive changes are the two threshold requirements: minimal diversity or aggregation of the amount in controversy. Since the data regarding the aggregate amount of controversy are harder to obtain than the diversity data, we focus on the latter to build these portfolios. The underlying assumption here is that the minimal diversity threshold (if any defendant is a citizen of a different state than any plaintiff, the case can be removed) would be sufficient for class action venues to move from a state to a federal court post CAFA. Therefore, firms involved in certain types of class actions that could have been filed in state courts in the pre-CAFA period can no longer be sued in state courts in the post-CAFA period.

As there are currently no datasets available that provide state level class action data in a tractable manner, we use the Federal Court Case Integrated Database (IDB) as proxy for the types of firms that would likely be involved in class action litigation. IDB contains limited information regarding the amount of damages pled, but provides delineations for case origin for every record in the dataset. For every class action we can identify if a case was originally filed in a state or federal court.

Table 3 produces a summary of diversity class actions by nature of lawsuit in 2004 that are reported in IDB. These are instances where class action lawsuits were initially filed in state court. Insurance and other contract actions make up 28.3% of diversity class actions, while personal injury-product liability, motor vehicle-personal injury, and motor vehicle-product liability account for 25.8%.

Table 3: Diversity Class Actions in 2004.

This table presents the proportion of diversity class actions by nature of suit categories. The proportion of diversity class actions by nature of suit categories gives an indication of the types of class actions that CAFA may impact.

Nature of Suit (NOS)	Percent
Insurance	13.3
Negotiable Instruments	.8
Stockholders Suits	.8
Other Contract Actions	15.0
Foreclosure	.8
Torts to Land	3.3
Tort Product Liability	.8
Other Real Property Actions	2.5
Airplane Product Liability	1.7
Motor Vehicle Personal Injury	.8
Motor Vehicle Product Liability	1.7
Other Personal Injury	9.2
Personal Injury – Product Liability	23.3
Asbestos Personal Injury- Product Liability	1.7
Other Fraud	6.7
Truth In Lending	.8
Other Personal Property Damage	1.7
Property Damage-Product Liability	12.5
Civil (RICO)	1.7
Constitutionality of State Statutes	.8
Total	100.0

Source: Federal Court Case Integrated Database

5.2.1. Product Liability Litigation Portfolio

We hypothesize that firms involved in product liability cases would exhibit a greater price reaction to CAFA than their contract liability counterpart. Testing of this hypothesis requires us to form two basic portfolios, namely product liability litigation portfolio and contract litigation portfolio. Based on Table 2, we form a product liability portfolio consisting of code 355 (Motor Vehicle Product Liability), 360 (Personal Injury),

and 365 (Product Liability). This process yields a total of 175 diversity class actions from 2001 through 2004.

Docket numbers are then used to extract the names of the parties in the litigation via PACER (Public Access to Court Electronic Records). In most instances there are multiple corporate defendants and in some instances there are multiple related cases. CRSP and COMPUSTAT were then searched in order to identify firm permanent numbers, CUSIPS, and SIC codes. Additionally, firms in the final sample must have at least 504 trading days worth of returns from the earliest event date (02/10/2004). We expand our sample by including firms that are in the same industries as the ones involved in product liability litigation. The final product liability portfolio contains 304 firms with nature of suit codes 355, 360 and 365 from 2001 through 2004 as well as peer firms extracted from COMPUSTAT by 4 digit SIC codes.

5.2.2. Contract Litigation Portfolio

For the contract liability portfolio, we employ the same screening methodology as the product liability litigation portfolio. However, this portfolio includes class actions that are originally filed in state courts with nature of lawsuit codes 110 (insurance) and 190 (other contracts). This process results in 97 class actions. We repeat the steps as used in forming the product liability portfolio. The final contract liability portfolio consists of 393 firms.

5.2.3. Lobby Portfolio

In addition to the two main portfolios described above, we also include a portfolio of firms that lobbied for CAFA. We assume that firms that advocated for the passage of CAFA did so because they expected to benefit from its passage. The portfolio of firms

that lobbied for the Act is selected by reviewing disclosure reports filed by lobbyists in order to comply with the Lobbying Disclosure Act of 1995.¹⁵ These reports contain information regarding the firm's client as well as the legislation lobbied for or against on their behalf. The US Senate website contains a database of disclosure reports which is searchable by the type and name of legislation. Search results from this database for the years 2001 to 2005 for firms that lobbied for CAFA are presented in Table 4. The final lobby portfolio contains 70 firms with the requisite return data.

¹⁵ http://www.senate.gov/pagelayout/legislative/g_three_sections_with_teasers/lobbyingdisc.htm
Any firm that expects to receive greater than \$10,000 in lobbying income must file.

Table 4: Firms Associated With CAFA As Identified in Lobbying Disclosure Filings

To comply with the Lobbying Disclosure Act of 1995, any firm or entity that expects to receive more than \$10,000 for their efforts must report their activity. This table lists the firms that were involved in lobbying activities pertaining to CAFA.

3M Co.	Ford Motor Corp.	Prudential Financial
ACA International	GAF Corp.	Radioshack Corp.
Ace INA Holdings	General Electric Co.	Scotts Company
Aetna	Guidant Corp.	Sears
Alticor Inc.	Hartford Financial Services Group	Service Master Co.
Altria	Health Net Inc.	Solutia Inc.
American Express	Home Depot	State Farm Insurance Companies
American International Group	Household Financial Group	Textron Inc.
A.O. Smith Corp.	HSBC Group Corp.	The Bank of New York Mellon Corp.
Apple Inc.	Humana Inc.	The Doctors Co.
Ashland Inc.	IMC Global	Toyota Motor Company N. Am.
Avaya Incorporated	ING America Ins. Holdings	Trueblue Inc.
Bank One Corp.	Intel Corp.	Tyson Foods
Bayer Corp.	Invista	Union Pacific Corp.
Beam Global Spirits & Wine	ITT Corp.	UST Public Affairs Inc.
BNSF Railway	Johnson & Johnson Services Inc.	Verizon Wireless Co.
Bristol-Myers Squibb Co.	Johnson Controls	Vulcan Materials
Brown-Forman Corp.	JP Morgan Chase & C.	Wachovia Corp.
Case New Holland Inc.	Jurix Incorporated	Wellpoint Health Networks
Caterpillar Inc.	Kimberly Clark Corp.	Wells Fargo & Co.
Celanese	Koch Industries	Weyerhaeuser Co.
Cendant Corp.	Lasalle Bank Corp.	Whirlpool Corp.
Centex	Liberty Mutual Group	Wyeth
Charles Schwab & Co.	Lorillard Tobacco Company	Zurich
Chrysler, LLC	Lumbermens Mutual Casualty Co.	
Chubb Corp.	Lyondell Chemical Company	
CNA Financial Corp.	Mass Mutual	
CNA Insurance	Mass Mutual Life Insurance Co.	
Coca-Cola Co.	Maytag Corp.	
Corning Incorporated	MBNA Corp.	
Countrywide Financial Corp.	Medwestvaco Corp.	
Cox Enterprises Inc.	Meredith Corp.	
Crown Cork & Seal	Micron	
CSX Corporation	New York Life Insurance Co.	
Cummins Inc.	Nissan America Inc.	
CUNA Mutual Insurance Society	Norfolk Southern Railroad	
Deere & Co.	Northwestern Mutual Life Ins.	
Dell Inc.	Occidental Petroleum Corp.	
Dow Chemical Co.	Owens-Illinois Inc.	
Drummond Co.	Pfizer	
Emerson	PPG Industries Inc.	
Farmers Group	Praxair	

Table 5 presents the composition of each of the three portfolios by two-digit SIC

Major Industry Codes.

