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## Law and stock markets: evidence from an emerging market

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Timo Korkeamäki – Elina Rainio – Tuomas Takalo

# **Law and stock markets: evidence from an emerging market**



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## **Law and stock markets: evidence from an emerging market**

The views expressed in this paper are those of the authors and do not necessarily reflect the views of the Bank of Finland.

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# Law and stock markets: evidence from an emerging market

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## Abstract

A sweeping and protracted reform of corporate law took place in Finland in the 1970s. The reform brought significant improvements to investor protection and, similar to the US Sarbanes-Oxley Act, tightened disclosure rules at the cost of increasing the work load in corporate reporting. We find that the Finnish stock market generally reacts negatively to news of tightened disclosure rules and increased work loads, whereas news of delays in implementation of reform were largely positive. This raises the question of whether strengthening investor protection by requiring greater transparency necessarily promotes the development of financial markets. It also serves to remind that the implementation costs of reforms should not be overlooked.

Keywords: corporate governance, investor protection, law and finance, transparency, Sarbanes-Oxley Act

JEL classification numbers: G34, K22

# Osakeyhtiölain uudistus Suomessa 1970-luvulla: vaikutukset sijoittajansuojaan ja osakemarkkinoiden kehitykseen

## Suomen Pankin keskustelualoitteita 1/2010

Timo Korkeamäki – Elina Rainio – Tuomas Takalo  
Rahapolitiikka- ja tutkimusosasto

### Tiivistelmä

Tässä keskustelualoitteessa tutkitaan Suomessa 1970-luvulla toteutetun poikkeuksellisen laajan ja pitkäkestoisen osakeyhtiölain uudistamisen vaikutuksia osakemarkkinoiden toimintaan. Ensimmäisen kerran koko 1900-luvulla Suomeen saatiin uusi osakeyhtiölaki. Tulokset osoittavat, että lakiuudistus paransi tuntuvasti sijoittajansuojaa. Kuten Yhdysvaltojen ns. Sarbanes-Oxley-säädös, myös Suomen uusi laki lisäsi yritysten tiedonantovelvollisuutta ja lisäsi samalla yritysten kustannuksia. Suomen osakemarkkinat reagoivat enimmäkseen negatiivisesti uudistusprosessin kuluessa julkaistuihin uutisiin, jotka painottivat tiedonantovelvollisuuden lisääntymistä ja siihen liittyviä kustannuksia, kun taas lain viivästyksistä kertovat uutiset johtivat pääosin positiivisiin markkinareaktioihin. Voidaankin kysyä, onko tiedonantovelvollisuuden tiukentaminen välttämättä hyväksi rahoitusmarkkinoiden kehitykselle. Tulokset muistuttavat myös, että lainmuutosten yrityksille aiheuttamat kustannukset tulisi ottaa huomioon lakeja suunniteltaessa.

Avainsanat: hallinnointiperiaatteet, sijoittajansuoja, laki ja rahoitus, läpinäkyvyys, Sarbanes-Oxley

JEL-luokittelu: G34, K22

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# 1 Introduction

Law and finance literature stemming from the works of La Porta, Lopez-de-Silanes, Shleifer and Vishny (LLSV) (1997, 1998) suggests that upgraded investor protection could expand financial markets and increase their liquidity. Several authors suggest a critical role for investor protection improvements in supporting growth of emerging markets (eg Johnson, Boone, Breach and Friedman, 2000, Pistor, 2000, Glaeser, Johnsson and Shleifer, 2001, Mitton, 2002, and La Porta, Lopez-de-Silanes and Shleifer, 2006). However, the recent discussion surrounding the US Sarbanes-Oxley Act (see eg Zhang, 2007) casts a doubt on whether improvements of investor protection, irrespective of their implementation costs, are beneficial for financial market development. This is reflected in the debate on pros and cons of increased transparency regulation in the aftermath of recent financial market turbulence. There is also growing evidence (see eg Spamann, 2006) that the results of law and finance approach are sensitive to the problems caused by large differences across countries. The question of whether and how legal protection of investors matters can hence be more fully explored in a clinical single country case. We present such an exploration, as we study an exceptionally large and long process of reforming corporate law that took place in Finland in the 1970s.

