Phoenix Rising: Economic Depression, Corporate Governance Reforms and Changes in Valuations in Finland*

Timo Korkeamäki
Gonzaga University

Yrjö Koskinen
Boston University School of Management and CEPR

Tuomas Takalo
Bank of Finland

Preliminary draft
Not for quotation
February 2005

Abstract

Finland experienced an extremely severe economic depression in the early 1990s, when the GDP per capita decreased by 14% over three years. In the midst of this crisis significant new legislation was passed that increased shareholder protection while decreasing the protection of creditors. We show that the introduction of these new laws resulted in positive abnormal stock returns. The new laws also lead to increases in firms' Tobin's q, especially for more levered firms. The results suggest that i) changes in investor protection lead to higher corporate valuations and not vice versa, ii) dilution of creditor rights increases rather than decreases corporate valuation, and iii) public supervision of financial markets fosters rather than hampers financial market development.

JEL Classification: G34, K22

Keywords: corporate governance, shareholder protection, creditors' rights, corporate valuations, political economy.

---

* We are grateful to Arturo Bris, Ari Hyytinen, Andrei Shleifer, and seminar participants at the Bank of Finland and Swedish School of Economics for helpful comments and to Helinä Laakkonen for research assistance. All errors are our responsibility.

1 Introduction

Finland went through economic depression in the early 1990s that was unprecedented in its severity for a highly developed country. From 1990 to 1993 the GDP per capita declined by 14 percent and the unemployment shot up from 3 percent of labor force up to 20 percent (see Honkapohja and Koskela, 2000, for further details). An integral part of this depression was a banking crisis, where the government was forced to give massive bailouts to all the banks and to guarantee their contractual obligations. At the end of this crisis one banking group was liquidated and two major banks were forced to merge. Finland's bank-dominated financial system was in ruins.

In the middle of Finland's darkest hour, the government introduced several pieces of new legislation that resulted in complete transformation of the country's financial system. The legislation improved the integrity of stock markets by establishing a new Financial Supervisory Authority with enhanced resources and powers. The other central piece of the legislation was new bankruptcy procedures that made the reorganization of companies easier, mirroring the U.S. Chapter 11 process. The legal reforms ended up improving shareholder protection while weakening creditors' rights. By the end of 1990s a new financial system had emerged, based on more prominent role for the stock market and less dependent on banks (see Hyytinen, Kuosa, and Takalo; 2003).

This paper analyzes the effects of these legal reforms on corporate valuations. Their net effect is ambiguous a priori. On the one hand, strong creditor protection can mean that illiquid but solvent companies are unnecessarily liquidated in bankruptcy processes, which should have an adverse impact on financial market development. Moreover, decreases in creditor rights might imply a wealth

transfer from creditors to stockholders. Since we also document an increase in shareholder protection, the Finnish legal reforms could affect positively on corporate valuation. On the other hand, there is some evidence that strong creditor protection is associated with strong shareholder protection and broader financial markets (Lopez-de-Silanes, Shleifer, and Vishny, 1997). In particular, good creditor protection should improve availability of debt finance, which has been a major source external finance in Finland. Thus a drastic weakening of creditor rights might affect negatively corporate valuation. This negative effect can also dominate over the effect of the creation of the Financial Supervisory Authority: While stronger shareholder protection should generally foster financial market development, the recent literature suggests that the public supervision of financial markets is irrelevant (Barth, Caprio, and Levine, 2004, and La Porta, Lopez-de-Silanes, and Shleifer, 2004). Hence the question of whether the reforms increase or decrease corporate valuation is ultimately empirical.

We employ company level data from Worldscope, Helsinki Stock Exchange and Compustat spanning the years 1989 to 1993. First we utilize event studies and examine if the legal changes result in abnormal portfolio returns for Finnish companies. There is no significant market reaction when the newspapers first report that the government is thinking of drafting new securities or corporate laws. This is in line with pioneering event studies on the effects of law changes such as Binder (1985), which point out the difficulties in specifying the appropriate first event date. However, there is a positive stock market reaction when the bills are first introduced to the parliament. This result applies to both improvements in shareholder protection (establishment of the new Financial Supervisory Authority) and weakening of creditors' rights (the new bankruptcy procedures). There is no market reaction when the parliament passes these laws. We interpret the evidence

as showing that the first announcement in the newspapers is too vague to elicit a significant market reaction, but when the government introduces the legislation to the parliament the laws are fundamentally in their final forms, thus resulting in significant market reactions. Since Finland had a strong majority government at that time, the final passing of the laws is just a mere formality with no new informational content.

Next we analyze the abnormal returns using cross-sectional regressions. We find that levered firms experience more positive abnormal returns when laws that weaken creditors' rights are introduced to the parliament. This result shows that the stock market values the new bankruptcy procedures for highly levered firms, but for the other reforms there is no additional benefit for levered firms.

In our last analysis, we study the effects of these legal reforms on Tobin's q by estimating panel regressions. We employ both firm fixed effects and random effects. The panel regression results confirm that more levered firms experience higher valuations as a result of the legal reforms.

Our paper builds on the vast law and finance literature initiated by La Porta et al. (1997, 1998). Consistent with this literature, our results show that better shareholder protection leads to higher corporate valuations. Interestingly, we also get the same result when creditors' rights are weakened. This could imply a wealth transfer from creditors to shareholders, or alternatively net positive wealth creation. The recent work in this tradition tries to evaluate the role of private vs. public enforcement in financial market development. In contrast to Barth et al. (2004) and La Porta et al. (2006) we find evidence, albeit tentative, that public enforcement matters as the creation of the Supervisory Authority raised corporate valuations.