Table 5: Portfolio Composition by SIC Major Industry Group

This table presents the composition of each of the portfolios by two digit SIC Major Industry codes. The major industry groups correspond to congressional testimony regarding industries proponents of the legislation said were negatively impacted by pre CAFA class action litigation as well as industry groups opponents argued would unfairly benefit from the legislation.

Panel A: Lobby Portfolio		
SIC Code	Industry Group	Percent
13	Oil and Gas Extraction	1.4
15	Building Construction	1.4
20	Food and Kindered Spirits	4.3
21	Cigarettes	1.4
24	Lumber and Wood Products	1.4
26	Paper and Allied Products	2.9
27	Printing, Publishing & Allied Industries	1.4
28	Chemicals and Allied Products	18.6
33	Primary Metal Industries	1.4
34	Fabricated Metal Products	1.4
35	Industrial and Commercial Machinery and Computer Equipment	8.6
36	Electronic And Other Electrical Equipment and Components	8.6
37	Transportation Equipment	4.3
38	Measuring Analyzing and Controlling Instruments	2.9
40	Railroad Transportation	4.3
48	Communications	1.4
52	Building Materials, Hardware, Garden Supply and Mobile Home Dealers	1.4
53	General Merchandise Stores	1.4
57	Home Furniture, Furnishings and Equipment Sales	1.4
60	Depository Institutions	7.1
61	Non-Depository Credit Institutions	1.4
62	Security, Commodity Brokers, Dealers and Exchanges	1.4
63	Insurance Carriers	11.4
64	Insurance Agents Brokers and Service	1.4
67	Holding and other Investment Offices	2.9
73	Business Services	1.4
75	Automotive Repair Services and Parking	1.4
87	Engineering, Accounting, Research and Management Services	1.4
	Total	100.0

Table 5. Portfolio Composition by SIC Major Industry Group (continued)

Panel B: Product Liability Portfolio		
SIC Code	Industry Group	Percent
10	Metal Mining	.3
13	Oil and Gas Extraction	27.3
15	Building Construction	.3
20	Food & Kindered Spirits	.3
21	Cigarettes	2.0
28	Chemicals and Allied Products	40.8
29	Petroleum Refining	5.3
32	Stone, Clay, Glass and Concrete	.3
35	Industrial and Commercial Machinery and Computer Equipment	.3
36	Electronic And Other Electrical Equipment And Components	.7
37	Transportation Equipment	3.6
38	Measuring Analyzing and Controlling Instruments	7.2
44	Water Transportation	.7
49	Electric, Gas and Sanitary Services	2.0
50	Wholesale Trade Durable Goods	.7
51	Wholesale Trade Non-Durable Goods	1.0
53	General Merchandise Stores	2.6
58	Eating and Drinking Places	.3
60	Depository Institutions	.3
62	Security and Commodity Brokers, Dealers, Exchanges	.3
63	Insurance Carriers	.3
64	Insurance Agents and Brokers	.3
65	Real Estate	.7
67	Holding and Other Investment Offices	1.3
73	Business Services	.3
87	Engineering, Accounting, Research, Management and Related Services	.7
	Total	100.0

Panel C: Contract Portfolio		
SIC Code	Industry Group	Percent
60	Depository Institutions	63.7
61	Non-Depository Institutions	4.2
62	Security, Commodity Brokers, Dealers and Exchanges	.2
63	Insurance Carriers	25.0
64	Insurance Agents Brokers and Service	4.4
67	Holding and Other Investment Offices	.5
73	Business Services	.5
80	Health Services	.7
87	Engineering, Accounting, Research and Management Services	.5
	Total	100.0

Table 6 provides summary statistics regarding the three portfolios. The portfolio of firms that lobbied for the legislation, in absolute terms, has significantly higher mean levels of total assets, total debt, EBIT and revenue than both the product liability and

contract portfolios. While the difference in average total assets and total debt are statistically insignificant the product liability and contract portfolios have statistically different mean levels of EBIT and Revenue. Product liability firms are substantially more profitable (EBIT/Asset =10.6% vs. 2.1%) and have higher revenue than the contract liability firms¹⁶.

Table 6: Selected Balance Sheet and Income Statement Means for the Three Portfolios

The following table reports selected balance sheet and income statement means for the three portfolios as well as their sample sizes.

Portfolio	Lobby	Product Liability	Contract
# of Firms	70	304	393
Total Assets (MM\$)	103,353	13,343	19,769
Total Debt (MM\$)	25,062	3,797	4,501
EBIT (MM\$)	4,198	1,413	419
Revenue (MM\$)	24,067	11,079	2,595

¹⁶ We conduct significance tests for the differences in means assuming unequal sample variances. Tabular results are not reported.

5.3. METHODOLOGY

5.3.1. Event Study Model

The standard market model in event studies uses Ordinary Least Square (OLS) method to regress estimates the market model and regresses individual stock returns on the return of a market portfolio. Abnormal returns in the event window are calculated as the estimated disturbance term of the market model calculated out of sample and residuals are assumed to be independently and identically distributed. Since we are estimating abnormal returns for our sample firms on the same event date (CAFA), the potential for cross sectional heteroskedasticity as well as for dependence among residuals exist. As such, we employ Zellner's (1962) Seemingly Unrelated Regression (SUR) method. SUR yields identical coefficients and standard errors as OLS but has the capability of testing, via Multivariate Regression Model (MVRM), for joint hypothesis in the presence of cross sectional heteroskedasticity and contemporaneous dependence among residuals.¹⁷

Following Binder (1985a) the methodology begins by estimating abnormal returns γ_{ia} in the individual return equations :

$$\tilde{R}_{it} = \alpha_i + \beta_i \tilde{R}_{mt} + \sum_{a=1}^A \gamma_{ia} D_{at} + \tilde{\varepsilon}_{it} \quad (1)$$

where R_{it} is the return on security i on day t, R_{mt} is the return on the CRSP value (equal) weighted market index on day t, D_{at} is a dummy variable equaling 1 during the ath event window and 0 otherwise; γ , β , and α are the parameters to be estimated.

¹⁷ MVRM, also known as event parameter approach uses joint Generalized Least Squares (GLS) method. This approach is employed by many researchers including Schipper and Thompson (1983), Binder (1985 a and b, and 1988), Rose (1985), Smith Bradley and Jarrell (1986), Cornett and Tehranian (1990), and Brown, Cummins, Lewis and Wei (2004).

When the explanatory variables are the same across equations the system of returns, equations can be written as below and estimated jointly by the MVRM:

$$\tilde{R}_{Nt} = \alpha_N + \beta_N \tilde{R}_{mt} + \sum_{a=1}^A \gamma_{Na} D_{at} + \tilde{\varepsilon}_{Nt} \quad (2)$$

MVRM approach allows for contemporaneous correlation across equations, however the disturbance terms ε_{it} are assumed to be i.i.d. In this specification, cumulative abnormal returns are summed over event windows and hypothesis testing focuses on the cumulative average abnormal returns (CAAR) defined as:

$$\bar{\gamma} = \frac{1}{N} \sum_{i=1}^N \gamma_{i,a} \quad (3)$$

In a portfolio framework equation (2) can be written in the following form

$$\tilde{R}_{Pt} = \alpha_p + \beta_p \tilde{R}_{mt} + \sum_{a=1}^A \gamma_{Pa} D_{at} + \tilde{\varepsilon}_{Pt} \quad (4)$$

where the estimated $\hat{\gamma}_{Pa}$ in equation (4) is equivalent to $\bar{\gamma}$ in equation 3.