As in many other countries, financial market regulation was reformed in Finland in the aftermath of the crisis of the 1930s and has since then been gradually revised. In contrast, corporate law in Finland was still in 1970 based on an outdated but flexible Companies Act of 1895. The Finnish stock market during the 1970s was small and illiquid and comparable to many of today's emerging markets. One could argue that the underdeveloped and vague corporate regulation contributed to the small role of the stock markets in Finland.

The focus of this study is the reform process leading to the new corporate law on January 1, 1980 and its effects on stock market development and availability of equity financing for Finnish firms. The process was exceptionally long, lasting over a decade, and its effects on the relationship between the corporations and their investors were exceptionally large. Measured by the indices of shareholder and creditor protection created by LLSV (1997, 1998) and subsequently extended by Pistor (2000) and Glaeser et al (2001), both investor groups received significant improvements to their protection against abuse by corporate insiders. Besides the effects captured by the investor protection indices, the reform brought about significantly tightened disclosure rules for Finnish companies. The obvious economic cost of the reform was reduced corporate flexibility, and increased work load in corporate reporting.

In order to study the effects of the law-making process on the Finnish financial markets, we use firm-level daily stock return data. We have paired the

daily stock return data with informational events regarding the law-making process throughout the 1970s. From *Kauppalehti*, the leading daily business news paper in Finland, we have manually identified 39 articles that specifically refer to the upcoming corporate law. As a group of three co-authors with varied backgrounds, we independently coded each article as to whether they contained information that we deemed new information at the time, regarding delays in the legislative process, investor protection, and transparency brought about by the new law. We also judged whether the article mentioned or alluded to increases in reporting work load, imposed by the new law. Out of the 39 articles, our coding agreed on the content of 25 articles.

We perform an event study, using publication dates of these 25 articles as our event dates. To take into account a finding by Korkeamäki, Koskinen and Takalo (2007) that new information arrives to the Finnish market as a law is introduced to the parliament, we also consider the official legislative steps as additional event dates.

Performing an event study of legal reforms on emerging market data is methodologically challenging: Not only do we have to deal with extreme event day clustering common to other event studies of legal reforms but we also have to take into account the problems caused by infrequent trading and autocorrelation. On the positive side, we have a complete set of firms listed on the Helsinki Stock Exchange. The panel of firms is very stable through the decade that we study, as the number of firms on the Helsinki stock exchange grows at a very slow pace, from 43 to 49 during the 1970s. There were also no bankruptcies or delistings among the firms listed on the Helsinki Stock Exchange during the decade. Furthermore, the news that we identify were likely to convey new information to the market: Most of them were on the front page of *Kauppalehti*. The news were not likely to leak to the public in advance, as the articles were based on an opinion of a journalist who often either interviewed alone a key law maker, or reported on his/her own research. In this respect our study contributes to the understanding of how journalists affect stock market behavior. In contrast to recent studies from the US (see eg Tetlock, 2007, and Fang and Peress, 2009), competition among financial information media was next to non-existent in Finland in the 1970s, which should contribute to the effect of *Kauppalehti* on the Finnish market.

We find that news paper articles focusing on the increased reporting work load are typically connected to a negative market response. Similarly, articles indicating a delay in the legislative process tend to be met by a positive reaction by the stock market. Evidence related to increased investor protection is more mixed and inconclusive. Given the tradeoffs involved, this is not as surprising as it may seem from the outset: The legislation improved investor protection, but it did so at the cost of increased disclosure and corporate work load. Nor it is clear from the prior literature (eg Korkeamäki et al, 2007, and Miller and Reisel, 2009) to what extent the creditors' and shareholders' interests are aligned, implying

ambiguous stock market reactions to creditor protection improvements. Our findings hence provide some support for the event-study results regarding introduction of the US Sarbanes-Oxley Act (see eg Zhang, 2007). We also support the theoretical literature suggesting that increased transparency regulation may not automatically be conducive for financial market performance (see eg Hyytinen and Takalo, 2002, and Chen and Hasan, 2006).