Typically, the relationship between investor protection and corporate valuations is studied using cross-sectional regressions. The cross-sectional regressions are open to criticism of reverse causality: it is plausible that higher valuations lead to better investor protection. We are able to deal with this issue in two ways: by using event studies and panel regressions. Recently event studies have also been used by Zhang (2005) who studies the introduction of the Sarbanes-Oxley Act of 2002. She shows that legal change resulted in negative abnormal results. Panel regressions have been used Pagano and Volpin (2005a, 2005b) who show that the better investor protection indeed leads to more developed financial markets, but the relationship is not as strong as in cross-sectional studies.

Current level of financial development is not permanent, as shown by Rajan and Zingales (2003). They show that financial development has changed a lot for some countries over the past century and that the United States - deemed to have the most developed financial markets – certainly was not the leading country in the early 20th century. The emerging literature of political economy and corporate governance tries to answer the question why and how investor protection laws and financial development in general evolve as a result of political process. In Pagano and Volpin (2005a, 2005b) workers align themselves with existing owners against outside financiers when workers do not participate in stock markets resulting in low level of investor protection and high level of employment protection. Perotti and von Thadden (2005) obtain a similar result when stock ownership is concentrated. Our paper contributes to this political economy literature: Our evidence can be interpreted as showing that far reaching corporate governance reforms are possible when labor loses its rents under the old conservative bank-dominated system and thus has very little reason to resist reforms. The reforms were passed under a right-wing government that did not include – for the first time in 30 years - left-

wing parties closely associated with labor unions. Interestingly, the mechanism for major reforms is the opposite in Pagano and Volpin (2005a, 2005b): When workers' rents dissipated, they began seeking new sources of profits and investing to the stock market. This made legal reforms possible as workers had something to gain from improved shareholder protection laws.

More generally, our results support the crisis-induced-reform hypothesis (see, e.g., chapter 10 in Drazen 2000, and Drazen and Easterly 2001). The traditional version of the hypothesis maintains that a sufficiently severe economy-wide crisis launches macroeconomic policy reforms. But a macroeconomic crisis also restricts the availability of external finance to firms and may induce a reform of corporate governance laws, since the economic and political costs of postponing it would be significant. Moreover, the macroeconomic crisis may disturb the balance of power between interest groups supporting and opposing the reform. Besides labor unions, the banks had traditionally been an influential interest group in Finland and the worsening of creditor rights ran against their interests. However, the banking crisis and subsequent reorganisation of the banking sector meant a deterioration of banks' previously strong political power. For example, the Act on Reorganisation of Companies was adopted despite protests by the Finnish Bankers' Association (whose objection to the Act is, e.g., documented in Government bill 182/1992).

The paper is organized as follows: Section two reviews the legal changes in Finland that occurred during the crisis years. Section three presents the data and the results. Section four concludes.

2 Changes in investor protection in Finland

2.1 Legal and institutional background before the reforms of 1991-93

The Finnish legal system has developed in close connection with other Nordic countries. Especially Swedish legislation has been influential due to Finland's union with Sweden which lasted for more than 700 years. The extensive legal cooperation between Nordic countries lasted until the early 1980s, but its role has almost vanished since then and it has been replaced by cooperation within the European Union. Like the other Nordic countries Finland was highly advanced in terms of overall legal development at the start of the 1980s. It is generally believed that the situation has even further improved since then. As Demirgüç-Kunt and Maksimovic (1998) report, the International Country Risk Guide gives Finland the highest possible score for the years 1985–1991 in its law and order index, which measures reliance on the legal system in mediating disputes and enforcing contracts. The World Competitiveness Yearbook places Finland fourth in 1990 and third in 2005 as regards fair administration of justice (IMD 1990, 2005). As to the state of the general legal and regulatory framework, Finland is ranked fifth in the IMD yearbook of 2005. [1] The WEF's Global Competitiveness Report 2004-2005 generally echoes these results, placing Finland first in the general growth competitiveness index and emphasizing judicial independence and property rights as major sources of competitive advantage (Porter, Schwab, Sala-i-Martin, and Lopez-Claros, 2004).

[1] Regarding the fair administration of justice, Finland's score in the 1990 World Competitiveness Yearbook is 84.17 (of 100) and in the 2005 Yearbook 8.75 (of 10). Finland's score regarding the state of the legal and regulator framework in the 2005 Yearbook is 6.82 (of 10).