We test each event separately setting a equal to one, the impact of individual events on the different portfolios is estimated by the following

$$\tilde{R}_{Pt} = \alpha_p + \beta_p \tilde{R}_{mt} + \gamma_p D_t + \varepsilon_{pt} \quad (5)$$

In testing Hypotheses 1 and 2, we use the following equation to estimate the average abnormal return:

$$\hat{\gamma}_p = 0 \quad (6)$$

5.3.2. Cross-sectional Regression Model

To explain cross-sectional variations in CARs across firms (i.e., to test Hypothesis 3), we employ OLS model in which we regress CARs of each firm on a

number of independent variables that serve as proxies for firm-specific characteristics, including its internal corporate governance mechanism in place. The independent variables we include here are board size, the number of analysts that follow the firm, an indicator variable if the CEO is the chairman of the board, the firm's Altman z-score, earnings before interest and taxes (EBIT) scaled by total assets, total debt scaled by total assets, the log of total assets and dummy variables representing the two digit sic codes for the pharmaceutical, oil and gas and medical devices industries. Explanations for using these independent variables will be provided later in this paper.

5.4. Data Sources

The Inter-University Consortium for Political and Social Research or ICSPR¹⁸ is a repository for various social and political data. We access court case related data through the Federal Court Cases: Integrated Data Base (IDB)¹⁹. Data from the years 2001 to 2006 are published individually, while pre-2001 data is published in an aggregate form from 1970 to 2000. These databases compile federal PACER²⁰ (Public Access to Court Electronic Records) data in SAS and SPSS readable data files. Files contain data items such as docket number, district, file date, termination date, the nature of the suit, the disposition of the suit, nature of judgment, termination date and a flag as to whether or not the case was filed as a class action.

ICSPR is the primary source for identifying firms for portfolios compiled by their nature of suit. Plaintiff and defendant names are not included from the Federal IDB through ICSPR. After screening by nature of suit categories we then return to PACER

¹⁸ www.icpsr.umich.edu

¹⁹ Federal Judicial Center. FEDERAL COURT CASES: INTEGRATED DATA BASE, 2004

²⁰ www.pacer.uscourts.gov

and retrieve corporate defendant data by docket number. Daily stock returns are obtained through CRSP while balance sheet and income statement data are taken from COMPUSTAT²¹. Risk Metrics and firm proxy statements serve as sources for board size, CEO and chairman data. I/B/E/S is our source for analyst coverage.

6. EMPIRICAL RESULTS

6.1 Event Study

The results of the event study are reported in Tables 7, 8 and 9. We have provided estimates using both the equal weighted and value weighted CRSP market index. The analysis uses three different estimation periods consisting of estimation lengths of (252,-4), (252,126) and (126,-42)²². The results are reported separately for each estimation period in Table 7 (Model 1), Table 8 (Model 2), and Table 9 (Model 3) respectively. We find some evidence that the firms that lobbied for the legislation experienced abnormally positive returns on February 10, 2005 and November 2, 2004. These dates correspond to the passage of CAFA by the US Senate and the election date that yielded the Republicans a majority in the US Senate. Average abnormal returns for February 10, 2005 range from 1.1% to 1.26% over the three models. Results are significant at the 5% level. Model 3 yields a significantly positive average abnormal returns of .64% over the (-1,1) election period. No other event dates for the lobby portfolio have significant cumulative average abnormal returns.

²¹ Access is provided through WRDS, wrds.wharton.upenn.edu.

²² Benchmark daily returns are estimated over the trading year ending 4 days prior to the event, six months after the event and the six month period ending 42 days before the event respectively. These estimation periods correspond to previous event studies. For example Schipper (1985) uses a period of six months before to six months after the event and Haslem (2005) uses the (126,-42) estimation period.

Table 7: Cumulative Average Abnormal Returns from model 1:

$$\tilde{R}_{Pt} = \alpha_p + \beta_p \tilde{R}_{mt} + \gamma_p D_t + \varepsilon_{pt}$$

$$H_0: \hat{\gamma}_p = 0$$

Where p=1,2,3 representing portfolios of firms that lobbied for CAFA, a portfolio of firms in industries in which cohort firms had state originated product liability class actions pending as of 2004, and a portfolio of firms in which cohort firms had state originated contract class actions pending as of 2004. The Model is estimated using SUR. The market portfolio is estimated for a period of 252 days ending 4 days before the event. Returns are cumulated over the event window (-1,1). Event parameters correspond to the following event dates: 2/17/05 (1), 2/10/05 (2), 2/2/05 (3), 1/17/05 (4), 11/2/04 (5), 7/08/04 (6), 6/08/04 (7) and 2/10/04 (8). Prob>F are reported below parameter estimates.

Expected Sign	Event Window (-1,1) Event Parameter	Lobby Firm Portfolio		Product Liability Class Action Portfolio		Contract Class Action Portfolio	
		Equal Weight	Value Weight	Equal Weight	Value Weight	Equal Weight	Value Weight
+	γ_1	.0003 (.7941)	.0017 (.5906)	.0147** (.0182)	.0154** (.0484)	-.0065 (.1579)	-.0057 (.2046)
+	γ_2	.011** (.049)	.0044 (.1682)	.0039 (.5263)	-.0031 (.6882)	.0024 (.6066)	-.0026 (.5621)
+	γ_3	-.0046 (.4141)	-.0046 (.1490)	.0083 (.1803)	.0094 (.2329)	-.0028 (.5365)	-.0025 (.5824)
+	γ_4	-.0040 (.4920)	-.0031 (.3393)	.0037 (.5587)	.0056 (.4973)	.0000 (.9925)	.0009 (.8417)
+	γ_5	.0069 (.2421)	.0047 (.1566)	-.0058 (.3423)	-.0064 (.4321)	.0015 (.7505)	.0016 (.7319)
-	γ_6	.0053 (.4376)	-.0007 (.8413)	.0015 (.8093)	-.0088 (.2933)	.0039 (.4519)	-.0028 (.6017)
-	γ_7	.0077 (.2749)	.0010 (.7770)	-.0112* (.0758)	-.0178** (.0378)	.0003 (.5618)	-.0036 (.4926)
+	γ_8	-.0018 (.8449)	.0001 (.9746)	.0046 (.4747)	-.0083 (.3391)	-.0013 (.7951)	.0011 (.8472)
	N	70	70	304	304	393	393

***, ** and * denote significance at 1%, 5% and 10% levels respectively.

Table 8: Cumulative Average Abnormal Returns from model 2:

$$\tilde{R}_{pt} = \alpha_p + \beta_p \tilde{R}_{mt} + \gamma_p D_t + \varepsilon_{pt}$$

$$H_0: \hat{\gamma}_p = 0$$

Where p=1,2,3 representing portfolios of firms that lobbied for CAFA, a portfolio of firms in industries in which cohort firms had state originated product liability class actions pending as of 2004, and a portfolio of firms in which cohort firms had state originated contract class actions pending as of 2004. The Model is estimated using SUR. The market portfolio is estimated for a period of 252 days ending 126 days after the event. Returns are cumulated over the event window (-1,1). Event parameters correspond to the following event dates: 2/17/05 (1), 2/10/05 (2), 2/2/05 (3), 1/17/05 (4), 11/2/04 (5), 7/08/04 (6), 6/08/04 (7) and 2/10/04 (8). Prob>F are reported below parameter estimates.