Evaluating the effects of corporate regulation in an emerging stock market involves numerous data and methodological challenges that are tackled in this study. We show that investor protection matters in an emerging market context but perhaps in a different way from that predicted by the earlier literature. In particular, better investor protection is not automatically positive for financial market development. Especially when increasing disclosure requirements, attention should be paid to the implementation costs of reforms.

The paper is organized as follows: Section two reviews the macroeconomic and legal background on which the reform was implemented. Section three describes the reform in Finland that took place in the 1970s and documents its impact on investor protection. Section four provides a discussion of the connections among investor protection and stock valuations. Section five describes our data sources. Section six contains the results. Section seven concludes.

## 2 Finland in the 1970s

### 2.1 Macroeconomic and financial market environment

At the end of World War II, the Finnish economy was relatively agrarian, lagging the other Nordic countries in terms of economic and industrial development. Since the war, the country's economic structure underwent a rapid change so that in the 1970s, heavy metals and forest-based industries formed the core of the Finnish economy.

Finland was in a delicate political situation in the 1970s. The country was formally neutral during the Cold War, but the political and commercial links with the Soviet Union were extensive, leading to the term 'finlandization' in international usage. For example, the Soviet opposition blocked the planned move to the Nordic common market and it was not until 1986 Finland could join the European Free Trade Association. Some areas of the economy deemed to have only domestic dimension – such as corporate law – were more free from the influence from the Soviet Union.

Starting from the 1930s, the Finnish economy and financial markets were increasingly regulated. While the economic crisis of the 1930s and the World War

It prompted similar regulatory tightening also in many other countries (see Rajan and Zingales, 2003) government's regulatory outreach in the financial market in Finland was particularly extensive. By the end of the 1970s, the cross-border capital flows were controlled by the central bank, interest rate ceilings on bank loans and deposits existed, along with regulated quantity limits on bank lending (Vihriälä, 1997). Besides the direct regulation, taxation also shaped the financial system. Tax exemption of interest earnings was tied to a uniform deposit rate and terms set by the authorities, and interest expenses were often deductible in taxation. Equity financing, by contrast, was subject to a burdensome tax treatment.

Low nominal lending rates, tax deductibility, and high inflation resulted in negative real lending rates and hence in excess demand for loans in the late 1970s. The tax exemption of deposit interest earnings subsidised banks and effectively discouraged the development of other financial intermediaries. The regulations in turn reduced banks' incentive to compete for market share and encouraged the creation of close banking relationships. Against this mix of regulation, taxation, and monetary policy favoring bank finance, it is hardly surprising that at the end of the 1970s the Finnish financial system was built on a non-competitive and subsidised banking sector in which long-term relationships with borrowers were essential and the incentives for risk management and monitoring were weak.

Finnish firms were roughly divided into three spheres, which were controlled by the main Finnish commercial banks (Lantto, 1990). Ownership of the firms was concentrated and the cross-ownership between financial institutions and nonfinancial firms was common. As a result, the financial institutions had a substantial influence on the decision-making of non-financial firms (Pohjola, 1988). Because the banks held large stakes in the firms in their spheres through equity and debt, they provided both financial and managerial support, in case a firm within their sphere encountered financial difficulties. Ultimate control rights of the main owners were thus typically larger than their direct stakes. Pohjola (1988) argues that a direct voting stake of 30% were sufficient for obtaining control in Finnish companies.

Since regulation and macroeconomic environment had generated a financial system based on the main-bank structure, it was not surprising that the stock market, while less regulated, was small and illiquid. For example, in 1970, there were only 43 firms listed on the Helsinki Stock Exchange.

Towards the end of the 1970s, intermediation restrictions and accelerating inflation made it increasingly evident that the financial system could no longer satisfy the financing needs of Finnish companies. The difficulties in the financial

sector and the example of the UK and the other Nordic countries led to the gradual liberalization of the financial market in the 1980s.<sup>1</sup>

## 2.2 Legal environment

The Finnish legal system has historically evolved in a 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.