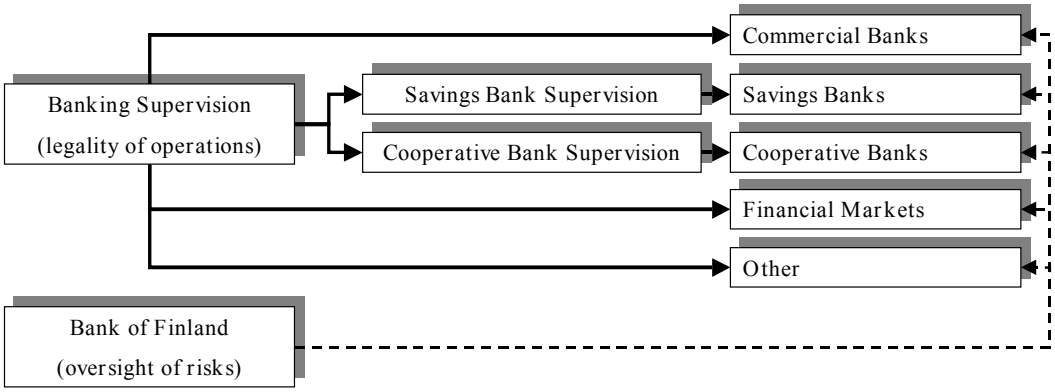
Although the foundations of the legal system were solid, Hyytinen et al. (2003) document that Finnish legislation concerning investor protection was underdeveloped in 1980's. Before 1990's the main determinants of shareholder rights in Finland came from the Finnish Companies Act 734/1978 (effective January 1, 1980). The Companies Act applies to all limited companies – whether private or state owned, family enterprise, or publicly listed. It was based on the aforementioned Nordic cooperation, which explains the similarity of investor protection across the Nordic countries, as documented in La Porta et al. (1997, 1998). The Companies Act of 1978 was virtually unchanged in the 1980's.

The main determinants of creditor rights before the reforms in early 1990's in Finland were the Liquidation Bankruptcy Code 31/1868 (effective November 9, 1868) and the Act on Compositions 148/1932 (effective May 10, 1932). Until the start of 1993, the principal route of resolution of financial distress was liquidation bankruptcy. When a firm was declared bankrupt, a trustee took over the firm and sold its assets. The firm could have been sold as a going-concern or liquidated piecemeal. The proceeds were then distributed to creditors according to priority of claims. Although the Liquidation Bankruptcy Code of 1868 was amended earlier, the changes were relatively minor compared with the changes in the reform of 1993. Workouts, or compositions established by a court, provided an alternative way of resolution until 1993 but, as documented in Government bill 182/1992, they were rarely used.

Before the enactment of the Securities Market Act 495/1989 (effective January 1, 1989) there was no specific law governing securities markets in Finland. This legislation incorporated mandatory disclosure requirements into Finnish law and thus was a major improvement in investor protection.

The Banking Supervision was established under the Ministry of Finance in 1922. It first dealt with commercial banks, but in 1970 co-operative and savings banks were also brought under its supervision, albeit only indirectly. The Bank of Finland had also a duty to oversee financial institutions and markets. Figure 1 illustrates the supervisory framework that was effective prior to the crisis years.

Figure 1. **Banking supervision in Finland 1980–1993**



Legislation governing the Banking Supervision remained relatively unchanged much of the 1980s and early 1990s.

2.2 Legal reforms

During the early 1990's, the investor protection legislation went through a number of changes, which we summarize below.

Three pieces of legislation affecting creditor rights were passed during the years 1991 and 1992: the Act on Restitution of Assets in Bankruptcy 758/1991 (effective January 1, 1992), the Act on Claim Priorities 1578/1993 (effective January 1, 1993), and the Act on Reorganisation of Companies 47/1993 (effective February 8, 1993).

The Act on Reorganisation of Companies of 1993 introduced court supervised reorganisation for financially stressed firms. As Ravid and Sundgren (1998) demonstrate, the Finnish Act on Reorganisation of Companies of 1993 is similar in many ways to the US Chapter 11 procedure.

The Act on the Financial Supervisory Authority 503/1993 (effective June 11, 1993) increased the resources and powers of financial supervision. In addition, the Act on the Financial Supervisory Authority of 1993 unified the dispersed banking supervision to one organization, which operates in connection with the Bank of Finland.[2]

These changes in the legislation show up in indexes developed by La Porta et al. (1997, 1998), and Pistor (2000) as follows:

- The Act on Restitution of Assets in Bankruptcy of 1991 improved creditors' rights, as measured by an increase in Pistor's index for creditors' legal possibilities to punish management (REMEDY) index from 1.5 to 2 (max 3).
- The Act on Financial Supervisory Authority of 1993 improved shareholder protection, as measured by an increase in the value of Pistor's stock market integrity index (SMINTEGR) from 5 to 6 (max 6).
- The Act on Reorganisation of Companies of 1993 and the Act on Claim Priorities of 1993 weakened creditors' rights, as measured by a decrease in La Porta et al.'s creditor right index from 4 to 1 (max 4), the extended La Porta et al.'s creditor right index from 4 to 1 (max 5)[3],

[2] The Act of 1993 was replaced by a new Act on the Financial Supervisory Authority 587/2003 (effective 1 July 2003).
[3] The extended La Porta et al.'s creditor right index was initiated by Pistor (2000). This index adds to La Porta et al.'s creditor right index a discrete variable for the provision for a legal reserve, i.e., the minimum percentage of total shares required to avoid dissolution of the company. This variable appears originally also in La Porta et al. (1997, 1998) but is not a part of their index.

and Pistor's index for creditors' control of the bankruptcy (CREDCON) from 3 to 1 (max 5).

As the indices suggest the Act on Reorganisation of Companies in 1993 was detrimental for creditor protection. The reform implied that the restrictions on going into reorganisation were weakened and the scope of the automatic stay on assets preventing secured creditors from getting their security was expanded. We also claim that the Act diluted creditor rights by enabling management to remain in the reorganisation.[4]

As a result of the deterioration of creditor rights, Finnish legislation currently provides a lower level of creditor protection than most common or civil law countries, as reported in La Porta et al. (1997, 1998). The score of 1 for Finland in 2000 is lower than the world average of 2.3 and the Nordic average of 2.0. Prior to 1993, the score for Finland was 4. The comparisons to La Porta et al. should be interpreted cautiously, because the legislation may also have been changed in the other countries.