Expected Sign	Event Window (-1,1)	Lobby Firm Portfolio		Product Liability Class Action Portfolio		Contract Class Action Portfolio	
	Event Parameter	Equal Weight	Value Weight	Equal Weight	Value Weight	Equal Weight	Value Weight
+	γ_1	.0015 (.7941)	.0029 (.4619)	.0149** (.0444)	.0157* (.0719)	-.0062 (.2494)	-.0053 (.2937)
+	γ_2	.0126** (.0294)	.0063 (.1060)	.0052 (.4809)	-.0021 (.8092)	.0027 (.6170)	-.0022 (.6604)
+	γ_3	-.0035 (.7115)	-.0024 (.5369)	.0072 (.3248)	.0094 (.2735)	-.0003 (.5836)	-.0019 (.7144)
+	γ_4	-.0021 (.7202)	-.0005 (.8943)	.0011 (.8736)	.0040 (.6392)	.0003 (.9952)	.0019 (.7145)
+	γ_5	.0076 (.1821)	.0064* (.0897)	-.0067 (.3492)	-.0065 (.4206)	.0021 (.6488)	.0019 (.6933)
-	γ_6	.0069 (.4376)	.0001 (.8413)	.0021 (.7764)	-.0074 (.3631)	.0007 (.1313)	-.0003 (.9464)
-	γ_7	.0071 (.2265)	.0023 (.5223)	-.0131* (.0696)	-.0176** (.0323)	.0029 (.5358)	-.0012 (.7988)
+	γ_8	-.0001 (.9831)	-.0033 (.5655)	.0066 (.4037)	.0025 (.8359)	-.0042 (.3568)	-.0009 (.8363)
	N	70	70	304	304	393	393

***, ** and * denote significance at 1%, 5% and 10% levels respectively.

Table 9: Cumulative Average Abnormal Returns from model 3:

$$\tilde{R}_{Pt} = \alpha_p + \beta_p \tilde{R}_{mt} + \gamma_p D_t + \varepsilon_{pt}$$

$$H_0: \hat{\gamma}_p = 0$$

Where p=1,2,3 representing portfolios of firms that lobbied for CAFA, a portfolio of firms in industries in which cohort firms had state originated product liability class actions pending as of 2004, and a portfolio of firms in which cohort firms had state originated contract class actions pending as of 2004. The Model is estimated using SUR. The market portfolio is estimated for a period of 126 days ending 42 days before the event. Returns are cumulated over the event window (-1,1). Event parameters correspond to the following event dates: 2/17/05 (1), 2/10/05 (2), 2/2/05 (3), 1/17/05 (4), 11/2/04 (5), 7/08/04 (6), 6/08/04 (7) and 2/10/04 (8). Prob>F are reported below parameter estimates.

Expected Sign	Event Window (-1,1)	Lobby Firm Portfolio		Product Liability Class Action Portfolio		Contract Class Action Portfolio	
	Event Parameter	Equal Weight	Value Weight	Equal Weight	Value Weight	Equal Weight	Value Weight
+	γ_1	.0013 (.7941)	.0017 (.6394)	.0153** (.0431)	.0210* (.0748)	-.0068 (.1512)	-.0069 (.1401)
+	γ_2	.0116** (.0461)	.0042 (.2410)	.0037 (.6201)	-.0039 (.6737)	.0018 (.6983)	-.0036 (.4333)
+	γ_3	-.0005 (.3887)	-.0048 (.1753)	.0076 (.3193)	.0088 (.3477)	-.0035 (.4221)	-.0031 (.4866)
+	γ_4	-.0034 (.3286)	-.0047 (.4146)	.0040 (.5402)	.0059 (.4501)	-.0003 (.9438)	.0009 (.8386)
+	γ_5	.0048 (.3950)	.0004 (.2114)	-.0039 (.6220)	-.0028 (.7682)	.0026 (.5507)	.0026 (.5597)
-	γ_6	.0043 (.4949)	-.0003 (.9286)	.0031 (.6398)	-.0125 (.1926)	.0023 (.6614)	-.0026 (.6160)
-	γ_7	.0077 (.1981)	.0013 (.7031)	-.0087 (.1918)	-.0162* (.0834)	.0011 (.8213)	-.0035 (.4904)
+	γ_8	.0006 (.9399)	.0005 (.9056)	.0106 (.1184)	.0132 (.1324)	-.0031 (.5591)	-.0017 (.7631)
N		70	70	304	304	393	393

***, ** and * denote significance at 1%, 5% and 10% levels respectively.

The product liability portfolio shows evidence of positive average abnormal returns for all three models, ranging from 1.47% to 2.1%, at the news of the passing of

CAFA by the House of Representatives (February 17, 2005). They are significant at the 5% and 10% levels. Additionally, there are significant negative abnormal returns when Senator Frist delays consideration of the legislation on June 7, 2004. It was reported that there was not enough support in the senate and the legislation failed cloture on July 8, 2004. Significantly negative parameter estimates range from -1.12% to -1.78%.

Figure 2. Daily Average Abnormal Returns

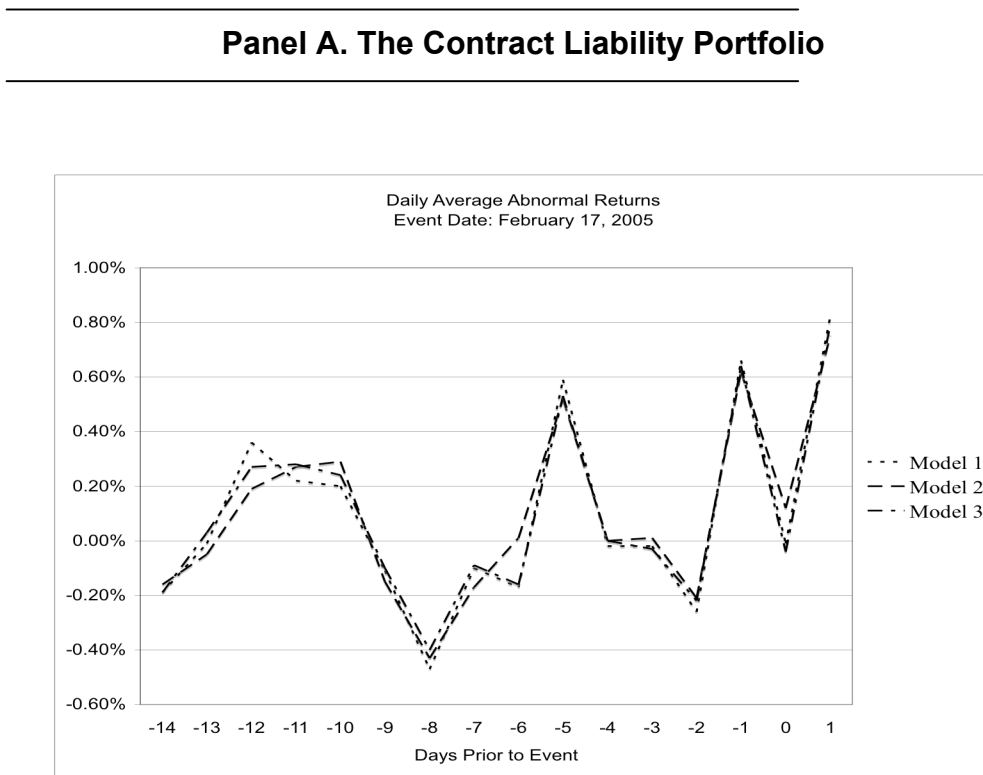
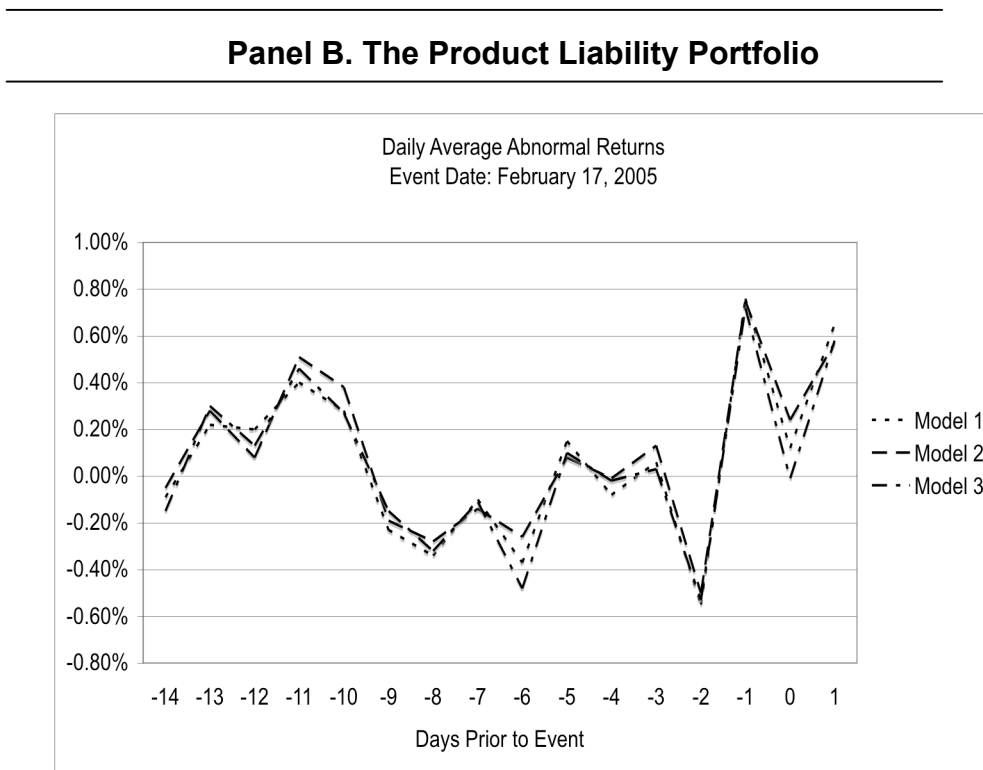