Like the other Nordic countries, Finland was relatively advanced in terms of independent legal enforcement in the late 1960s. However, the legislation concerning investor protection was outdated, being mainly rooted in the Companies Act of 1895, in the Liquidation Bankruptcy Code and the Decree on Claim Priorities of 1868, and the Act on Compositions of 1932.<sup>2</sup>

The Companies Act of 1895 was prepared simultaneously with similar Swedish and Norwegian corporate law reforms. The law was fairly 'Coasean', giving only general framework of investor protection. It regulated mainly founding of corporations, while leaving vast contractual freedom for charter provisions regarding a broad range of issues. This flexibility partially explains why the pressure for a law reform began to build only in the late 1960s. There were only 10 amendments to the Companies Act of 1895 during its entire existence. As a result, when the 1970s approached, corporate governance was little regulated in contrast to many other areas of the Finnish economy. By then, it was only natural to think that corporate governance, too, should be regulated in more detail.

The Companies Act of 1895 had particularly scant provisions on investor protection and disclosure rules. For example, the law contained only one significant mandatory minority shareholder provision: 10% of share capital was sufficient to call an extraordinary shareholder's meeting. The scope for expropriation of minority shareholders had been a concern at least since the 1930s.<sup>3</sup> It was thought that the new law should put in place more explicit controls concerning auditing, conglomerate formation, corporate finance and liquidation procedures.

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<sup>1</sup> See Drees and Pazarbasioglu (1995) and Vihriälä (1997) for comprehensive accounts of the liberalisation.

<sup>2</sup> The Liquidation Bankruptcy Code, the Decree on Claim Priorities of 1868, and the Act on Compositions of 1932 were only reformed in the early 1990s (see Korkeamäki et al, 2007, for the effects of these reforms).

<sup>3</sup> An amendment of 1935 (350/1935, effective 15 November 1935) tried to protect minority shareholders by requiring equal treatment of shareholders by the decisions made in the shareholders' meeting.

### 3 The corporate law reform of 1970s

The preparation for the new corporate law began already in the late 1960s as a joint effort of four Scandinavian countries (Denmark, Finland, Norway, Sweden). As mentioned above, the goal of the new law was to increase regulatory outreach of the corporate law.

Based on the government's official documents and the newspaper articles we have read (see Section 3.1), it is evident that the new law aimed at increased public disclosure of corporate information. It provided detailed regulation on conglomerate auditing and accounting, and required increased disclosure regarding ownership structure and identity of main shareholders. Added transparency regarding use of convertibles and warrants in corporate financing was also among the new requirements. The new law furthermore aimed to reduce the threshold for firms to incorporate, and to enhance Finnish corporations' ability to raise equity capital. It also tried to specify the position of shareholders and corporate board members. Even though the legal principals of corporate regulation went practically unchanged, regulation got more precise, with less room for judgement.

The effect of the new corporate law (the Companies Act 734/1978, effective January 1, 1980) on investor protection is quantified by Rainio (2006). She employs the popular index measures by LLSV (1997, 1998), and their extensions by Pistor (2000) and Glaeser et al (2001), to measure the effect of the reform both on creditors and shareholders. The indices indicate an improvement in shareholder protection. The eight-point scale by LLSV moves from 2 to 4<sup>4</sup>, and the Pistor index moves from 2 to 4, upon the reform. An exception is the Glaeser et al index, which shows a slight deterioration from 6.3 to 5.3, on the scale of 0 to 16. The deterioration is due to the new law disallowing bearer shares and preference shares.<sup>5</sup>

Despite the fact that Finland has a separate bankruptcy code, the Companies Act of 1980 also affected creditor protection. Two measures in the LLSV (1997, 1998) creditor protection index changed, resulting in an improvement in the LLSV index measure from 2/5 to 4/5. Prior to the reform, Finnish corporations could themselves initiate the bankruptcy proceedings, without creditor consent. The Companies Act of 1980 requires an approval by the firm's major creditor

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<sup>4</sup> The reading of 4 agrees with the LLSV (1997, 1998) value for Finland, which is also based on the Companies Act of 1980 that was in force until 2006, with a major revision taking place in 1997, after LLSV collected their data. However, it is worth noting that Rainio (2006) disagrees with LLSV on the individual factor coding. While LLSV argue that firms are not allowed to block trade of their own shares before the shareholders' meeting and that cumulative voting is not allowed in Finland, Rainio (2006) cites Finnish legal references in support of the opposite. The two disagreements cancel each other out, giving the same overall rating for both studies.