Other creditor rights have remained strong or even improved. Measured by Pistor's index for collateral rules (COLLAT), Finnish legislation continues to provide a maximum level of investor protection. Due to the passing of the Act on Restitution of Assets in Bankruptcy in 1991, it has become easier to nullify transactions that preceded the opening of bankruptcy. The Act increased possibilities to punish the management (as measured by Pistor's REMEDY-index) during the crisis years.

[4] Our interpretation is disputable. After the reform of 1993, the management can stay in reorganization, although its power is limited and a trustee should be appointed. Prior to the reform, however, the management did not have the option of staying because a trustee and the creditors managed the company in bankruptcy. It was possible for members of the pre-bankruptcy management to be selected to run the company, though.

It is possible that the impact of the Act was stronger than captured by the 0.5 point increase in the index. Before the Act the way transactions that preceded the opening of bankruptcy could have been nullified were governed by the old Liquidation Bankruptcy Code of 1868, which also regulated the bankruptcy procedure in itself. The Code was vague and gave many limits for the time period prior to the bankruptcy in which suspicious transactions were in jeopardy. For instance, the time limit was 12 months if transactions dealt with some one closely associated with a bankrupt company, but the time limit was only 60 days for transactions with unrelated parties. The reform raised the time limit to three years for related transactions and the time limit to six months for unrelated transactions. Such improvement in the possibilities to constrain management's moral hazard prior to bankruptcy can also indirectly benefit minority shareholders: even in the midst of severe financial distress it is less attractive to divert funds from the firm whereas avoiding bankruptcy, e.g., by means of reorganization, becomes more attractive.

It is also likely that the Act on the Financial Supervisory Authority of 1993 has had effects beyond the change in the index value. A reason for the establishment of the new Financial Supervisory Authority was the lack of resources in the old Banking Supervision., which hampered the effective supervision of the Finnish banking and financial system in the 1980s. Over the period 1985-1990 there were on average only 7 employees per one hundred supervised institutions. The number employees per supervised institutions increased after the Financial Supervisory Authority was established and has continued to do so.

The quality of information received and processed for supervisory purposes by the Banking Supervision was of limited scope and quality until the 1990’s. The Banking Supervision did become more active in issuing guidelines on information

disclosure by its supervised institutions at the beginning of the 1990s. For example, guidelines on the reporting of non-performing assets were given amidst the banking crisis in 1992. After the establishment of the Financial Supervisory Authority the situation has improved markedly.

3 Hyphotheses, data description, and results

3.1 Two hyphotheses

As described in Introduction, the effects of legal changes are ex ante ambiguous. Previous research pins down two hypotheses, which generate opposite expectations about the effects of legal changes on corporate valuations

First, there is an inverse relationship between corporate valuations and changes in creditor rights and a direct relationship between the valuations and shareholder protection changes. According to this hypothesis, the stock prices should react positively to three law changes out of four we study, since two of them represent a decrease in creditor rights and one is an increase in shareholder protection. The Act on Restitution of Assets in Bankruptcy of 1991 marks an improvement in creditor rights, so that the stock price reaction to that law should be negative. Since the creditor right improvement is relatively small and can be interpreted to profit minority shareholders, the first hypothesis predicts that Tobin's q increases in the panel data estimations, especially for leveraged firms.

Second, there is a direct relationship between corporate valuations and creditor rights whereas the creation of the Financial Supervisory Authority is at best irrelevant for corporate valuations. This hypothesis implies that in the event study we should observe a negative stock price reaction to the two dilutions of the

creditor rights, a positive reaction to the creditor right improvement, and no (or even a negative) reaction to the Financial Supervisory Authority. We should find a decrease or at best no increase in Tobin's q in the panel regressions.

3.2 Data description

We utilize two different main data sources. Our Finnish stock return data was obtained directly from the Helsinki Stock Exchange. That data set contains the entire universe of Finnish publicly traded firms. The accounting data that we use in the cross sectional analysis of our results comes from Worldscope. Since the Worldscope coverage is limited compared to our returns data, our sample size varies depending on which tests we perform. However, our return results are robust to leaving out firms that are not part of our Worldscope sample.

In Table 1, we provide some descriptive statistics for our Worldscope sample across the five years (1989-1993) included in this study. Notably, the medians of revenues and assets have significantly decreased during our sample, as more and more smaller companies have entered the Worldscope dataset each year. Leverage, calculated as long-term debt divided by total assets, has varied from year to year, without any clear trend.

Table 1 here

We also report the median Tobin's q values for our sample in Table 1. We calculate Tobin's q according to equation (1). If the reductions that we report in creditor protection result in wealth transfers from creditors to stockholders (the first hypothesis), we would expect to observe economy-wide increases in Tobin's q. However, lack of such improvements in Table 1 could be explained by either

firms with lower Tobin's q values entering the data set or some other macro economic effects counter-weighing the regulatory changes.

Tobin's q = (total assets – bv common stock + market capitalization) / total assets (1)

3.3 Results

3.3.1 Event study results

We begin a more rigorous analysis of our data by conducting an event study around events related to the three law changes that we study. For each law change, we identify three dates of interest – (1) first announcement date identifying the first mention of each law in *Kauppalehti*, the leading Finnish daily business newspaper, (2) the date when each law change was introduced by the Government to the Parliament, and (3) the date when the law was enacted by the Parliament.