Figure 2. Daily Average Abnormal Returns (continued)



There are no significant abnormal returns for the Contract Class Action portfolio over any of the event dates. In figure 2 panel A and B we report the average abnormal daily returns for the two weeks prior to the February 17, 2005 event date through the day after (the signing of the act) for the contract and product liability portfolios. We see a spike in daily average abnormal returns on day -1 and day +1 for all models and both portfolios.²³

²³ In figure 2 we illustrate average daily abnormal returns for the CRSP using the CRSP value weighted index. We see a similar pattern in the equal weighted results as well.

We sum up our findings based on Tables 8, 9, and 10 as follows:

1. We find weak evidence that shareholders of firms that lobbied for the passage of CAFA experience significant average abnormal returns when the House of Representatives pass the law and over the election event window;
2. We find strong evidence that shareholders of firms in the product liability portfolio experience wealth increases as of the February 17, 2005 (passing of CAFA by the House of Representatives) and wealth losses over the June 8, 2004 (Senator Frist delays consideration of the legislation)²⁴.
3. We find no evidence that shareholders of firms in the contract portfolio experience any changes in wealth as a result of the passage of CAFA.

In hypothesis 1, we propose that the direction of CAFA effect is an empirical issue. The results indicate that the market perceives CAFA to be positive news for the affected firms. In other words, positive aspects of CAFA (e.g., the possibility of a reduced number of frivolous class-action law suits and potential for reduced amount of punitive award) outweigh what opponents describe as negative aspects of CAFA. The results are also consistent with hypothesis 2 in that the companies that are more likely to be involved in product liability lawsuits are more sensitive to CAFA than those that are primarily involved in contract liability lawsuits.

²⁴ As a robustness check we tested joint hypotheses using SUR across the product liability and contract portfolios on February 17, 2005 and June 8, 2004. The results support our conclusion regarding the significant differences between these two portfolios.

6.2. Cross Sectional Determinants of Abnormal Returns

In this section, we test Hypothesis 3 to examine if firm characteristics (including internal corporate governance) are able to explain the variations in CARs across firms. We employ OLS by regressing individual firm's CAR on independent variables representing firm characteristics.

Our empirical findings thus far indicate that product liability prone firms experience significant cumulative average abnormal returns over the February 17, 2005 event date. Cross sectional analysis is performed in order to identify firm specific characteristics of the product liability firms that explain the cross sectional variation in cumulative abnormal returns over the February 17, 2005 event date. In the cross-sectional regression, we use the firm level CARs over the event window (-1,1).

6.2.1. The Model

We derive a model based on the discussion in the 4.2 sub-section above. The model also includes variables that have been found significant by other researchers (see Bhagat, Bizjak and Coles, 1998, for example) in explaining abnormal returns around the litigation events. Our analysis focuses on the agency conflicts that arise as a result of the manager-owner relationship.

The model is presented below.

$$\begin{aligned} CAR_i = & \alpha + \beta_1 BOARDSIZE + \beta_2 ANALYST + \beta_3 CEOCHAIRMAN + \\ & \beta_4 ZSCORE + \beta_5 EBIT / TA + \beta_6 D / TA + \beta_7 LOGTA + \beta_8 SIC13 + \beta_9 SIC28 \\ & + \beta_{10} SIC38 + \varepsilon_i \end{aligned} \quad (7)$$

Provided below are the definitions of each variable and justification for the choice of each independent variable along with the expected sign.

CAR is the firm's CAR for the event window (-1,1), with event date being February 17, 2005 (passing of CAFA by the House of Representatives).

BOARDSIZE is the firm's board size. Research provides evidence that companies with small boards are associated with more favorable financial ratios and also provide stronger CEO performance incentives (for example, Rosenstein and Wyatt, 1990,1997, Yermack, 1996, Eisenberg, Sundgren and Wells, 1998, Shivdasani and Yermack,1999, and Denis and McConnell, 2003).We expect a negative coefficient on BOARDSIZE.

ANALYST is the number of analysts following a firm. The number of analysts following a firm has been positively associated with firm value and less earnings management. For example, Chung and Jo (1996) find a positive relationship between the number of analysts following a firm and firm value. Hong, Lim and Stein (2000) find that momentum strategies perform well in firms with low analyst coverage. Yu (2008) finds that firms followed by more analysts manage their earnings less. We expect the coefficient on ANALYST to be positive.

CEOCHAIRMAN is a dummy variable that takes on a value of 1 when CEO is also the chairman of the board. There is empirical evidence showing both positive and negative relationships when the CEO is the chairman of the board. Baliga and Moyer (1996) test CEO duality against perception that concentration of CEO and Chairman of the Board functions negatively impact firm performance. However, they find no evidence of significant reactions to announcements of changes in duality and find no evidence of changes in operating performance around the announcement and weak evidence of positive long term performance.

Rechner and Dalton (1991) find that firms that separate the CEO and Chairman positions outperform firms that do not. Haslem (2005) reports a negative coefficient when the same person occupies the role of both CEO and Chairman. Following Haslem, we expect a negative coefficient on CEOCHAIRMAN.

ZSCORE is the firm's Altman z-score. It measures a firm's proximity to bankruptcy. The expected sign is positive based on the logic that CAFA might reduce the exposure of an already financially troubled firm to further trouble stemming from class-action lawsuits in state courts. Previous studies such as Bhagat, Bizjak and Coles (1998) and Haslem (2005) include this variable.

EBIT/TA is a firm's EBIT scaled by its total assets. We include EBIT/TA as a proxy for firm profitability and a test of the deep pockets hypothesis. Our logic here is that profitable firms will benefit if the market perceives they are less likely to suffer a large judgment or settlement. This measure is most often used in bankruptcy prediction models as an independent variable testing financial stability (for example, Pinches, Mingo and Caruthers, 1973; and Jung, Kim and Stultz, 1996).

