Working Paper Series

Wealth Effects of Supervisory Goodwill Litigation: A Portfolio Approach

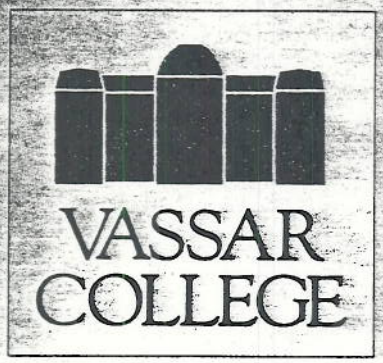
Vassar College Working Paper #48

John Z. Smith Jr.
Joshua M. Beauregard

First Version: November 2, 1999
Latest Revision: March 18, 2000

Relevant JEL codes: **G14, G28, G21**

Department of Economics



Poughkeepsie, New York 12601

Wealth Effects of Supervisory Goodwill Litigation: A Portfolio Approach

John Z. Smith Jr., (E-mail: jzsmith@vassar.edu), Vassar College
Joshua M. Beauregard, (E-mail: jobeauregard@vassar.edu), Vassar College

Abstract

Using a unique set of publicly-traded litigation certificates, we measure the wealth effects of (largely) unanticipated damage awards in the ongoing supervisory goodwill litigation between thrifts and the federal government. Estimating abnormal returns for portfolios of litigation certificates and retained supervisory goodwill claims, we find that the estimated net wealth effect of four litigation-related events between October 1998 and April 1999 was roughly twice as large for the portfolio of publicly-traded litigation certificates as for the portfolio of retained litigation claims. This disparity is puzzling given that the aggregate amount of supervisory goodwill in each portfolio was roughly equivalent. This study provides some evidence that financial markets do not always value assets and liabilities retained within firms efficiently.

Introduction

Nearly a decade after the passage of the Financial Institutions Reform, Recovery, and Enforcement Act (FIRREA), the federal government remains embroiled in dozens of lawsuits filed by thrift institutions. Charging that provisions in FIRREA abrogated existing agreements between federal government agencies and thrifts that permitted the use of an intangible asset, supervisory goodwill, to satisfy regulatory capital requirements, affected thrifts sought compensation for lost profits and damages suffered from reliance on these pre-FIRREA agreements.

Concerns regarding the market=s undervaluation of these litigation claims, coupled with difficulties in transferring ownership rights to the final damage award in the face of sustained merger activity in the thrift industry, led several thrifts to Aspin off@ their litigation claims by issuing litigation certificates, also known as litigation recovery interests. Previously, firms had established trusts to earmark litigation awards for shareholders, but the aforementioned litigation interests differed in that ownership rights were transferable, which allowed a secondary market for the securities.

Using an event-study analysis of the wealth effects of decisions and damage awards in the ongoing supervisory goodwill litigation, we can test not only the significance of abnormal returns to firms retaining supervisory goodwill claims, but also the differential response of free-standing *vs.* imbedded claims to damage awards in the supervisory goodwill litigation. We find significantly larger abnormal returns for the Apure play@ litigation interests. The conventional portfolio of firms with retained supervisory goodwill claims did not generate portfolio abnormal returns significantly different from a no-litigation claims control portfolio for most events. More generally, the differential valuation of litigation claims across portfolios suggests that financial markets do not always value a firm=s imbedded assets or liabilities efficiently.

Economic and Regulatory Background

Federal regulation of the United States savings and loan industry can be traced to the 1930's, when the aftermath of the Great Depression left more than 1700 of the nation=s approximately 12,000 savings institutions insolvent.[1] To stabilize the industry, Congress passed a series of bills shaping the lending activity of the thrifts and creating regulatory agencies. First, the Federal Home Loan Bank Act created the Federal Home Loan Bank Board (FHLBB), which was authorized to channel funds to thrifts for loans on houses and for preventing foreclosures on them. The Home Owners= Loan Act of 1933 authorized the Bank Board to charter and regulate federal savings and loan associations. Finally, the National Housing Act created the Federal Savings and Loan Insurance Corporation (FSLIC), under the Bank Board=s authority, with responsibility to insure thrift deposits and regulate all federally insured thrifts.

This regulatory system worked reasonably well until the industry was confronted with unforseen increases in inflation during the 1970's. Inflationary expectations fueled interest rate increases, sharply reducing the market value of fixed-rate, single-family mortgage loans, which constituted the bulk of most thrifts= loan portfolios. Moreover, thrifts were forced to offer higher interest rates to depositors so they would not withdraw their funds and reinvest in higher-yielding money market funds. Offering higher rates to depositors, however, eroded the spread between interest rates paid on time deposits and interest rates on home mortgage lending. In 1981, thrifts were paying depositors an average of 11 percent while collecting an average of only 10 percent on their 30-year fixed-rate loans. By the early 1980's, this spread compression resulted in industry-wide losses in the hundreds of millions of dollars, leaving many thrifts either insolvent or with little net worth.

The first response to the thrift failures was Aextensive deregulation,@ including the passage of the Depository Institutions Deregulation and Monetary Control (DIDMCA) Act of 1980 and Garn-St. Germain Depository Institutions Act (GSGDIA) of 1982. Essentially, DIDMCA phased-out interest rate ceilings on deposits and greatly expanded the lines of business open to thrifts, raised the deposit insurance ceiling to $100,000, and granted new powers to thrift institutions. Thrifts were allowed to offer checking accounts and issue credit cards. Lending opportunities for thrifts were expanded to include larger home mortgage loans, consumer loans, construction loans, and, on a limited scale, commercial loans. Thrifts were allowed to significantly expand their real estate lending while also entering new lines of business. (Robert W. Kolb, and Ricardo J. Rodriguez, pp. 417-418) The Garn-St. Germain act allowed banks and thrifts to offer money market deposit accounts to staunch the outflow of funds from financial institutions. Under GSGDIA, thrifts were allowed to substantially increase commercial lending and lending secured by commercial real estate. Broadening the scope of lending activities available to thrifts was designed to increase the diversification of loan portfolios while allowing thrifts to engage in lending with higher returns (and higher risk as well).

Loosening restrictions on thrift lending, however, did little to resolve the looming insolvency crisis triggered by losses on fixed-rate mortgage lending. Between 1981 and 1983, 435 thrifts failed. (General Accounting Office (1987), p. 12) Hundreds of surviving thrifts faced rapidly declining net worth, and would fail between 1983 and 1985. The industry=s deposit insurance fund, administered by the FSLIC, recognized the growing severity of the crisis, but lacked the funds necessary to close failed institutions using the payout method. Fearing the repercussions of widespread seizures of insolvent thrifts and pro-rated payouts to insured depositors, the FHLBB and the FSLIC embarked upon a program of easing capital requirements. The FHLBB reduced capital reserve requirements from five percent to four percent in November 1980, and implemented a subsequent reduction to three percent in January 1982.