<sup>5</sup> Both share types were extremely rare prior to the law change, but since the index measures changes in the letter of the law rather than the practice, both changes reduce the index level.

prior to the firm entering the bankruptcy proceedings. The previous corporate law also allowed the firm to decide on the order of liquidation of its assets, whereas the new law stipulated on the priority of secured creditors over unsecured creditors.<sup>6</sup>

### 3.1 Process towards the corporate law of 1980

The law change that took effect at the beginning of 1980 was anticipated well in advance. The first proposal draft for the new corporate law was published by the government already in 1969. Unfortunately, our stock returns data source does not allow us to consider the earliest events in our analysis, as our data set begins from February 2, 1970. In search of newspaper articles related to the anticipated law change, we manually explored daily editions of *Kauppalehti*, the leading business daily newspaper in Finland at the time, and even today. The earliest mentions of a planned new corporate law are from the spring of 1970. In total, we identify 39 articles published during the 1970s that specifically mention the planned corporate law change. Most of the articles either discuss the content of the law proposal, or report on its progress. Also, three of the events we consider represent days for the legislative steps that the law took.

In order to explore the type of information released in the newspaper articles, we performed content analysis of each article. Among the three authors of this study, we independently judged each article along three dimensions, by determining whether the article contained new information related to a delay in the legislative process, an increase in the reporting work load for the companies, or a change in investor protection.<sup>7</sup> Consensus among all three authors was required in order for an article to be classified under each category, and we analyze further only articles that all three authors independently agree to be significant at least in one of the dimensions. We also study entire issues of *Kauppalehti* on days around each event to search for potential sources of event contamination. Table 1 provides information on the events.

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<sup>6</sup> This also illustrates the liberal nature of the Companies Act of 1895. In practice, priority of secured creditors was commonly respected, but the letter of law did not require it.

<sup>7</sup> As changes in investor protection were difficult to differentiate between those affecting creditor protection and shareholder protection, we considered investor protection as a single dimension.



Table 1.

### Events and news paper articles during preparation of the 1980 corporate law

The table lists legislative steps, and news related to preparation of the Finnish corporate law of 1980. Columns ‘delay’, ‘inv prot’, and ‘work load’ indicate authors’ independent judgement on whether the content of each article contained information emphasizing a delay in the legislative process, a change in investor protection, or increase in work load, respectively.

Date	Event/article title	page no.	delay	inv prot	work load	legislative event
24.4.1970	“Konserni vieras lainsäädännössä; uusi oyl selkeyttää konsernilainsäädäntöä” “Oy-laki suppea kansainvälisesti”		X			
21.10.1970	Kirjanpito- ja osakeyhtiölait koordinoitava elinkeinotuloverolain (EVL) kanssa	4	X		X	
21.12.1970	Osakeyhtiölaki voimaan -75?	1	X		X	
29.12.1970	Kirjanpitolaki ainoaksi tilinpäätösten säätäjäksi	4		X		
1.9.1972	Kuolleiden firmojen kummittelu lakkaa	1				
24.1.1974	Tilintarkastajille uusi organisaatio; uusi oyl vaatii	8		X		
2.9.1974	Proposal for new corporate legislation					X
8.11.1974	Tietoja lisää osakeyhtiöistä	18		X	X	
29.1.1975	Yhden miehen tehoryhmästä huolimatta uusi osakeyhtiölaki siirtyy jatkuvasti	1	X			
24.10.1975	Uusi oy-laki laajentaa tilintarkastuksen tehtäväkenttää	6		X	X	
21.7.1976	Osakeyhtiölaki puoluepunnitaan; laki voimaan aikaisintaan 1978	1	X			
18.2.1977	Uusi osakeyhtiölaki eduskuntaan tässä kuussa	1		X		
22.3.1977	Tämän vuosikymmenen tavoite: Oy-lainsäädäntö pohjoismaiselle pohjalle	4		X	X	
29.3.1977	Government’s proposal to the parliament					X
7.6.1977	Pääsääntö uuden oy-lain myötä: Toimintakertomuksen paljastettava paljon	1		X	X	
15.6.1977	Hajasijoituksesta on vain haittoja	back cover	X			
12.9.1977	Oy-lain uusi kompastuskivi: E-liike ei hyväksy KHT-tilintarkastajia	1			X	
26.9.1977	Uusi vaatimus laskentatoimelle: Konsernienkin tilit vaaditaan julkisiksi	1			X	
19.1.1978	Uusi oy-laki poistaa esteet optiokaupasta	back cover				
2.6.1978	Parliament decision, 3. round					X
3.7.1978	Oy-laki voimaan vasta 1980	1	X		X	
29.9.1978	Law enacted; Oy-laki haaste kauppakamarille: Tilintarkastajien koulutus kovenee	9		X		X
8.11.1978	Pörssiyhtiöiden vuosikertomukset tutkittu: Avoimuus lisääntynyt	11		X	X	
1.12.1978	Taloudellinen lainsäädäntö 80 -teemasivut; oyl-uudistusta koskevia uutisia	9			X	
29.12.1978	Uusi oy-laki tuo työläät konsernitilinpäätökset	1			X	
27.3.1979	Uudessa oy-laissa peräti 167 pykälää	1		X	X	
1.1.1980	Law takes effect					X