As documented in Hyytinen et al. (2003) the Finnish stock market was relatively small in size and liquidity in the early 1990s. We use a fairly wide event window to allow time for any new information to be assessed. Our event window of (-2,+1) also allows for information leakages prior to the events, which is possible in markets where information amongst market participants may be superior to that observable by the general public (or a researcher).

Common to prior research into law changes, such as Binder (1985), and Brook, Hendershott, and Lee (1998), we have an extreme case of event date clustering amongst our sample firms, which is likely to cause the abnormal returns to be correlated in the cross-section. Therefore, we are unable to test for significance

using the "traditional" event study methodology as outlined by Brown and Warner (1985). When the entire sample shares the event date, Campbell, Lo, and MacKinlay (1997) suggest aggregating individual stock returns into a portfolio and analyzing abnormal returns of that portfolio. We follow their suggestion and compile an equally-weighted portfolio of all stock returns available around each of our events. The abnormal returns for our portfolio are measured by the coefficient β_2 in equation (2).

$$R_{pf,t} = \alpha + \beta_1 R_{mkt,t} + \beta_2 D_{(-2,+1)} + \varepsilon, \quad (2)$$

where

R_{pf} = Return on the equally-weighted Finnish stock portfolio on day t;

R_{mkt} = Return on the MSCI World index on day t;

$D_{(-2,+1)}$ = Dummy variable that takes on value of one during the event window, zero otherwise.

For each event, we use trading days (-250,-10) as the estimation period. In other words, we include (-250,-10) in each estimation, while excluding the days leading into each event (-9,-3). For the market portfolio (R_{mkt}), we use the MSCI World index.[5] The abnormal portfolio returns are reported in Table 2.

Table 2 here

Only one of first announcements is met by a statistically significant stock reaction: in line with the first hypothesis the markets react positively to the news about the creation of the Financial Supervisory Authority. The insignificance of the other announcements can be explained by either the event having no effect to the stock returns, or by the difficulty in observing the true event date in a market where the news may leak to market participants prior to public announcements.

[5] Our findings are essentially identical if we use a European index instead.

However, introduction to the parliament is accompanied by a significant positive reaction in all of the three cases where we expect a positive reaction according to the first hypothesis. The date when the law is introduced to the parliament is the first date when a full version of the law is available to the public. While this is only the first introduction of the law, it is worth noting that during our sample period, the parties in the Finnish Government held majority of the Parliament, and therefore the eventual final version of the law was likely to be almost identical to the one that was originally introduced. It is also worth noting that both dilutions of creditor rights share the date of introduction to the parliament (September 25, 1992), and that event date is associated with the most significant positive reaction.

Given the majority Government, the date when the law is enacted by the Parliament is likely to be of limited importance in terms of conveyance of new information. Indeed, only one of the four enactment events is met by a significant reaction as the reaction to the Act on the Financial Supervisory Authority is negative. Despite this last observation, we read the evidence from the portfolio estimations to support the first hypothesis.

Next, we analyze the cross-sectional determinants of individual cumulative abnormal returns around each event. We estimate firm-specific cumulative abnormal returns, again using the estimation period of (-250,-10), and the event window of (-2,+1). We continue to use the MSCI World Index as our market portfolio, while use of alternative market portfolios leaves our findings intact.

If the first hypothesis holds, law changes that limit creditor rights are better news to firms that are more financially levered, and so we should expect to observe a positive correlation between the cumulative abnormal returns (CARs) and

leverage. Leverage, and all other firm-specific variables are observed in the year-end preceding the event date.[6]

Table 3 here

The cross-sectional regression results are reported in Table 3. The first four columns show results of OLS regressions with CAR as the dependent variable. Even after controlling for whether the firm is cross-listed on a foreign exchange, whether the firm is a financial institution, and for the firm's market-to-book and dividend payout ratios, leverage is not associated with the magnitude of the firm's CAR. In the fifth column, we report the results of a panel data estimation random effects model, but again, none of the independent variables is statistically significant. All of these regressions also exhibit extremely low adjusted R^2s. Part of the inconsequential results in the first five columns of Table 3 may be explained by the fact that many of the events included in the analysis did not convey any new information to the market, according to Table 2.

When we focus only on the Introduction to the Parliament, the event that conveys information to the market as suggested by Table 2, the picture becomes clearer. The cumulative abnormal returns around these events do have a positive relation to the firm's leverage, albeit the connection is only statistically significant at the 10% level. The adjusted R^2 increases to about 4%. Inclusion of only the two introduction events that occurred on September 25, 1992 results in a stronger connection between leverage and stock price reactions and the model also gains explanatory power. In the final column of Table 3, we report results when only the introduction of the Act on the Financial Supervisory Authority is included in the analysis. In this regression, leverage is again unrelated to the stock reaction.

[6] An exception to this is the first announcement of "The Act on Restitution of Assets in Bankruptcy of 1991", with first announcement occurring already in 1988. Since our accounting data set only begins in 1989, we have used year-end 1989 values for that event as well.