As thrift failures continued unabated and losses in the industry grew, thrift regulators implemented more questionable practices to bolster the capital reserves of thrifts. In 1982, the FHLBB developed new regulatory accounting principles (RAP) which in many instances replaced generally accepted accounting principles (GAAP) for purposes of determining capital compliance. RAP had the effect of artificially inflating a bank=s capital as it authorized the use of various accounting gimmicks, described by one judge as Aspinning straw into gold,@ that either treated potential liabilities as assets or double-counted assets in an effort to meet capital requirements.[2] Under RAP, thrifts were allowed to use a wide range of Apaper assets@ such as capital credits, net worth certificates, and supervisory goodwill as regulatory capital; a measure of capital used to determine capital compliance.[3] The adoption of regulatory accounting principles led to a divergence between real capital and regulatory capital, and hence a difference between the actual and reported net worth of savings and loans. By 1984, this difference was close to $9 billion, which meant that industry-wide capital cushion was vastly overstated. (General Accounting Office, (1989), p. 108)

Supervisory goodwill **B** one form of regulatory capital created under RAP **B** would play a central role in the next phase of regulatory forbearance. Despite broadening of lending powers and a variety of accounting gimmicks, the number of insolvent thrifts continued to grow. Committed to a course of avoiding seizure and payout as a means of resolving failed thrifts, the FHLBB next pursued a policy of merging insolvent thrifts with healthy ones.[4] Since failed thrifts had negative net worth, regulators had to offer financial inducements to healthy thrifts. The FHLBB and FSLIC actively solicited healthy thrifts to acquire insolvent thrifts through supervisory mergers. In a supervisory merger, the healthy thrift could treat the difference between the purchase price (typically zero) and the net worth of the failed thrift as supervisory goodwill. While purchase prices in excess of market value are typically classified as goodwill **B** an intangible asset **B** under purchase accounting, healthy thrifts in supervisory mergers could use qualifying supervisory goodwill as regulatory capital. For accounting purposes, supervisory goodwill was treated as an intangible asset and amortized on a straight-line basis over a period of 25-40 years.[5] In Glendale Federal=s 1981 supervisory merger with the insolvent First Federal Savings and Loan of Broward County, Broward had a negative net worth of $734 million at the time of the merger. Had Glendale not been permitted to record the $734 million deficit as supervisory goodwill **B** to be amortized on a straight line basis over 40 years **B** Glendale would have fallen out of capital compliance. Supervisory goodwill allowed participating thrifts to acquire additional bank capital without shrinking loan portfolios or issuing additional debt or equity. As a result, Asupervisory goodwill@ thrifts could leverage additional lending.

Supervisory goodwill provided further benefits to acquiring thrifts as well. Supervisory mergers effectively permitted healthy thrifts to expand across state borders at a time when federally chartered thrifts were enjoined from interstate branching. Glendale=s acquisition of Broward in a supervisory merger in 1981 combined California- and Florida-based thrifts. Acquiring thrifts assumed additional deposit liabilities, but were able to capture the value of under-priced deposit insurance. Under RAP, supervisory mergers provided acquiring thrifts with a variety of financial incentives that padded reported earnings, even if the capital cushion they created was largely illusory.

As the financial condition of the thrift industry worsened throughout the late 1980s, it became clear to both Congress and regulators that further attention was needed. The interest rate problem of the early 1980s was now a credit problem, as relaxation of lending restrictions coupled with extensive regulatory forbearance led to substantial losses on commercial lending and loans secured with real estate. From 1980 to the end of 1989, the number of operating thrifts fell from 3,993 to 2,878, a 28 percent decline. Of the 2,878 institutions still open for business, 517 were technically insolvent and another 122 had dangerously low capital reserves. (James R. Barthe and Philip F. Bartholomew).

Faced with growing pressure to resolve the escalating thrift crisis, Congress passed the Financial Institutions Reform, Recovery, and Enforcement Act (FIRREA) in August 1989. FIRREA authorized $50 billion of additional borrowing to handle the closing or merging of failed thrifts, and raised the minimum requirements for capital. Specifically, FIRREA required thrifts to maintain tangible capital of at least 1.5 percent of assets and core capital of at least 3 percent of assets. FIRREA also established risk-based capital requirements, which required thrifts with riskier asset portfolios to maintain additional capital. More importantly, FIRREA negated supervisory assistance agreements between the FHLBB and thrifts by ending the further creation of supervisory goodwill and introducing a rapid phase-out of existing supervisory goodwill. As of December 31, 1989, supervisory goodwill thrifts could not be counted toward tangible capital, and the use of supervisory goodwill as core capital would be phased out entirely by January 1, 1995.

At the time of FIRREA=s passage, supervisory goodwill equaled almost 36% of all capital of the savings and loan industry.[6] Raising capital requirements facing thrifts while destroying more than one-third of the thrift industry=s capital had sweeping repercussions on supervisory goodwill thrifts. Many fell out of capital compliance and became insolvent. To avoid regulatory takeover, thrifts were forced to take drastic action by either reducing their asset holdings (selling loans) or raising new capital from investors or internal sources. Many of the thrifts carrying unamortized supervisory goodwill were so damaged by the newly-passed legislation that they were seized and closed down by regulators. Thrifts that remained in capital compliance incurred higher borrowing costs and the opportunity cost of shrinking their loan portfolios.

History of Supervisory Goodwill Litigation

FIRREA effectively superseded the existing contractual relationships the FHLBB and FSLIC had negotiated with thrifts in the course of supervisory mergers. Claiming that the federal government had abrogated enforceable contracts, several of the Asupervisory goodwill@ sued the government for breach of contract. At issue in this litigation was the existence of binding agreements between thrifts and the agents of the federal government, the FHLBB and the FSLIC. Several thrifts, such as Glendale Federal, had explicit supervisory assistance agreements drafted by the Federal Home Loan Bank Board at the time of the supervisory or assisted merger.[7] Other thrifts involved in the litigation, such as California Federal, had scant written documentation of an agreement with either the FHLBB or the FSLIC, but instead relied on memoranda and other documents that suggested an implied agreement. The exact nature of agreements, and hence the damage claims, varied on a case-by-case basis. Some of the supervisory goodwill cases, such as the Coast Federal litigation, involved capital credits and promises by the FHLBB to essentially double-count cash injections provided at the time of mergers as regulatory capital.

In the supervisory goodwill litigation, thrifts sought damages under three traditional theories of contract breach: reliance, restitution, and expectancy. Reliance damages are defined as the Ainterest in being reimbursed for loss caused by reliance on the contract by being put in as good a position as [the company] would have been in had the contract not been made.@ (*Glendale Federal Bank* v. *United States*, 43 Fed. Cl. 390 (1999), p. 12) Glendale sought reliance damages totaling $862,770,000 which included: pre-breach costs of performing under and relying on the contract (which include the costs of acquiring thrifts under supervisory goodwill and interest payments), post-breach damages caused by investments made in reliance that the government would follow its contract, and wounded bank damages which never would have occurred because it would have remained in capital compliance had it never entered into the contract.

The second theory of damages, restitution damages, is defined as: Athe interest of the plaintiff in having restored to him any benefit that he has conferred on the other party.@ (*Glendale Federal Bank* v. *United States*, 43 Fed. Cl. 390 (1999), p. 13) Glendale=s restitutionary claim, including non-overlapping reliance damages, totaled $2.015 billion. This amount was calculated by summing up the immediate benefits the government received at the moment of the merger **C** which included the cost of resolving insolvent thrifts **C** and the interest income accruing to the government on these funds.

The final theory of damages, expectancy, is defined as Athe interest in having the benefit of [the company=s] bargain by being put in as good a position as [the company] would have been had the contract been performed@ (*Glendale Federal Bank* v. *United States*, 43 Fed. Cl. 390 (1999), p. 6) Glendale claimed $1.603 billion in expectancy damages. This amount consisted of lost profits from the date of breach to the trial date, lost future profits from the date of the trial until 2021 when the contract was originally set to end, the increased cost of funds, and increased insurance premiums and other miscellaneous costs imposed by the breach.

The federal government contended that the thrifts suffered no damages directly related to the contract breach. The government=s response in many of the supervisory goodwill cases was that the alleged damages claimed by thrifts were a result of poor management and excessive risk taking, and were not imposed by the change in accounting rules. Moreover, the government claimed that FIRREA , in fact, prevented thrifts from suffering additional losses in the future because it forced thrifts to exit money-losing lines of business.