As Table 1 shows, many of the articles appeared on the front cover of *Kauppalehti*. Seven of the articles, mainly from the early part of the decade, emphasized a delay in the process. Ten articles had a focus on investor protection, and thirteen of them emphasized an increase in work load. A number of them had more than one emphasis, according to our judgment.

## 4 The economic impact of legal reforms

The valuation effect of the events under our consideration is ambiguous, *ex ante*. As discussed above, the Companies Act of 1980 brought about significant improvements in both shareholder protection and creditor protection in Finland through more direct guidance and increased transparency. While improvements in shareholder protection should most likely result in a positive stock value reaction, improvements in creditor protection could affect the stock price negatively, eg if they implied a wealth transfer from stock holders to lenders in case of bankruptcy (see Korkeamäki et al, 2007 and Miller and Reisel, 2009). Many reform features, especially those concerning increased disclosure, clearly also imply direct compliance costs, which should adversely affect the stock prices.<sup>8</sup> Under the premise that improvements offered by the reform were good news to the stock market in general, any delays in the legislative process should be met with negative stock reactions. If, however, the market judged that the costs of implementing the new regulations would surpass their benefits, the reaction could be the opposite, in particular to news that highlight the reporting burden.

Our judgement of information content of the articles, made after 30 years from their publication, can also be justifiably questioned. On the other hand, compared with the recent studies on the effects of mass print media on the stock market (eg Tetlock, 2007, and Fang and Peress, 2009), and unlike with many other corporate events, we can be considerably more confident that information contained in the articles was genuine news. *Kauppalehti* was, and still is, the leading business news paper in Finland, and there was little competition from other media back in the 1970s. About half of the articles we consider appeared on the front cover, and many articles seem to be the products of the journalists who eg had interviewed alone a key law maker. Ultimately, our event study results in the next section should shed light on whether and in what way each article contained new information to the market.

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<sup>8</sup> Hyytinen and Takalo (2002) argue that there can also be indirect compliance costs arising from informational spillovers created by disclosure regulation.

## 5 Data

Data constraints tend to plague studies of corporate finance from earlier time periods. The Finnish stock market in the 1970s can be characterized as an emerging market. At the end of the decade, the total annual stock market turnover reached 4 billion euros (measured in 2006 terms), which is comparable in 2006 to markets such as Bulgaria, Croatia, Jamaica and Ukraine. The problems we have faced with data availability and accessibility in this study may be even more severe than those with current day's emerging markets. As digitization and electronic data access were unknowns in the 1970s, our efforts to overcome data problems have included a large amount of manual data collection.

Our stock return data come from the Hanken School of Economics database on Finnish stock returns from the 1970s. We have used the daily return series on individual firms, which were used to construct the so called WI-index. Details on the data collection for this index are reported in Berglund, Wahlroos and Grandell (1983). The data set includes all firms traded on the Helsinki Stock Exchange during the time period. We supplement our returns data with firm-specific accounting information that has been hand-collected from annual editions of *Pörssitieto* year books.