The law changes that were introduced on September 25, 1992 brought about a very significant reduction in creditor rights, whereas the change introduced on November 27, 1992 left the creditor protection unchanged while strengthening the shareholder protection. Our results suggest that while the market-wide positive reaction to the September 25, 1992 event may have been driven by the more levered firms reacting more significantly, leverage played no role in firm-level reactions to the November 27, 1992 event. This evidence is again in line with the first hypothesis, although the results concerning November 27, 1992 may point to the irrelevance of the Financial Supervisory Authority.

3.3.2 Panel regression results

Another way to observe the effect of reduced creditor protection on the stock values is to measure changes in Tobin's q during the period of law changes. In Table 4, we report results from panel data estimation, where we have used measures related to Tobin's q as dependent variables. While Table 1 failed to identify any systematic increase in the Finnish stock values in 1989-1993, firm-specific variables might shed more light to the factors behind changes for individual companies.

Table 4 here

In the first two columns of Table 4, we report the panel regression results when Tobin's q is used as the dependent variable. In this part of our analysis, we focus on years 1991 and 1992, during which most of the legislative changes under study occurred. We control for leverage, firm size (Log of total assets), and also for any macro effects of years 1991 and 1992 (dummy variables for each year, respectively) on Tobin's q. However, our main interest is in the interaction vari-

ables Year 91 x leverage and Year 92 x leverage. These variables should capture the marginal effect of higher leverage on Tobin's q in each of the two years.

In the first two columns of Table 4, each firm Tobin's q-level is used as the dependent variable. We report both firm-level fixed effects and random effects results. In this first panel regression, Hausman test fails to reject the Random effects model, and therefore we should focus on the results in column 2. The results in column 2 suggest a strong positive connection between Tobin's q and leverage in years 1991 and 1992. Both coefficients are statistically significant at the 1.5% level or better. These results support the view that overly strong creditor protection hampers financial market development (the first hypothesis).

The results using Tobin's q levels could potentially be affected by new successful and highly levered firms entering the sample in 1991 and 1992. Recall that our sample grew by 10 firms in 1991 and by 4 firms in 1992. To reduce this concern, we next run a similar panel regression now using the change in Tobin's q as the dependent variable. To be included in this regression, the company obviously has to report data in both the observation year and the year before. The results in columns 3 and 4 of Table 4 are similar to the ones reported in the first two columns. Random effects is again the preferred method of analysis as indicated by the Hausman test. The effect of leverage on the 1991 Tobin's q values gains significance, while the 1992 results are somewhat weaker.

In the last two columns of Table 4, we control for industry-specific changes in stock values. We obtain U.S. data within each company's two-digit SIC code from Compustat, and calculate the U.S. industry median for each Finnish firm. The U.S. makes an ideal point of comparison not only because of data availability, but also because creditor protection remained unchanged during the period of interest in the U.S. The dependent variable in our last panel regression is the differ-

ence between the sample firm's Tobin's q and its U.S. industry median. The Hausman test indicates that we should this time focus on the Fixed effects model. While the 1991 results are insignificant, even in this alternative specification, year 1992 results exhibit a positive and significant sign, providing further backing for the first hypothesis.

4 Conclusions

This paper shows that the major corporate governance reforms in Finland have lead to higher corporate valuations. We study two kinds of legal reforms: those that improve shareholder protection via creation of a public enforcer of securities market legislation and those that weaken creditors' rights by facilitating reorganization of distressed companies. We show that both kinds of reforms lead to positive abnormal returns when the bills are introduced to the parliament, but only the latter reforms lead to more positive abnormal returns for levered firms.

We obtain consistent results with panel regressions, using both firm-fixed effects and random effects regressions, where the dependent variable is the Tobin's q: more levered firms experience a higher increase in q. As a robustness check we adjust the Finnish company-level q-ratios with median q-ratios obtained from U.S. data and the results remain qualitatively the same.

The typical investor protection study uses cross-sectional data and shows that good investor protection and high stock prices are positively correlated. In these studies the causation could go either way: high level if investor protection could indeed lead to high stock valuations, but it could be equally plausible that high stock valuations lead to good investor protection. Moreover, it is not a priori clear whether strong creditor protection is conducive for financial market development or not. Since we use event study methodology, and the corporate governance re-

forms were introduced in the midst of a deep recession when the stock prices were also in doldrums, we are able show that improved shareholder and weakened creditor protection laws indeed lead to higher stock prices and not vice versa. We deem this to be the major contribution of our paper.

Our study also has bearings on the debate about whether public enforcement matters for financial market development. Based on cross-sectional data existing research suggests that public enforcement does not improve financial market development. Our results contrast this view: we find evidence that the stock market welcomed the introduction of an independent Financial Services Authority.

The severe economic crisis also sheds light on the politics of corporate governance reforms. During the crisis bankruptcies reached unprecedented levels and Finnish banks were struggling. The banking crisis implied a deterioration of banks' traditionally strong political power. They were thus in a weak position to oppose the substantial worsening of creditor rights which ran against their interests. From the ruins of Finland's previously bank-dominated financial system emerged a more stock market-oriented system that has served Finnish companies well. The next logical step is to examine changes in equity issuance, in particular IPOs, ownership concentrations and dividend policies in Finland before and after the reforms. That is left for a further study.

References

Barth, J. R., Caprio, G. Jr., and Levine, R., 2004, "Bank Regulation and Supervision: What Works Best?" *Journal of Financial Intermediation* 13, 205-248.

Binder, J.J., 1985, "Measuring the Effects of Regulation with Stock Price Data", *Rand Journal of Economics* 16, 167-183.