In July of 1992, the U.S. Court of Claims ruled in the consolidated *Winstar* and *Statesman* cases that the government had broken contractual obligations with the thrifts. This ruling was appealed in 1993, and the decision was reversed in favor of the government. Two years later, the Federal Appeals Court reaffirmed the U.S. Claims Court ruling in 1992 and again found that the passage of FIRREA breached the government=s contract with the thrifts. Due to the size and importance of the case, the U.S. Supreme Court agreed to hear the federal government=s appeal of the Federal Appeals Court decision. On July 1, 1996, in *United States* v. *Winstar Corp*., the Supreme Court upheld the 1995 ruling that the government had breached contracts with investors in troubled thrifts by disallowing supervisory goodwill and was thus liable for damages suffered.

The *Winstar* decision moved the supervisory goodwill litigation to the damages stage. To expedite processing of the supervisory goodwill cases, a 1997 case management order sorted the lawsuits into eight primary cases, including the Glendale and California Federal cases, and two subsequent rounds of thirty cases each. Discovery lasted more than 18 months in most of these cases. The plaintiffs (supervisory goodwill thrifts) presented damage theories and the magnitude of damages sought during discovery and subsequent testimony. Determining the exact magnitude of damages likely to be awarded is difficult, as the Federal Claims Court judges can decide which, if any, of the damages theories to accept. The first court decisions regarding damages in the supervisory goodwill litigation occurred on April 9, 1999, when Judge Loren Smith awarded Glendale Federal $908.948 million in restitution and non-overlapping reliance damages, and on April 16, 1999, when Judge Robert Hodges awarded California Federal approximately $23.3 million in transactions costs incurred in replacing supervisory goodwill. The Glendale award was approximately $300 million less than anticipated, while the California Federal award was expected to range from $800 million to $1600 million. As the first two supervisory goodwill cases in which damages were awarded, these cases were closely watched bellwethers for the subsequent supervisory goodwill claims awaiting trial.

Literature Review

There is a considerable body of literature examining the wealth effects of changes in banking regulation during the 1980's and 1990's. Event studies have been used to evaluate share price reactions to a number of regulatory changes over the past twenty years, including the Depository Institutions Deregulation and Monetary Control Act of 1980, the Garn-St. Germain Institutions Act of 1982, and the Financial Institutions Reform, Recovery, and Enforcement Act of 1989. This section provides an overview of the relevant literature measuring the wealth effects of regulatory changes, particularly as such changes affected the thrift industry.

Depository Institutions Deregulation and Monetary Control Act

Paul R. Allen and William J. Wilhelm (1988) assess the wealth effects of one of the first regulatory changes of the 1980s, the Depository Institutions Deregulation and Monetary Control Act (DIDMCA) of 1980. With the passage of DIDMCA, Congress expanded the products depository institutions could provide consumers **C** reversing the trend of disintermediation **C** and broadening the scope of lending banks and thrifts could extend. Allen and Wilhelm (1988) measure the impact of five events that conveyed relevant information about DIDMCA=s passage on three different depository institutions portfolios: Federal Reserve member banks (FRB); savings and loans (S&L); and nonmember banks (NMB). Using a seemingly unrelated regression (SUR) framework, Allen and Wilhelm find that DIDMCA produced overall positive effects on the FRS banks and negative effects on the savings and loan and non-member bank portfolios. During the week of DIDMCA=s enactment, the FRB portfolio exhibited a gain of 3.9 percent, while the NMB and S&L portfolios lost 4.3 percent and 4.4 percent, respectively.

Regulatory Accounting Principles

From 1980 to 1983, regulators made several changes to the method of measuring and reporting net worth for thrifts, referred to as regulatory accounting principles (RAP). Walter Blacconiere (1989) examines the market reactions to the following RAP events: permitting the deferral of gains and losses associated with the disposition of loans and assets; permitting the use of appraised equity capital in determining regulatory net worth; and the ability to use net worth certificates in determining regulatory net worth. Each of these changes increased the regulatory net worth of thrifts and thus, effectively eased regulatory net worth requirements. From a sample of fifty-five publicly-traded thrifts, Blacconiere constructs the following four portfolios: a portfolio constituting the full sample; the full sample excluding thrifts with dividend and earnings announcements during the event period; a portfolio of thrifts with low regulatory net worth; and the low net worth portfolio excluding thrifts with dividend and earnings announcements. The time frame of the study is from August 13, 19800 to August 29, 1983. Blacconiere finds that thrifts experienced significant positive stock price reactions to the appraised equity capital regulation that effectively eased net worth requirements. This was especially true for those with low regulatory net worth. In contrast, he finds significant negative stock price reactions for the regulations allowing deferral of loan losses and net worth certificates. One explanation for the negative reactions is that the market expected the deferred net losses and net worth certificates regulations to be more beneficial than indicated by the actual events.

Garn-St. Germain Depository Institutions Act (GSGDIA) of 1982

Donald R. Fraser and James W. Kolari (1990) and Marcia Millon Cornett and Hassan Tehranian (1990) examine the market response to GSGDIA. Using seven events leading up to the passage of the Garn-St. Germain Act, Fraser and Kolari calculate weekly security returns from July 3, 1981 to June 24, 1983 for an equally-weighted portfolio of 33 publicly-traded thrifts. The authors use a modified market index model that controls for interest rates as well. Fraser and Kolani find significant positive returns in the weeks immediately preceding passage of Garn-St. Germain. These results suggest that GSGDIA generated significant positive wealth effects for the saving industry by expanding the lines of business and types of lending open to thrifts.

Millon Cornet and Tehranian (1990) use a larger sample of events (fourteen events) and a larger sample (228 depository institutions) when evaluating the effects of events leading to the passage of GSGDIA. The researchers use a multivariate regression framework to measure the abnormal returns to four different portfolios (large banks, small banks, large thrifts, and small thrifts). Their results indicate that GSGDIA did produce significant changes in the value of commercial banks and savings and loans. Specifically, two events signaling the likely passage of GSGDIA generated significant positive abnormal returns to stockholders of large commercial banks and large thrifts while significant negative abnormal returns to stockholders of small commercial banks and small thrifts.

Financial Institutions Reform, Recovery and Enforcement Act (FIRREA) of 1989

Sundaram, Rangan and Davidson (1991) examine the impact of the debate and passage of FIRREA on publicly-traded commercial banks and thrifts. Their sample includes 84 thrifts and 187 commercial banks divided into four portfolios: large banks, small banks, large thrifts and small thrifts. The event period extends 326 days, from 100 trading days prior to the first event to 100 trading days after the final event. Ten different events leading up to the passage of FIRREA are included in the event study analysis. Sundaram *et al.* find significant positive abnormal portfolio returns for banks on the day President Bush introduced the bill (+0.66 percent) as well as the date on which the bill was signed into law (+1.04 percent). For the thrift sample, significant portfolio abnormal returns were found for the date on which the bill was introduced (-0.29 percent) and the day the bill was signed (+1.43 percent). When comparing the abnormal returns to banks by size, large banks experienced significant positive abnormal returns of +1.10 percent, while small banks realized abnormal returns of +0.79 percent, which was also positive and significant. The passage of FIRREA generated significant positive abnormal returns for both large thrifts (+2.82 percent) and small thrifts (+1.48 percent). Although FIRREA raised capital requirements, investors perceived this re-regulation of depository institutions as wealth enhancing.