D/TA is the firm's debt ratio (total debt/total assets). This variable serves as a proxy for a manager's disincentive to overinvest. Jensen (1986) shows managers have an incentive to invest regardless of the present value of their investment when they accrue private benefits. A solution to this overinvestment problem is by increasing debt to force management to disgorge free cash flows. Stulz (1990) shows that debt levels are optimally tied to the positive net present value investment set. Berger, Ofek and Yermack (1997) find an inverse relationship

between leverage and managerial entrenchment. Thus, we expect a positive coefficient on this variable.

LOGTA is the log of total assets. Bhagat, Bizjak and Coles (1998) and Haslem (2005) use this variable as a measure of transparency—the bigger the size, the less the transparency. We expect the sign to be negative on this variable.

SIC 13, 28, 38 are 2-digit sic codes representing pharmaceutical, oil and gas, and medical devices industries respectively. We include dummy variables for each of the three major industry groups in the product liability portfolio. (Groups 13, 28 and 38 comprise respectively 27.3%, 40.8% and 7.2% of the product liability portfolio.) The congressional record specifically mentions pharmaceutical, oil and gas and medical device manufacturers in the context of firms that have nationwide class actions heard in state courts²⁵. We expect positive coefficients on these industry dummy variables reflecting a positive market reaction for these firms if they benefit as legislators predicted.

6.2.2. Data

We collect balance sheet and income statement information from COMPUSTAT annual files in 2004. Security return data is extracted from CRSP. Risk Metrics²⁶ and firm proxy statements serve as sources for board size, CEO and chairman data. I/B/E/S is our source for analyst coverage. There were 304 firms in our product liability portfolio for the initial event study. Our final sample consists of 161 firms for which we have complete return and cross sectional data. Additionally, we perform the analysis on a

²⁵ Senate Report 109-14 109th Congress February 28, 2005, p. 65.

²⁶ The Risk Metrics governance set was formerly known as the IRRC Takeover Defense database cited in Gompers, Metrick and Ishii (2003). It provides various director data related to individual board members of S&P 1500 companies.

sample of 213 firms for which we have all return and cross sectional data excluding the chairman indicator variable and board size. We report the mean values for our cross sectional variables in Table 10.

Table 10. Cross Sectional Independent Variable Means

Mean Independent Variables	
ANALYST	11.273
BOARDSIZE	8.925
ZSCORE	6.541
D/TA	0.206
EBIT/TA	0.060
LOG TA	6.988

6.2.3. Results of Cross-sectional Regression

Table 11 presents results for the sample of 161 firms for which we have all cross sectional data. In terms of internal corporate governance variables, the results show that CEOCHAIRMAN has a negative impact (significant at the 1% level), D/TA and ANALYST have a positive impact (significant at the 1% and 5% levels respectively), and BOARDSIZE has no significant on a firm's abnormal return in response to CAFA. Among other variables, ZSCORE and EBIT/TA have significantly positive affect on a firm's CAR (at the 1% level) while LOGTA has no significant impact on the same. Two-digit SIC codes do not have any explanatory power.

Table 11. Cross Sectional Determinants of CARs

This table presents an analysis of the effect of various factors in explaining cross-sectional variations in abnormal returns of firms in the product liability portfolio. The event date is February 17, 2005 when the House of Representatives passed the final version of CAFA. The regression model used is:

$$CAR_i = \alpha + \beta_1 BOARDSIZE + \beta_2 CEOCHAIRMAN + \beta_3 ANALYST + \beta_4 ZSCORE + \beta_5 EBIT / TA + \beta_6 D / TA + \beta_7 LOGTA + \beta_8 SIC13 + \beta_9 SIC28 + \beta_{10} SIC38 + \varepsilon_i$$

The model is estimated using OLS. *BOARDSIZE* is the number of members of the board of directors, *CEOCHAIRMAN* is an indicator variable equal to one if the CEO is also the chairman of the board, *ANALYST* is the number of analysts following the firm, *ZSCORE* is the Altman z-score of the firm, *EBIT/TA* is earnings before interest, taxes, depreciation and amortization scaled by the firm's total assets, *LOGTA* is the log of firm total assets and *SIC13*, *SIC28* and *SIC38* are industry dummy variables.

Predicted Sign	Parameter	Estimate (P-value)	Variable
	α	.0094 (.6284)	Intercept
-	β_1	.0013 (.4951)	Boardsize
-	β_2	-.0238*** (.0077)	Chairman
+	β_3	.0016** (.0202)	Analyst
+	β_4	.0009*** (.0049)	Z Score
+	β_5	.0797*** (.0000)	EBIT/TA
+	β_6	.0879*** (.0003)	D/TA
+	β_7	-.0040 (.2792)	LOG TA
+	β_8	-.0157 (.1231)	SIC 13
+	β_9	-.0076 (.7012)	SIC 28
+	β_{10}	-.0196 (.1074)	SIC 38
	N		161
	R sq.		.29

***, ** and * indicate significance at 1%, 5% and 10%.

Table 11 provides evidence that internal corporate governance as well as certain firm characteristics explain cross-sectional variations in abnormal return among firms

within the product liability portfolio. Shareholders of firms that do not split the role of CEO and chairman of the board suffer losses stemming from a weaker internal corporate governance system. This is consistent with the view that separating these roles reduces agency conflicts and enhances firm value. Firms with higher debt levels (as measured by D/TA) had higher cumulative abnormal returns. This is supportive of the views that higher debt levels reduce agency costs either through increased monitoring of management or by reducing their incentives to pursue perquisites. The positive and significant coefficient on the ANALYST variable indicates that firms with less information asymmetry have higher CARs, other things held equal.

Shareholders of more profitable firms (as measured by EBIT/TA) and firms that are further away from bankruptcy (as measured by ZSCORE) experience higher CARs. This is consistent with the viewpoint that firms with more to lose by class action litigation are more likely to gain from the passage of CAFA as firms in closer proximity to bankruptcy may be one class action verdict away from bankruptcy.

Table 12 presents results for an extended sample of 213 firms which have the data for all variables except BOARDSIZE and CEOCHAIRMAN. We find similar results as in Table 11. However, in this specification we do find SIC38 is significantly positive²⁷. SIC38 comprises 7.2% of the product liability portfolio and includes firms in the medical device industry. The congressional record specifically mentions medical device manufacturers in the context of firms that have nationwide class actions heard in state courts. Thus far our results indicate shareholder wealth gains for firms likely to be involved in product liability class actions as a result of CAFA. One interpretation of these

²⁷ We ran a specification in which all firms with SIC codes 13, 28 and 38 were coded as dummy variables. The results were not qualitatively different than our initial specification.

results is that the market perceives state courts as a less favorable forum for corporate defendants. The final section of our paper examines this issue directly.

Table 12. Cross Sectional Determinants of CARs

This table presents an analysis of the effect of various factors in explaining cross-sectional variations in abnormal returns of firms in the product liability portfolio. The event date is February 17, 2005 when the House of Representatives passed the final version of CAFA. The regression model used is:

$$CAR_i = \alpha + \beta_1 ANALYST + \beta_2 ZSCORE + \beta_3 EBIT / TA + \beta_4 D / TA + \beta_5 LOGTA + \beta_6 SIC13 + \beta_7 SIC28 + \beta_8 SIC38 + \varepsilon_i$$

The model is estimated using OLS. *ANALYST* is the number of analysts following the firm, *ZSCORE* is the altman z-score of the firm, *EBIT/TA* is earnings before interest and taxes scaled by the firm's total assets, *LOGTA* is the log of firm total assets and *SIC13*, *SIC28* and *SIC38* are industry dummy variables.