Brook, Y., Hendershott, R., and Lee, D., 1998, "The Gains from Takeover Deregulation: Evidence from the End of Interstate Banking Restrictions", *Journal of Finance* 53, 2185-2204.

Brown, S. J., and Warner, J, 1985, "Using Daily Stock Returns: The Case of Event Studies", *Journal of Financial Economics* 14, 3-31.

Campbell, J.Y., Lo, A.W., and MacKinlay, A.C., 1997, *The Econometrics of Financial Markets*, Princeton University Press, Princeton, NJ.

Demirgüç-Kunt, A., and Maksimovic, V., 1998, "Law, Finance, and Firm Growth", *Journal of Finance*. 53, 2107–2137.

Drazen, A. (2000). *Political Economy Macroeconomics*. Princeton University Press: Princeton, NJ.

Drazen, A. and Easterly, W. (2001). "Does Crisis Induce Reform? Simple empirical Test of Conventional Wisdom." *Economics and Politics*, 13, 129–157.

Glaeser, E., Johnson, S., and Shleifer, A., 2001, "Coase versus the Coasians." *Quarterly Journal of Economics*, 116, 853–899.

Honkapohja, S., and Koskela, E., 2000, "The Economic Crisis of the 1990s in Finland", *Economic Policy*, 401-436

Hyytinen, A., Kuosa, I., and Takalo, T., 2003, "Law or Finance: Evidence from Finland", *European Journal of Law and Economics*, 16, 59-89.

IMD, World Competitiveness Yearbook 1990, Lausanne.

IMD, World Competitiveness Yearbook 2005, Lausanne.

La Porta, R., Lopez-de-Silanes, F., and Shleifer, A., 2006, "What Works in Securities Laws?", Forthcoming in *Journal of Finance*.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., and Vishny, R., 1997, "Legal Determinants of External Finance", *Journal of Finance*. 52, 1131–1150.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., and Vishny, R., 1998, "Law and Finance", *Journal of Political Economy*. 106, 1113–55.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A. and Vishny, R., 2000, "Investor Protection and Corporate Governance", *Journal of Financial Economics*. 58, 2–27.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A. and Vishny, R., 2002, "Investor Protection and Corporate Valuation", *Journal of Finance*. 57, 1147-1171.

Pagano, M., and Volpin, P., 2001, "The Political Economy of Finance", *Oxford Review of Economic Policy*, 17, 502–519.

Pagano, M., and Volpin, P., 2005a, "The Political Economy of Corporate Governance", *American Economic Review,* 95.

Pagano, M., and Volpin, P., 2005b, "Shareholder Protection, Stock Market Development, and Politics", the Marshall lecture, European Economic Association.

Porter, M. E., Sala-i-Martin, X., Schwab, K., and Lopez-Claros, A. (2004) *The World Economic Forum's Global Competitiveness Report 2004-2005*. Palgrave: New York, N.Y.

Perotti, E., and von Thadden, E-L., 2005, "The Political Economy of Corporate Control and Labor Rents", working paper, University of Amsterdam.

Pistor, K., 2000, "Patterns of Legal Change: Shareholder and Creditor Rights in Transition Economies", *European Business Organisation Law Review*, 1, 59–108.

Ravid, S.A., and Sudgren, S., 1998, "The Comparative Efficiency of Small-Firm Bankruptcies: A Study of the US and Finnish Bankruptcy Codes", *Financial Management,* 27, 28–40.

Rajan, R., and Zingales, L., 2003, "The Great Reversals: The Politics of Financial Development in the Twentieth Century", *Journal of Financial Economics* 69, 5-50.

Zhang, I., 2005, Economic Consequences of the Sarbanes-Oxley Act of 2002, mimeo, University of Rochester.

Table 1
Median values of firm characteristics

	Number of obs.	Revenues	Assets	Leverage	Tobin's q
1989	61	1352943	1768436	0,2327	1,1683
1990	69	1126404	1222130	0,25571	1,01255
1991	79	768343	1010397	0,30304	0,98143
1992	83	646200	732362	0,2988	0,98368
1993	88	593273	778175	0,24014	1,16795

The table reports sample medians by observation year. Revenues = net sales, assets = total assets, and leverage = long-term debt / total assets. Tobin's q = (total assets - book value of common stock + market capitalization)/total assets.

Table 2
Abnormal Portfolio Returns

		Date	CAR	t-statistic
The Act on Restitution of Assets in Bankruptcy of 1991				
First announcement	611	16.6.1988	0,0022	0,4077
Introduction to the parliament	1160	17.8.1990	0,0044	0,8729
Enactment	1331	26.4.1991	0,0014	0,3511
The Act on Claim Priorities of 1993				
First announcement	1144	26.7.1990	0,0045	0,9015
Introduction to the parliament*	1686	25.9.1992	0,0209***	3,8111
Enactment	1752	30.12.1992	-0,0006	-0,0928
The Act on Financial Supervisory Authority of 1993				
First announcement	1484	29.11.1991	0,0105***	3,0356
Introduction to the parliament	1731	27.11.1992	0,0178***	2,6430
Enactment	1862	11.6.1993	-0,0174**	-2,2293
The Act on Reorganisation of Companies of 1993				
First announcement	1327	22.4.1991	-0,0022	-0,5364
Introduction to the parliament*	1686	25.9.1992	0,0209***	3,8111
Enactment	1767	25.1.1993	-0,0018	-0,2449

* these two laws were introduced to the parliament on the same day.