Bierman, Fraser, and Zardkoohi (1999) examine the effect of FIRREA on supervisory goodwill thrifts using three events leading up to the passage of the bill. Three thrift portfolios are constructed: publicly-traded thrifts that failed after FIRREA and that are involved in the supervisory goodwill litigation; publicly-traded thrifts that survived after FIRREA and that are involved in the supervisory goodwill litigation; and a control group consisting of publicly-traded thrifts not involved in the litigation. Calculating the mean abnormal return for each of the portfolios over the three events, Bierman *et al.* find no evidence of statistically significant negative abnormal returns for either of the supervisory goodwill portfolios. On the contrary, the portfolio of surviving supervisory goodwill thrifts exhibited statistically significant positive returns (+1.30 percent) to the announcement that the Treasury secretary would recommend a presidential veto if Congress eased the proposed capital requirements. When the authors explore the market reaction to other FIRREA events, they find little evidence of negative wealth effects. These findings suggest that the actual passage of FIRREA generated no significant negative effect on the supervisory goodwill thrifts, a result that illustrates the support for increasing capital requirements in the industry.

Supervisory Goodwill Litigation

Bierman, Fraser and Zarkoohi (1999), examine a series of seven litigation events associated with supervisory goodwill ligation, from 1990 to the *Winstar* decision on July 1, 1996. The authors measure the abnormal returns associated with announcements in the supervisory goodwill litigation by constructing two portfolios: one comprised of publicly-traded thrifts with supervisory goodwill claims and a second control portfolio of publicly traded thrifts not involved in the litigation. The authors use a single index model estimated over approximately 280 trading days prior to the event in question. Thrifts involved in the litigation recorded a mean abnormal return of +5.69 percent in response to the *Winstar* decision, whereas the control portfolio posted an insignificant abnormal return of +0.29 percent. Bierman *et al.* also estimate the dollar amount of estimated wealth effects for the supervisory goodwill portfolio, and compare these amounts to the $10-$20 billion wealth effects reported in the press. The authors find the estimated dollar wealth changes were substantially less than the amount reported by the press. Bierman *et al.* cite market adjustments prior to the event periods and the dollar amount of the monetary damages not yet determined as possible reasons for these findings.

We extend the previous work of Bierman *et al*. to litigation announcements associated with the damages phase of the supervisory goodwill litigation. In particular, we exploit the decision by many plaintiffs in the supervisory goodwill litigation to issue transferable litigation interests; shares that represent claims on the final damage award in the litigation. These litigation interests provide another supervisory goodwill portfolio; one which represents a pure play in the supervisory goodwill litigation free of contaminating news such as merger announcements or movements in interest rates. We use a portfolio approach to measure abnormal returns in response to four litigation announcements viewed as Across-cutting@ or common to all supervisory goodwill claims. In addition to a control portfolio of publicly traded thrifts and banks with thrift subsidiaries and a corresponding supervisory goodwill portfolio, we measure abnormal returns to a portfolio of publicly-traded litigation interests and a fourth portfolio comprised of two supervisory goodwill bank holding companies who retained minor interests in the litigation while substantially spinning off their claims into litigation interests. We conduct a variety of tests to measure the robustness of our findings, and report the implied wealth effects as well.

Data Description

We use daily stock returns from June 4, 1998 to September 15, 1999 to measure the wealth effects arising from four litigation announcements (events) in the ongoing supervisory goodwill litigation. The sample includes daily returns for sixteen publicly-traded thrifts and bank holding companies with thrift subsidiaries, as well as four litigation certificates issued by thrifts. Ten of the sixteen bank companies and thrifts included in the sample are involved in the litigation while the remaining six companies are not involved in the litigation. Daily closing prices and trading volumes were obtained from Commodity Systems International, the Center for Research in Security Prices (CRSP) and Factset Research Systems.

During this time period, we identify four significant announcements (events) in the supervisory goodwill litigation that are likely to impact the expected value of nearly all supervisory goodwill claims. The events are described in **Table 1** below. The first event, Congressional approval to fund all damage awards in the supervisory goodwill litigation is the only event not specifically related to a judge=s decision, and represents the only event for which the exact timing of the announcement cannot be determined. The final three events are judge=s rulings or decisions in supervisory goodwill litigation, each of which was announced after the market closed. Within a three-day event window centered on the event date, we searched for contaminating announcements and found none. The final two events, damage awards in the Glendale Federal and California Federal cases, are particularly important, as they represent the first two decisions awarding damages in the nearly ten-year history of the supervisory goodwill litigation. Admittedly, the material facts in supervisory goodwill claims vary across thrifts, but damage theories advanced by Glendale and California Federal are fairly common to the majority of outstanding supervisory goodwill claims. Hence, these two decisions provide significant information regarding the expected value of damage awards in the remaining cases.

Table 1: Supervisory Goodwill Litigation Event-Dates

Event Number	Event Date	Event Description	Predicted Effect on Share Prices
1	Oct. 30, 1998	Appropriation in federal budget approved by Congress provides federal government funds to settle or pay court-ordered judgment in thrift litigation. Damage awards will not be capped by available monies in deposit insurance fund.	Positive: Plaintiff thrift institutions will not face pro-rated damage awards.
2	Nov. 12, 1998	Judge Robert Hodges rejects California Federal=s $1.64 billion expectancy damages as particularly speculative.	Negative: Hodge=s ruling roughly halves the maximum award CalFed can receive, calls into question expectancy damages theories.
3	Apr. 12, 1999	First day of trading after Judge Loren Smith orders government to pay $908.9 million in damages to Glendale. Glendale decision represented Abellwether@ supervisory goodwill damages case.	Negative: Glendale sought damages as high as $1.9 billion; analysts= conservative damage forecast was $1.2 billion
4	Apr. 17, 1999	First day of trading after Judge Hodges awards California Federal $23.9 million in its supervisory goodwill case.	Negative: Cal Fed had sought $1.6 billion in damages; analysts= conservative damage forecast was $750 million

Four portfolios are constructed, and portfolio daily returns are constructed by equally-weighting individual security returns within each portfolio. As discussed above, the publicly-traded litigation interests **B** hereafter referred to as the Litigation Certificates Portfolio **B** provide the opportunity to measure the effect of litigation announcements that cannot be confounded by industry-specific or firm-specific news; only news that affects the expected value of the damage award in the underlying supervisory goodwill litigation should move the share price of these litigation interests. The litigation certificate portfolio is comprised of four securities whose value is based directly on damages awarded in each of their respected cases. These securities or Alitigation certificates@ were spun-off by thrifts to preserve the value of the litigation for their shareholders. By distributing these certificates to shareholders of the thrift, the Aoriginal@ shareholders could maintain any damages awarded in their thrift=s claim even if the thrifts was acquired by another bank. Although banks have established trusts in the past where stockholders are assigned contingent rights in litigation, the California Federal CALGZ litigation certificates were the first such rights that were transferable. In addition to the four litigation certificates, the litigation certificate portfolio consists of two insolvent thrifts who are both involved in the litigation, Ambase Corp. and Meritor Corp.. Both thrifts were seized by the RTC in 1992 but are still publicly traded. Neither of these firms generates significant operating revenues; their value is solely a function of damages awarded in their supervisory goodwill claims.

The second portfolio **C** hereafter referred to as the Supervisory Goodwill Portfolio **C** consists of six publicly-traded companies involved in the supervisory goodwill litigation. Several of the companies in the supervisory goodwill portfolio are not the original plaintiffs in the supervisory goodwill lawsuits. Rather, they became involved in the litigation following the acquisition of a thrift that had already brought suit against the government. Dime Bancorp for example, became a plaintiff in 1995 following its acquisition of Anchor Bancorp who had previously filed a suit against the government for breach of contract.