Predicted Sign	Parameter	Estimate (P-value)	Variable
	α	.0000 (.992)	Intercept
+	β_1	.0008* (.0895)	Analyst
+	β_2	.0009*** (.0054)	Z Score
+	β_3	.0728*** (.0000)	EBIT/TA
+	β_4	.0681*** (.0017)	D/TA
+	β_5	-.0024 (.2743)	LOG TA
+	β_6	-.0100 (.3530)	SIC 13
+	β_7	-.0073 (.4086)	SIC 28
+	β_8	.0328* (.0580)	SIC 38
N			213
R sq.			.192

***, ** and * indicate significance at 1%, 5% and 10%.

6.3 MARKET REACTION TO FORUM CHANGE

CAFA has significantly limited state jurisdiction over class-action lawsuits. The results reported above demonstrate that the market reaction to the events favoring CAFA's passage has been positive. On the other hand, the market reaction is usually negative to events that are perceived by shareholders as to reduce the chances of CAFA passage. A conclusion that one can derive from previously reported results is that state courts are perceived by shareholders to be unfavorable forums for corporate defendants.

There have been a few empirical studies on this issue and their results have been inconclusive. Also, none of these studies examines the forum issue in the context of class-action litigations. Helland and Taborrak (2002) perform an exhaustive analysis using 75,000 tort awards from various states. They control for differences in injuries, poverty levels, income, selection effects and many others. Focusing on diversity cases and states that they define as partisan when the judiciary is elected and non-partisan where it is not, they find that state court judges award significantly higher awards than their federal counterparts when applying the same state laws. They conclude that changing venues from a non-partisan state court to a partisan state court increases expected awards by 23% whereas moving from a non-partisan state to a partisan state when a federal judge applies state law does not increase expected awards.

The evidence reported by Willging and Wheatman (2006) and Cohen (2006), however, contradict that of Helland and Taborrak (2002). In a study that included comparing attorney perceptions of class action certification by forum to class-action trial outcomes, Willging and Wheatman (2006) find that state and federal courts were

equally likely to certify class actions in the pre CAFA period. Cohen (2006) compares civil litigation in federal and state courts in some of the most populous counties in the United States. After comparing diversity issues relating to tort, contract and real property issues Cohen (2006) reports that the overall plaintiffs' win rates are similar in state and federal courts. Also, damage awards are larger in federal courts, especially in product liability cases.

In this section, we examine the market reaction to events of class action cases being remanded to state courts in spite of defendant firms' efforts to have them tried in a federal court. If the market reaction to this news is indeed negative, this result will be consistent with our earlier finding that extended power of federal courts has been received by stockholders of defendant firms as a favorable outcome of CAFA. To the best of our knowledge, this section represents the first attempt to examine CARs related to forum change involving class action litigation.

6.3.1 Event Definition, Sample Selection and Methodology

6.3.1.1. Event Definition

In class action litigations, the ultimate forum of adjudication is not necessarily the jurisdiction in which the case is originally filed. While plaintiffs initially choose the filing venue, procedural rules allow the defendants to challenge jurisdiction. This is accomplished by filing a motion to remove an action. When removing a class action lawsuit from state to federal courts, the federal court ultimately determines the appropriate jurisdiction. If the federal court refuses jurisdiction, the case is remanded to state court. The event of interest here is the date a class action is remanded to state

court. To be consistent with the results reported above, we should find a negative market reaction to the remanding event.

6.3.1.2. Sample

Using the *Federal Integrated Database* we initially screen for state originated class action lawsuits in the pre-CAFA period from 2001 to 2004²⁸. We then identify cases that were remanded to state court and the date of remand. In each instance, the matter was originally filed as a state court class action and the defendants moved for a removal to federal jurisdiction, but the federal court remanded the case to the jurisdiction of original filing. This yields 122 class action lawsuits that fall within the product liability and contract liability categories²⁹. Once these cases are identified, docket numbers are used in coordination with PACER (Public Access to Court Electronic Records) in order to review the specific docket histories of these cases. A case is included if it is remanded without any additional significant information in its docket history at the time of remand. Our goal is to identify events where the only significant information is that the case will be tried in state court. Additional information may or may not influence the direction of stock market responses. For example, there are instances in which a case is remanded, but a defendant is dismissed. This may be positive for the remaining corporate defendants if it signals an avenue out of the litigation or negative if the remaining defendants will assume more of the liability. Another example of positive information associated with remand is when the litigants

²⁸ During this time period the data files for the *Federal IDB* are continuous and the Class Action Fairness Act had not yet been passed. These cases are classified as diversity cases in the database as the

²⁹ These are 355 (Motor Vehicle), 360(Personal Injury), 365 (Product Liability), 110 (Insurance) and 90 (Other Contract).

make stipulations that might resolve some of the uncertainty around the litigation.³⁰

Table 13 provides an excerpt from docket history showing the remand order pertaining to class-action suit against Phillip Morris. Our final sample contains 57 firm event dates.

Table 13. Docket History Excerpt

The following excerpt is from *Aspinall v. Phillip Morris Companies*. The history reflects the date of the notice of removal, the date stipulations are made regarding damages and the Order of Remand.

Date Filed	Entry #	Docket Text
05/03/2002	1	Notice of Removal. Filed by Philip Morris Companies, Inc., Philip Morris Incorporated. Filing fee paid; receipt number 633751. (Attachments: # 1 Appendix Volume 1 of 2# 2 Appendix Volume 2 of 2# 3 Civil Cover Sheet)(W, Jo) (Entered: 05/06/2002)
12/17/2002	38	Memorandum Opinion Granting Motion to remand case (Related Doc # 9); this action is remanded with the following findings, which shall be binding as the law of the case, (1)plaintiffs will not seek compensatory or punitive damages, including injunctive relief, in excess of \$75,000 per plaintiff, and any award of damages will be so limited; and (2) plaintiffs will not seek, and will not be permitted to seek, damages or relief for personal injury claims. Donald C. Nugent, Judge (C, B) (Entered: 12/19/2002)
12/17/2002	39	Order of Remand by Judge Donald C. Nugent that pursuant to the memorandum opinion 38 plaintiffs' motion to remand 9 is granted and this action is remanded to the Court of Common Pleas for Medina County, Ohio, with the following stipulations: (1) plaintiffs will not seek compensatory or punitive damages, including injunctive relief in excess of \$75,000.00 per plaintiff, and any award of damages will be so limited; and (2) plaintiffs will not seek, and will not be permitted to seek, damages or relief for personal injury or addiction claims; the Clerk is directed to mail a certified copy of this Order of Remand to the Clerk of the Medina County, Ohio, Court of Common Pleas. (C, B) (Entered: 12/19/2002)

Source: PACER Docket History

³⁰ An example of the former is the dismissal of a pharmaceutical company as a defendant upon remand and an example of the latter is an agreement by plaintiffs not to seek damages in excess of \$75,000 per claimant in tobacco litigation.

6.3.1.3. Methodology

We conduct event studies using three conventional models over two event windows. The first method is the standard market model estimated using equally weighted and value weighted indices³¹. Estimates are carried out over the event windows (-1,1) and (3,3). Following Haslem (2005) we use an estimation period beginning 168 days prior to the event date continuing for 126 days and ending 42 days prior to the event. We also use an estimation period lasting for 252 days ending four days prior to the event date³². Secondly, we employ the Fama-French (1993) three factor model augmented with Carhart's (1997) momentum factor. We also present results for market adjusted returns. Market adjusted returns are calculated by subtracting the market return on day t from the observed firm return on day t .