CARs are estimated using equation $R_{pf,t} = \alpha + \beta_1 R_{mkt,t} + \beta_2 D_{(-2,+1)} + \varepsilon$

The market portfolio is the MSCI World index, and the data included in each regression covers days (-250,-10) and (-2,+1). The dummy variable $D_{(-2,+1)}$ takes on value of 1 during the event window of (-2,+1), zero otherwise. First announcements are identified from Kauppalehti, and the dates of Introduction the the parliament and Enactment by the parliament are obtained from the Finnish Parliament. ***, **, and * indicate statistical significance at one percent, five percent, and ten percent level, respectively.

Table 3
Cross-Sectional Analysis of Abnormal Returns

Sample	all	all	all	all	all	intro to parl	25.9.1992	27.11.1992
Method	OLS	OLS	OLS	OLS	Random eff	OLS	OLS	OLS
Constant	0,0204	0,0183	0,0151	0,0143	0,0132	-0,04728	-0,1492*	0,0206
	(1,395)	(1,246)	(0,868)	(0,734)	(0,758)	(-1.074)	(-1.704)	(0,433)
Leverage	-0,0092	-0,0087	-0,006	-0,0048	-0,0058	0,1128*	0,2570**	-0,0097
	(-0.469)	(-0.439)	(-0.271)	(-0.188)	(-0.296)	(1,852)	(2,030)	(-0.158)
Foreign listing		0,011	0,0108	0,0128	0,0126	0,0066	0,0041	0,0331
		(1,473)	(1,450)	(1,562)	(1,382)	(0,356)	(0,106)	(1,322)
Institution			0,0044	0,0034	0,0038	0,0388	0,0678	0,0097
			(0,467)	(0,334)	(0,497)	(1,392)	(0,899)	(0,334)
Market to book				0,0356	0,285	-3,3183	-7,622	8,4166
				(0,044)	(0,734)	(-1.579)	(-1.213)	(1,639)
Dividend payout				0,0011	0,0011	0,0008	-0,0086	0,0248*
				(1,620)	(1,310)	(0,839)	(-0.371)	(1,743)
Adj. R-sq	-0,0016	-0,0004	-0,0018	-0,0031	-0,0034	0,0397	0,0661	0,155
n	478	478	478	458	458	132	46	46

The dependent variable in all specifications is the (-2,+1) CAR. The first five columns include all three types of events for all four law changes. The sixth column includes only the Introductions to the parliament, and the last two columns include only two specific Introduction to parliament events. Leverage is calculated as total debt divided by total assets, foreign listing = 1 for firms that are listed on an exchange outside Finland, Institution = 1 for lending institutions, Market to book = market capitalization/book value of equity, Dividend payout = Cash dividends/EBT. The t-statistics (in parentheses) are calculated using White (1980) standard errors. ***, **, and * indicate statistical significance at one percent, five percent, and ten percent level, respectively.

Table 4
Panel Estimation Results

Dep. var.	Tobin's Q	Tobin's Q	Tobin Chg.	Tobin Chg.	Tob vs US	Tob vs US
Model	Fixed eff.	Random eff.	Fixed eff.	Random eff.	Fixed eff.	Random eff.
Constant		1,3818***		0,2905**		-1,2992**
		(7,049)		(2,418)		(-2.401)
Leverage	-0,3213***	-0,3731***	-0,3813	-0,2841***	-0,9050*	-0,6033
	(-2.850)	(-3.304)	(-1.471)	(-2.615)	(-1.806)	(-1.544)
Log (assets)	-0,0583	-0,0078	-0,0308	-0,0102	0,1017	0,0911**
	(-0.801)	(-0.553)	(-0.185)	(-1.182)	(0,471)	(2,332)
Year 91	-0,2810***	-0,2828***	-0,2657***	-0,2903***	-0,3598**	-0,2909
	(-4.860)	(-5.348)	(-2.779)	(-4.678)	(-2.423)	(-1.456)
Year 92	-0,2527***	-0,2506***	-0,0899	-0,1055*	-0,7121***	-0,6522***
	(-5.040)	(-5.075)	(-1.098)	(-1.895)	(-3.778)	(-3.484)
Year 91 x Lev	0,3900***	0,3856**	0,5839**	0,5965***	0,3718	0,2000
	(2,853)	(2,473)	(2,435)	(3,277)	(0,827)	(0,339)
Year 92 x Lev	0,3627***	0,3518***	0,2518	0,2581*	1,1651**	1,0584**
	(3,136)	(2,560)	(1,317)	(1,669)	(2,413)	(2,027)
Adj. R-sq	0,6912	0,0657	-0,07	0,0953	0,4888	0,0648
Hausman test p		0,777		0,9825		0,0190

Tobin's q = (total assets - book value of equity + market capitalization)/total assets. Tobin Chg. = Tobin's $q_{year\ t}$ / Tobin's $q_{year\ t-1}$ - 1. Tob vs US = Tobin's q - U.S. median Tobin's q within the firm's two-digit SIC code. Leverage = non-equity liabilities/total assets. Log (assets) = Log (total assets). Year 91 and Year 92 = 1 for observations in each year, respectively, zero otherwise. Year 91 x Lev and Year 92 x Lev are interaction variables between the year dummy variables and Leverage. T-statistics (in parentheses) are calculated using heteroscedasticity-consistent standard errors. ***, **, and * indicate statistical significance at one percent, five percent, and ten percent level, respectively.