The third portfolio **B** hereafter referred to as the Control Portfolio **B** is composed of publicly-traded thrifts and bank holding companies with thrift subsidiaries, each of which is uninvolved in the litigation. Selection of the control portfolio was designed to generate a portfolio of thrifts similar to those with supervisory goodwill claims in terms of industry classification (four-digit SIC code), market capitalization, and geographic scope of operations.

The final portfolio **B** hereafter referred to as the Holding Companies portfolio **B** consists of two publicly-traded bank holding companies with thrift subsidiaries, Golden State Bancorp and Washington Mutual. Each of these firms Aissued@ litigation certificates, yet retains a partial interest in the supervisory goodwill litigation.[8] We expect the market response of this portfolio to litigation announcements to be greater than the control portfolio but less than the supervisory goodwill portfolio. **Table 2** below summarizes the composition of each of the four portfolios used in the study.

Table 2: Security Composition of Portfolios

Litigation Certificates Portfolio			
CALGZ	California Federal Contingent Litigation Recovery Interests	California	NASDAQ
CALGL	Federal Secondary Contingent Litigation Recovery Interests	Coast	NASDAQ
CCPRZ	Federal Litigation Contingent Payments Rights Trust		NASDAQ
GSBNZ	Golden State (Glendale) Tracking Warrants		NASDAQ
ABCP	Ambase Corp.		OTC BB
MTOR	Meritor Savings Bank		OTC BB
Holding Companies Portfolio			
GSB	Golden State Bancorp Inc.		NYSE
WM	Washington Mutual, Inc.		NYSE
Supervisory Goodwill Portfolio			
ASFC	Astoria Financial Corp.		NASDAQ
BNKU	Bank United Corp.		NASDAQ
CF	Charter One Financial Inc.		NYSE
CFB	Commercial Federal Corp.		NYSE
DME	Dime Bancorp, Inc.		NYSE
TCB	TCF Financial Corp.		NYSE
Control Portfolio			
GDW	Golden West Financial Corp.		NYSE
GPT	GreenPoint Financial Corp.		NYSE
RSLN	Roslyn Bancorp, Inc.		NASDAQ
SPBC	St. Paul Bancorp		NASDAQ
WFSL	Washington Federal		NASDAQ
WBST	Webster Financial Corp.		NASDAQ

Table 3 below reports the mean and standard deviation of daily returns for the four portfolios as well as the S&P 500 index and an equally-weighted thrift industry index. Summary statistics are reported for both event days and non-event days. The twelve event days are further decomposed into the one Agood news@ event (October 30, 1998) and the three subsequent bad news events. For both Abad@ and Agood@ events, the mean daily returns for the Litigation Certificates Portfolio was significantly different from the other portfolios. On non-event days, the mean returns across portfolios were not statistically significantly different.

Table 3: Mean Daily Returns and Standard Deviation of Daily Returns
AGood News@ Event Days, ABad News@ Event Days, Non-Event Days
Total Number of Observations (Trading Days): N=324
mean
(standard deviation)

Portfolio	Good News Event Days: Event 1 (N = 3)	Bad News Event Days: Events 2, 3 and 4 (N = 9)	All Event Days (N = 12)	Non-Event Days (N = 312)
Litigation Certificates	6.14% (4.02%)	-9.89% (16.04%)	-5.88% (15.57%)	-0.16% (1.92%)
Bank Holding Companies	1.92% (1.18%)	-0.06% (2.18%)	0.44% (2.12%)	-0.12% (2.70%)
Supervisory Goodwill	2.27% (0.63%)	-0.07% (0.76%)	0.52% (1.27%)	-0.11% (1.89%)
Control	1.32% (0.75%)	0.48% (0.55%)	0.69% (0.68%)	-0.06% (1.68%)
Standard and Poor=s 500 Composite Index	1.34% (0.29%)	-0.11% (1.05%)	0.25% (1.11%)	0.06% (1.34%)
Equally-Weighted Thrift Index	1.08% (1.18%)	0.46% (0.98%)	0.62% (1.01%)	-0.11% (1.45%)

Note: Event days are defined as day prior to event, event day, and day after event. Using this definition, there are three trading days relevant to each event.

Empirical Methodology

Two of the litigation certificates were not listed on NASDAQ prior to June 1998, which left approximately 100 trading days prior to the first event. As a result, the model parameters were estimated across the events rather than in a pre-event estimation period, and indicator variables were used to measure abnormal returns. For each of the four portfolios, a two-index model including both a market index (S&P 500) and an industry index (equally-weighted return on a composite of all publicly-traded thrifts and bank holding companies with thrift subsidiaries) is estimated using daily returns from June 4, 1998 to August 17, 1999. Event-day abnormal returns are estimated by including indicator variables for each of the four litigation announcement events, as follows:

$$r_t^{Port.} = \alpha + \sum_{j=1}^{4} \delta_j \bullet D_j + \beta_{S\&P\ 500} \bullet r_t^{S\&P\ 500} + \beta_{Industry} \bullet r_t^{TII} + \varepsilon_t \quad where\ ,$$

$$t \ \ indexes\ trading\ days\ in\ the\ estimation\ window\ ,$$

$$r_t^{Port} = daily\ return\ on\ portfolio\ \ for\ date\ t\ ,$$

$$r_t^{SP\ 500} = daily\ return\ on\ S\ \&\ P\ 500\ market\ index\ \ for\ date\ t\ ,$$

$$r_t^{TII} = daily\ return\ on\ equally\text{-}weighted\ thrift\ industry\ composite\ index\ \ for\ date\ t\ ,$$

$$D_j = Indicator\ variable = 1\ \ for\ event\ \ j\ ,$$

The exact specification of D_j will vary across specifications, as well as assumptions made about the independence of the error term, ε. To correct for serial correlation in the error term, we report parameter estimates from Cochrane-Orcutt regressions. To allow for potential event-date uncertainty, anticipation of news, and response of the market to news, the event window is expanded from the event date to a three-day window indexed by $\tau \in [-1,1]$, where $\tau = 0$ represents the event date. In this specification:

$$r_t^{Port} = \alpha + \sum_{j=1}^{4} \sum_{t=-1}^{+1} \delta_j \bullet D_{t\ j} + \beta_{S\&P\ 500} \bullet r_t^{S\&P\ 500} + \beta_{Industry} \bullet r_t^{TII} + \varepsilon_t \ .$$

In the above specification, δ_j represents the average daily abnormal return over a three-day event window centered on the event-date.

Results

Event-day abnormal returns for each of the four portfolios are presented in **Table 4** below. Although the OLS and Cochrane-Orcutt estimates are similar in magnitude, Durbin-Watson tests failed rejected the null hypothesis of no serial correlation for the control portfolio, hence we focus on the Cochrane-Orcutt estimates.