6.3.2. Results

The results of the event studies are reported in Table 14 and Table 15 for the (-1,1) and (-3,3) event windows respectively. CARs of both the market model and market adjusted model range from -.27% to -.85% and are significantly negative (at the 10% and 5% level respectively). However, results of the augmented Fama-French model are not statistically significant. At least the market model and market adjusted model provide evidence that stockholders of defendant firms react negatively when a class-action lawsuit is reverted back to the state court.

³¹These are the CRSP value and equally weighted indices.

³²This is the same estimation period used in our earlier analysis.

Table 14. Event Period Returns Around Forum Change

The following table reports mean cumulative average returns for 3 benchmark models and 2 estimation periods around a (-1,1) event window for termination dates in which a class action case was remanded to state from federal court. Panel A reports the results using the market model as a benchmark, panel B reports results based upon the Fama-French model augmented with Carhart's momentum factor and panel C reports results for Market Adjusted Returns. The two estimation periods include 252 days ending 4 days prior to the event and 126 days ending 42 days prior to the event (as in Haslem 2005). The sample contains 57 events for firms with useable CRSP returns from 2001-2004. All firms in the sample had suits originally filed in state courts, defendants had them removed to federal court and the event corresponds to the date these cases were remanded back to state court.

Estimation Period	252 days, -4	126 days, -42
Event Window	(-1,1)	(-1,1)
Panel A: Market Model		
Equal Weighted	-.34% -1.805**	-.30% -1.758**
Value Weighted	-.33% -1.590**	-.27% -1.550*
Panel B: Fama-French-Momentum		
Equal Weighted	-.17% -1.046	-.20% -1.100
Value Weighted	-.02% -1.082	-.12% -.574
Panel C: Market Adjusted Returns		
Equal Weighted	-.85% -2.160**	-.85% -2.118**
Value Weighted	-.41% -2.123**	-.41% -2.077**

The symbols ***, **, and * denote statistical significance at the 1%, 5% and 10% levels.

Table 15 reports the results when extending the event window to (-3,3) a longer event window is prone to show results that are likely to be biased against finding significant CARs due to information leakage and the problem of identifying the exact event date. In spite of this potential bias, our results are even stronger than Table 14 in that now all three models (the augmented Fama-French model, market model and market-adjusted model) show negative CARs that are significant at a 5% significance

level or better. Overall, the results in Tables 14 and 15 provide clear evidence that stockholders of a defendant firm react negatively to the ruling that remands a class-action lawsuit from a federal to a state court. These results are consistent with above-reported findings that shareholders react positively to CAFA-induced extended federal jurisdiction on class-action suits.

Table 15. Event Period Returns Around Forum Change

The following table reports mean cumulative average returns for 3 benchmark models and 2 estimation periods around a (-3,3) event window for termination dates in which a class action case was remanded to state court from federal court. Panel A reports the results using the market model as a benchmark, panel B reports results based upon the Fama-French model augmented with Carhart's momentum factor and panel C reports results for Market Adjusted Returns. The two estimation periods include 252 days ending 4 days prior to the event and 126 days ending 42 days prior to the event (as in Haslem 2005). The sample contains n events for firms with useable CRSP returns from 2001-2004. All firms in the sample had suits originally filed in state courts, defendants had them removed to federal court and the event corresponds to the date these cases were remanded back to state court.

Estimation Period	252 days, -4	126 days, -42
Event Window	(-3,3)	(-3,3)
Panel A: Market Model		
Equal Weighted	-1.51% -2.600***	-1.45% 3.084****
Value Weighted	-1.39% -2.649***	-1.25% -2.345***
Panel B: Fama-French-Momentum		
Equal Weighted	-.79% -2.371***	-.72% -2.424***
Value Weighted	-.89% -1.877**	-.71% -2.693***
Panel C: Market Adjusted Returns		
Equal Weighted	-2.27% -2.690***	-2.27% -2.649***
Value Weighted	-1.34% -1.858**	-1.34% -1.812**

The symbols ****, ***, ** and * denote statistical significance at the .1%, 1%, 5% and 10% levels.

7. CONCLUSIONS

Passage of the Class Action Fairness Act of 2005 expanded federal jurisdiction of class action litigation. Proponents of CAFA argue that this act bodes well for firms, while the opponents argue that CAFA's affect is negative on firms. The major purpose of this dissertation is threefold: 1) to determine the magnitude and direction of impact of CAFA on relevant firms, 2) to examine if firms that are more exposed to product liability type suits are more sensitive than those more exposed to contract liability type suits to CAFA, and 3) to investigate the extent to which internal corporate governance tools explain the cross-sectional variations in market reaction to CAFA for the firms in the product liability portfolio.

The results suggest that the market perceives CAFA to contain positive information for relevant firms. Consistent with our second hypothesis, we also find that firms in the product liability portfolio are more sensitive to CAFA than those in the contract liability portfolio. We find strong evidence that shareholders of firms in the product liability portfolio react negatively at the news of delay (and the possibility that the CAFA-related legislation may not pass) on June 8, 2004 when Senator Frist delays consideration of the legislation. On the other hand, the market reaction for the same group of firms is strongly positive on February 17, 2005 when CAFA is passed by the House of Representatives. Our joint test confirms these results as it finds our average abnormal returns to be jointly non-zero and not equal across the product liability and contract litigation portfolios.

Our cross-sectional analysis supports the conclusion that market reaction to CAFA varies across firms in the product liability portfolio depending on some of the

firm's inherent characteristics. We find that a firm's system of internal corporate governance plays an important role in explaining the firm's CAR which is positively related to the number of analysts following the firm and its debt to asset ratio, but negatively related to the governance structure in which a firm's CEO also serve as Chairman of its board. The market reacts positively when a firm has higher possibility of bankruptcy or when it is highly profitable.

CAFA increased federal jurisdiction and changed a means of external corporate governance. Ultimately, the market reaction indicates that firms likely to be involved in product liability class action benefit more than firms likely to be involved in contract class action litigation. However, our cross sectional analysis indicates that those firms with better internal corporate governance structures and less agency conflict experience greater increases in shareholder wealth to CAFA.

Finding that shareholder wealth increases for firms we identify as likely to be involved in product liability class actions indicates the market perceives state courts as less friendly venues than federal courts for adjudicating cases. We test this directly by looking at CARs when class actions are remanded to state court from federal court. We find confirmation of our earlier results examining cases during the four years preceding CAFA. To our knowledge this is the first time anyone has directly tested forum price effects around class action litigation.

Appendix A: Pending Federal Cases

This table reports the number of Federal cases pending by year and the top 5 frequencies of class actions by Nature of Suit (NOS). The NOS codes are Securities, Commodities, and Exchange (850), Other Statutory Actions (890), Employee Retirement Security Income Act (791), Fair Labor Standards Act (710), Civil Rights Jobs (442), Other Civil Rights (440), Antitrust (410), Asbestos Personal Injury (368) and Product Liability Personal Injury (365).

Year	N	Class Actions	Class Action Frequency by NOS
2001	232,800	4,563	850 (46.3%) 890 (9.2%) 440 (5.9%) 410 (5.8%) 365 (5.3%)
2002	265,926	4,835	850 (48.1%) 890 (8.9%) 365 (6.4%) 440 (5.5%) 410 (5.1%)
2003	261,065	4,977	850 (47%) 890 (8.7%) 365 (7.5%) 440 (4.9%) 410 (4.6%)
2004	267,270	5,535	850 (41.7%) 890 (10.4%) 365 (8.2%) 440 (4.8%) 791 (4.7%)
2005	266,216	5,356	850 (39.6%) 890 (10.4%) 365 (7.3%) 410 (5.1%) 440 (5.0%)

Source: Federal Court Case Integrated Database

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