Table 4: Estimates of Event Day Abnormal Returns to Portfolios

Number of Observation (Trading Days): N=324

coefficient estimate

(standard error)

[p-value]

	Litigation Certificates		Supervisory Goodwill		Control		Holding Companies	
Parameter	OLS	Cochrane-Orcutt	OLS	Cochrane-Orcutt	OLS	Cochrane-Orcutt	OLS	Cochrane-Orcutt
Event 1: 10/30/98	9.64%** (2.053%) [0.000]	10.325%** (2.044%) [0.000]	-1.062% (0.924%) [0.251]	-0.962% (0.924%) [0.299]	-0.066% (.892%) [0.941]	0.006% (0.861%) [0.994]	-0.803% (1.245%) [0.519]	-0.849% (1.246%) [0.496]
Event 2: 11/12/98	-4.35%* (2.043%) [0.034]	-5.26%** (2.034%) [0.010]	0.203% (0.919%) [0.825]	0.178% (0.919) [0.847]	0.434% (0.889%) [0.625]	0.557% (0.856%) [0.516]	-0.203% (1.239%) [0.870]	-0.213% (1.239%) [0.864]
Event 3: 4/12/99	-.27.13%** (2.043%) [0.000]	-28.07%** (2.037%) [0.000]	-1.001% (0.920%) [0.278]	-1.087% (0.921%) [.239]	-0.527% (0.888%) [0.554]	-0.341% (0.858%) [0.692]	-2.85%* (1.124%) [0.022]	-2.73%* (1.241%) [0.028]
Event 4: 4/19/99	-44.32%** (2.057%) [0.001]	-43.57%** (2.049%) [0.000]	1.75%* (.926%) [0.059]	1.70% (0.926%) [0.067]	0.643% (0.894%) [0.472]	0.388% (0.863%) [0.653]	-1.089% (1.248%) [0.383]	-1.028% (1.248%) [0.411]
Adjusted R^2	0.68	0.69	0.76	.077	0.71	0.74	0.79	0.79
D-W stat. (1.71-1.83)	NA	1.8786	NA	1.9963	NA	1.6233*	NA	1.9282

OLS = Ordinary Least Squares; Cochrane-Orcutt = Cochrane-Orcutt correction for serial correlation of error terms

**=Significant at the 1 percent level; * = Significant at the 5 percent level.

Durbin-Watson test: Reject null of serial correlation (at 5 percent level) if D-W statistics is less than 1.71

For Event One (the appropriation that any damages awarded to the plaintiff would not come out of the deposit insurance fund), the litigation certificates portfolio recorded a statistically significant abnormal return of 10.325 percent. Prior to Congressional approval of the budget appropriation, plaintiffs in the supervisory goodwill litigation anticipated that damage awards might be capped by the surplus in the Savings Association Insurance Fund. The appropriation measure relaxed this constraint and provided funding necessary to pay all final damage awards. None of the other portfolios experienced significant abnormal reactions to Event One.

Judge Hodges= rejection of Cal Fed=s expectancy theory of damages (Event Two) produced significant abnormal returns for only the litigation certificate portfolio (-5.26 percent). None of the other portfolios, including the supervisory goodwill portfolio, exhibited significant abnormal returns for this event date. One explanation for this finding is that many of the supervisory goodwill claims cases were based on reliance theories of damages.[9]

The Glendale decision (Event Three) generated statistically significant, one-day abnormal returns of -28.07 percent for the litigation certificates portfolio. The amount awarded in the case ($909 million.) was substantially less than the expected amount ($1.2 billion), which explains the large negative response. The significant -2.73 percent abnormal return for the bank holding companies portfolio is likely an artifact of Golden State Bancorp=s retained 15 percent interest in both the Glendale Federal and California Federal litigation claims.

The litigation certificates portfolio registered large, statistically significant abnormal returns (-43.56 percent) in response to the California Federal decision (Event Four). Prior to the California Federal decision, analysts forecast a damage award of $800 million to $1.64 million. After the decision, the California Federal secondary litigation interests (CALGL) were essentially worthless, and analysts substantially downgraded the expected damage award in the Coast Federal litigation.

Event-day wealth effects are provided in **Table 5** below. Abnormal returns associated with the four events resulted in a net loss of 53.87 percent of the October 28, 1998 market capitalization of the litigation certificates portfolio. The four events in the supervisory goodwill litigation had large wealth effects on the litigation certificates. The net wealth effect of the four events on the portfolio of supervisory goodwill firms was negligible, while the net wealth effect on the Golden State - Washington Mutual portfolio represented a loss of 5.18 percent of October 28, 1998 market capitalization. It is difficult to determine the extent to which the negative wealth effect for the bank holding company portfolio is driven by the loss of value for Golden State=s $160 million Goodwill Litigation Asset, but the market might have overestimated the effect of the Glendale Federal and California Federal decisions on the market value of the parent company, Golden State Bancorp.

Table 5: Portfolio Wealth Effects: Event-Day Abnormal Returns
(all figures in millions of dollars)

Event	Litigation Certificates	Supervisory Goodwill	Control	Holding Companies
Event 1: Oct. 30	$92.933	-$112.282	$0.712	-$204.850
Event 2: Nov. 12	-$54.325	$22.489	$70.097	-$52.294
Event 3: April 12	-$272.030	-$161.446	-$33.269	-$719.655
Event 4: April 19	-$251.483	$250.417	$39.251	-$273.574
Column Totals:	-$484.905	-$0.822	$76.791	-$1250.375

NOTE: Dollar amounts of wealth effects are calculated by multiplying the estimated abnormal returns to the stock on the event day by the equally weighted market capitalization of each portfolio.

Table 6: Estimates of Three-Day Abnormal Returns to Portfolios

Number of Observations (Trading Days): N = 324

coefficient estimate

(standard error)

[p-value]

	Litigation Certificates		Supervisory Goodwill		Control		Holding Companies	
Variable	OLS	Cochrane-Orcutt	OLS	Cochrane-Orcutt	OLS	Cochrane-Orcutt	OLS	Cochrane-Orcutt
Event 1: 10/30/98	5.787%** (1.802%) [0.001]	6.186%** (1.135%) [0.000]	0.974%** (0.53%) [0.068]	0.96%** (0.519%) [0.066]	0.140% (0.516%) [0.786]	.0284% (0.445%) [0.949]	0.184% (0.717%) [0.798]	0.216% (0.0073%) [0.768]
Event 2: 11/12/98	-5.05%** (1.794%) [0.005]	-4.89%** (1.126%) [0.000]	-0.239% (0.530%) [0.652]	-0.234% (.516%) [0.650]	0.357% (0.514%) [0.487]	0.3206% (0.443%) [0.469]	0.016% (0.714%) [0.983]	0.017% (0.0073%) [0.981]
Event 3: 4/12/99	-1.279%** (1.803%) [0.000]	-14.41%** (1.126%) [0.000]	-1.294%* (0.532%) [0.016]	-1.25%* (0.519%) [0.017]	0.170% (0.517%) [0.742]	0.2312% (0.445%) [0.604]	-2.07%* (0.717%) [0.004]	-2.067%* (0.0073%) [0.005]
Event 4: 4/19/99	-11.89%** (1.803%) [0.000]	-14.98%** (1.134%) [0.000]	-0.075% (0.533%) [0.888]	-0.045% (0.519%) [0.931]	-0.242% (0.517%) [0.640]	-0.203% (0.445%) [0.648]	-0.944% (0.717%) [0.189]	-0.927% (0.738%) [0.208]
Adjusted R^2	0.2368	0.549	0.7621	0.766	0.7132	0.739	0.7886	0.787
DW-stat (1.71-1.83)	NA	1.059*	NA	1.93	NA	1.615*	NA	1.933

OLS = Ordinary Least Squares; Cochrane-Orcutt = Iterative Cochrane-Orcutt correction for serial correlation of error terms

** = Significant at the 1 percent level, * = Significant at the 5 percent level.

Durbin-Watson statistic: Reject null hypothesis of no serial correlation (at 5 percent level) if Durbin-Watson statistic is less than 1.71.

Expanding the event-window to three days produced results similar to the one-day estimates. The litigation certificates portfolio produced significant (one percent level) abnormal returns for all four events. The supervisory goodwill portfolio produced significant abnormal returns for Event One (+0.96 percent) and Event Three (-1.25 percent). The implied wealth effects for the four events using the cumulative 3-day abnormal return are reported below. Wealth effects in dollar terms at the three-day parameter are depicted in **Table 7** below. Not surprisingly, the estimated wealth effects grow in response to expanding the event window. The change in net wealth for the litigation certificates portfolio represents a 73 percent loss in value from the October 28, 1998 market capitalization of the portfolio. The net loss of wealth from October 28, 1998 stock market value is 9.11 percent for the Golden State - Washington Mutual holding companies portfolio, and 2.82 percent for the supervisory goodwill portfolio.

Table 7 Portfolio Wealth Effects: Three-Day Abnormal Returns
(all figures in millions of dollars)

Event	Litigation Certificates	Supervisory Goodwill	Control	Holding Companies
Event 1: Oct. 30	$167.036	$336.146	$1.011	$156.352
Event 2: Nov. 12	-$153.782	-$88.691	$121.040	$12.521
Event 3: April 12	-$418.947	-$556.967	$67.67	-$1634.644
Event 4: April 19	-$259.390	-$19.886	-$61.608	-$740.086
Column Totals:	-$665.083	-$329.398	$128.113	-$2205.857

NOTE: Since the three-day regression specification restricts the measured abnormal return to be equal across each of the three events days, the aggregate three-day abnormal return is just three times the estimated average daily abnormal return. The associated three-day wealth effect is calculated by multiplying the three-day abnormal return by the equally-weighted market capitalization of each portfolio.

To test whether the estimated abnormal returns for the litigation certificates and supervisory goodwill portfolios differ from the control portfolio, we estimate cross-equation equality of coefficients tests. The estimated abnormal returns for the litigation certificates portfolio were statistically significantly different (at the one percent level) from all other portfolios for both the one-day and three-day specifications.

Using the three-day event window, the coefficients for the supervisory goodwill portfolio and control portfolio exhibited significant differences corresponding to Event Three [p=0.0063]. This result is expected since the companies in the supervisory goodwill portfolio were directly affected by Event Three. None of the other events, however, produced significantly different results when testing the equality of coefficients between the supervisory goodwill portfolio and control portfolio. One explanation for this finding is that analysts discount potential litigation damage awards due to uncertainty surrounding the amount of such awards.

When testing the equality of coefficients for the control portfolio and holding companies portfolio, Event Three exhibited statistically different results using both the one-day [p=0.0614] and three-day [p=0.0019] parameters. These findings are better understood by recognizing that companies in the holding portfolio retaining residual interests in the supervisory goodwill claims.

Estimating the index model regressions across the event windows creates further empirical concerns, namely the possibility of parameter instability. For example, the control portfolio of thrifts and bank holding companies with thrift subsidiaries might be more sensitive to the return on the S&P 500 index prior to the event period (October 29, 1998 to April 20, 1999) than after this time period.[10] To test for potential instability in the coefficients on the S&P 500 daily return, the thrift industry composite index daily return, and the constant term, two different tests are implemented. Splitting the data into three time periods: a pre-event period of 102 days from June 4, 1998 to September 28, 1998; an event period from September 29, 1998 to April 20, 1999; and a post-event period of 102 days from April 21, 1999 to September 15, 1999, Chow tests of parameter stability from the pre- and post-event periods are implemented for each of the four portfolios. Tests of the equality of the above coefficients in these different time periods rejected the stability of the coefficient on the thrift industry comp osite index with the portfolio of supervisory goodwill thrifts at the 5 percent level [p = 0.027] for the event-date regressions. For the three-day event window, the stability of the coefficient on the thrift index could be rejected at the ten percent level. For the control portfolio of thrifts not involved in the supervisory goodwill litigation, the stability of the coefficient on the S&P 500 index was rejected at the ten percent level in both the event-date and three-day regressions. None of the other regression specifications exhibited parameter instability. These tests revealed little evidence of parameter instability, at least at reasonable confidence intervals. One explanation for the observed instability, particularly in the portfolio of thrifts with supervisory goodwill claims, is that in the post-event period, investors realized that the terminal value of the supervisory goodwill litigation had fallen significantly.[11] The general pattern of results from the Chow tests of parameter stability demo nstrate that estimating across the event window did not introduce any consistent misspecification in the regression equations.

To further test for parameter instability using a more flexible framework, an indicator variable equal to one for days 103-324 was included in the regressions above. This indicator variable was also interacted with the daily returns on the S&P 500 index and the thrift industry composite. Including these interaction terms allows not only the constant to shift during and after the event period, but also the estimated coefficients on the indices in the market model. The exact form of the regression equation is:

(3)

$$r_t^{Port.} = + z_1 \cdot Z + \sum_{j=1}^{4} d_j \cdot D_j + b_{S\&P} \cdot r_t^{S\&P} + b_{TII} \cdot r_t^{TII}$$
$$+ z_2 \cdot \left[Z \cdot r_t^{S\&P} \right] + z_3 \cdot \left[Z \cdot r_t^{TII} \right] + e_t \ , \ where$$
$$Z = indicator\ va riable\ \ set\ \ to\ 1\ \ for\ trading\ \ days\ 103-324.$$

Here again, slight evidence of parameter instability was found on the coefficient of the indicator variable interacted with the thrift index in the regressions estimated using daily returns from the supervisory goodwill portfolio. This result was significant at the five percent level for event-day returns and at the ten percent level for three-day returns. For the control portfolio, the interaction of the Aevent-onset@ indicator with the daily return on the S&P 500 index was significant in both the event-date and three-day specifications. The less restrictive, regression-based approach to test for parameter stability generated similar results. Admittedly, there is slight evidence of parameter instability, but these results are not significant at the five percent level, suggesting that the regression specification estimated across the events does not result in misspecification.

Conclusion

Interestingly, one of the rationales for the original issuance of supervisory goodwill litigation certificates was to allow the market to value the thrift=s claims against the government. As such, litigation certificates are similar to many of the tracking stocks currently issued by companies in an attempt to unlock the value of divisions or assets within a firm that the market undervalues. As a pure play in the damage awards from litigation, these litigation interests provide a rare opportunity to test the market valuation of free-standing litigation claims *vs.* similar litigation claims retained by companies.

Not surprisingly, we find that a portfolio of litigation certificates generates significantly larger abnormal returns in response to litigation events compared to a conventional portfolio of publicly-traded thrifts with retained litigation claims. Admittedly, many companies discount the value of their supervisory goodwill claims in annual reports, and uncertainty over the final award amount and date make it difficult to precisely value these litigation claims, whether they are publicly-traded or retained. Nonetheless, the results from this study, particularly the estimated dollar values of wealth effects associated with common litigation news, suggest that retained litigation claims are not appropriately valued and are relatively unresponsive to the revelation of material information.

Works Cited

Alexander, John C. Jr., Michael F. Spivey. ACEBA of 1987 and the Security Returns and Market Risk of Savings and Loan Institutions: A Note.@ *Journal of Banking & Finance*, 1994, v18, pp. 1205-1215.

Allen, Paul R. and Wilhelm, William J. AThe Impact of the 1980 Depository Deregulation an Monetary Control Act on Market Value and Risk: Evidence from the Capital Markets.@ *Journal of Money, Credit and Banking*, August 1988, 20 (3), pp. 364-380.

Bierman, Leonard, Donald R. Fraser, and Asghar Zardkoohi. AOn the Wealth Effects of the Supervisory Goodwill Controversy.@ *The Journal of Financial Research*, Spring 1999, XXII, pp. 69-81.

Blacconiere, Walter G. AMarket Reactions to Accounting Regulations in the Savings and Loan Industry.@ *Journal of Accounting and Economics*, 1991, v14, pp. 91-113.

Bodie, Zvi, Alex Kane, and Alan J. Marcus. *Investments, 4th edition*. Boston, MA: Irwin McGraw-Hill, 1999, (Chapter 12, Market Efficiency, pp. 338-442)

Carow, Kenneth and Glen A. Larsen, AThe Effect of FDICIA Regulations on Bank Holding Companies.@ *Journal of Financial Research*, Summer 1997, v20, n2, pp. 159-175.

Cooper Mary H. AS & L Bailout: Assessing the Impact.@ *Congressional Quarterly=s Editorial Research Reports*, June 22, 1990, v1, n23, pp. 350-363.

Cutler, David M. and Lawrence H. Summers. AThe Costs of Conflict Resolution and Financial Distress: Evidence from the Texaco-Penzoil Litigation.@ *Rand Journal of Economics*, Summer 1988, n19, pp. 151-172.

Feldman, Ron. AHow Weak Recognition and Measurement in the Federal Budget Encouraged Costly Policy: The Case of >Supervisory Goodwill.=@ *Public Budgeting and Finance*, Winter 1996, pp. 31-44.

Fraser, Donald R., James W. Kolari. AThe 1982 Depository Institutions Act and Security Returns in the Savings and Loan Industry.@ *The Journal of Financial Research*, Winter 1990, XXIII, n4, pp.339-347.

Horvitz, Paul M. AAbnormal Returns in Post-FIRREA Acquisitions of Failed Thrifts.@ *Journal of Financial Services Research*, December 1994, 8, pp. 269-281.

Kane, Edward J. AThe High Cost of Incompletely Funding the FSLIC Shortage of Explicit Capital.@ *Journal of Economic Perspectives*, Autumn 1989, 3 (4), pp. 31-47.

Kane, Edward J. *The S & L Insurance Mess: How Did It Happen?* Washington D.C.: The Urban Institute Press, 1989.

Kolb, Robert W. and Ricardo J. Rodriguuez. *Financial Institutions and Markets*. Miami, FL: Kolb Publishing, 1993.

Labaton, Stephen. AThe Debacle That Buried Washington: Long After the S & L Crisis, Courts Are Handling Taxpayers a New Bill.@ New York Times (11/22/98).

Labaton, Stephen. AWest Coast S & L Wins $908.9 million From Government.@ The New York Times (4/9/99).

MacKinlay, Craig A. AEvent Studies in Economics and Finance.@ *Journal of Economic Literature*, March 1997, XXXV, pp. 13-39.

Madura, Jeff, Ann Marie Whyte. AWealth Effects from Acquiring Failed Thrifts since FIRREA.@ *Review of Financial Economics*, Fall 1992, v2, n1, pp. 17-31.

Millon-Cornett, Marcia H. and Tehranian, Hassan. AAn Examination of the Impact of the Garn-St. Germain Depository Institutions Act of 1982 on Commercial Banks and Savings and Loans.@ *Journal of Finance*, February 1990, 45 (1), pp. 95-111.

Pressman, Steven. ABehind the S & L Crisis.@ *Congressional Quarterly=s Editorial Research Reports*, November 4, 1988, v2, n17, pp. 550-563.

Schmitt, Richard B. AInvestors Betting on Judgment for Thrift Take a Hit in California Federal Ruling.@ The Wall Street Journal (4/20/99)

Sundaram, Sridhar; Rangan, Nanda and Davidson III, Wallace N. AThe Market Valuation Effect of the Financial Institutions Reform, Recovery, and Enforcement Act of 1989.@ *Journal of Banking and Finance*, December 1992, 16 (6), pp. 1097-1122.

Sweeney, Paul. AHow to Win Big in Court and Never See a Lawyer.@ The New York Times (11/1/98).

Endnotes

1. *United States* v. *Winstar Corp*., 116 U.S. 2432 (1996), p. 16.

2. *California Federal Bank* v. *United States*, 43 Fed Cl. 445, 1999.

3. Other creative accounting practices allowed under RAP included deferral of losses on sales of assets with below-market yields and the exclusion of contra-asset accounts from liabilities in measuring a thrift=s net worth.

4. The Federal Home Loan Bank Board implemented another strategy in 1981 called the Phoenix program. Under the Phoenix program, failed thrifts were combined and operated with FHLBB and FSLIC supervision. Admittedly, these newly-formed APhoenix@ thrifts had substantial negative net worth, but unlike other zombie thrifts, government oversight prevented a shift into riskier lending activities. As interest rates declined in the mid-1980's, the Phoenix thrifts= balance sheets improved. With further financial assistance arising from cash injections and the forgiveness of capital income certificates, many of these Phoenix savings and loans subsequently went public. In 1987-1988, the FHLBB supported a variant of the Phoenix program, the ATexas plan,@ so named after the Board=s strategy for resolving the widespread thrift failures in Texas. The Texas plan also combined failed thrifts, but the FHLBB, and later the Federal Reconstruction Fund, retained equity participation in these combines.

5. In a supervisory merger, a healthy thrift typically acquired a loan portfolio of fixed-rate home mortgage loans whose value had declined due to interest rate increases. The difference between the market value of the loan=s and their book value is referred to as the discount. As the duration of the loan portfolio decreases (outstanding loans move closer to maturity), the discount of market value from book value decreases, which results in an accretion into income for the institution, increasing reported profits. If the useful life of supervisory goodwill had coincided with the time-to-maturity of the loan portfolio, the advantage of supervisory goodwill would have been substantially reduced. Given a forty-year time period to amortize supervisory goodwill and an average time-to-maturity of eight years for loan portfolios, healthy thrifts reaped the benefits of supervisory goodwill for nearly thirty years after its counterpart, the discount, had been fully accreted into income.

6. The General Accounting Office reported that 300 federally-chartered thrifts recorded $4.7 billion of supervisory goodwill as of March 1991. These thrifts controlled slightly more than 50 percent of assets in the thrift industry. (General Accounting Office, (1991))

7. The supervisory assistance agreement (SAA) received by Glendale Federal in the Broward supervisory merger explicitly mentioned the negative net worth of $734 million, and indicated said amount could be treated as regulatory capital to be amortized over a 40-year life. In fact, regulators included in the Glendale SAA explicit mention of the savings to the FSLIC generated by Glendale=s acquisition of approximately $750 million. (*Glendale Federal Bank* v. *United States*, 43 Fed. Cl. 390 (1999), p. 16.

8. Golden State Bancorp will receive 15 percent of the final damage awards from both the Glendale Federal and California Federal cases, net of litigation costs and taxes. As of December 31, 1998, Golden State Bancorp recorded a Goodwill Litigation Asset with a fair market value of $160 million on its consolidated balance sheet. The company=s December 31, 1998 10-K report indicates that its interest in the California Federal litigation has a fair market value of $100 million and its interest in the Glendale Federal litigation has a fair market value of $60 million. Golden State is the only firm involved in the supervisory goodwill litigation that has recorded the expected damage award as an asset. Washington Mutual owns a small number of the Coast litigation certificates, and also has a residual claim in supervisory goodwill litigation through its acquisitions of Home Savings and Keystone Holdings (American Savings).

9. One supervisory goodwill case that did rely heavily on expectations theories of damages was the Lasalle Talman case. Lasalle Talman was acquired by Dutch universal bank ABN Amro in 1991. Because Lasalle=s parent company was a foreign universal bank rather than a domestic thrift, it was excluded from this study. On October 5, 1999, Lasalle=s was awarded $5 million in damages for transactions costs associated with replacing supervisory goodwill. It had sought more than $1 billion in damages, chiefly expectancy damages.

10. The simple correlation of daily returns on the S&P 500 index and the control portfolio was +0.78 during June-September 1998, but fell to +0.64 during April-September 1999.

11. The simple correlation between daily returns on the supervisory goodwill portfolio and the thrift industry index was +0.93 for the June-September 1998 period, and then dropped significantly to +0.79 for the April-September 1999 time period.