Table 2 provides descriptive statistics on our sample. The emergent nature of the Finnish stock market in the 1970s is illustrated by a small number of firms, and especially by the extremely low turnover of shares traded on the Helsinki Stock Exchange. While the median number for shares traded per day increases from 28 to 120 during the 1970s, even in 1979, firms with less than 10 shares traded on an average trading day exist.

Table 2. **Descriptive statistics for firms  
on the Helsinki Stock Exchange by year**

The table reports median values for each year. Assets and sales are in FIM millions, turnover is in number of shares traded on an average trading day.

Year	N	Assets	Sales	Turnover
1970	43	208.8	204.46	28
1971	44	237.3	194.23	28.5
1972	44	284.15	245.85	41.5
1973	46	332.05	317.35	65
1974	46	438.59	433.51	75
1975	46	499.775	445.91	51
1976	49	482.2	483.345	54.5
1977	49	555.02	446.13	88
1978	49	592.38	483.77	89
1979	49	633.35	577.39	120

It is well documented that daily return series tend to be autocorrelated. The problem is more severe for assets that are infrequently traded (Scholes and Williams, 1977). It is therefore no surprise that the return series that we use for this paper suffer from severe autocorrelation. Berglund and Liljeblom (1988) list factors that make Finnish data from the 1970s particularly affected by autocorrelation. Firstly, the trading rules on the Helsinki Stock Exchange during our sample period were such that the list of companies traded on the exchange was ‘called out’ during the morning trading hours, and at that point, the bid-ask spread for the day was established. Since trades outside that spread were, by rules of the exchange, not allowed on that trading day, the price of a firm in the early part of the list would react to news that arrive later on day  $t$  (or even during the calling out process) only on day  $t+1$ . Secondly, the daily return series in our data source are tabulated so that for each stock that failed to trade on a certain day, the last trade price is substituted by the bid price (use of the bid-ask midpoint is not possible, as for a number of companies, only bid but no ask price exists on numerous trading days). We deal with these empirical challenges in our econometric tests, as detailed in the following section.

## 6 Results

We conduct an event study around events related to the news paper articles and legislative events detailed above. For each event, we use a 250-day estimation window and an event window of  $(0,+1)$ .<sup>9</sup> Our choice of the event window is motivated in part by the trading system of the Helsinki Stock Exchange during our sample period. As discussed above, whether the news of day 0 are reflected on the stock return for the company on the same day or not depends on where that company is on the list that is called out during the morning hours at the exchange. Particularly for companies that come up early on the list, inclusion of day  $+1$  in the event window is therefore critical.

Research of market reactions to law changes is plagued by extreme event date clustering, as all firms in the market share the same event date (see eg Binder, 1985). In such cases, Schwert (1981) and Campbell, Lo, and MacKinley (1997) suggest using a portfolio of returns instead of making inferences about market reactions based on reactions of individual stocks. At the aggregate market level, our primary measure of market returns is an equally-weighted index that we construct from the Hanken School of Economics data base. With an equally-

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<sup>9</sup> Since our return data begins from February 1970, we do not have information available for 250 trading days prior to our first four events. For those events, we have used the method familiar from the IPO literature, where a post-event estimation period is used (eg Mikkelsen and Partch, 1986). For those cases, we use a 250-day estimation period beginning on the 2nd day after the event day.

weighted index, we hope to capture the market reaction of the average Finnish firm to each event. However, use of an equally-weighted index increases the relative weight of infrequently traded stocks in the portfolio, which intensifies the technical problems discussed above. We tackle this issue in three ways. First, we adjust the original return series to account for the bid rate quotes used for stocks with no trades on certain days. Second, we use the algorithm suggested by Jokivuolle (1995) to correct for autocorrelation in the time series. Third, we use alternative measures for aggregate market reaction to study the robustness of our results.

The abnormal returns for our portfolio are measured by the coefficient  $\beta_2$  in equation (6.1).

$$R_{pf,t} = \alpha + \beta_1 R_{mkt,t} + \beta_2 D_{(0,+1)} + \varepsilon \quad (6.1)$$

where

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

$R_{mkt}$  = Return on the Stockholm Stock Exchange on day  $t$ ;

$D_{(0,+1)}$  = 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).<sup>10</sup> For the market portfolio ( $R_{mkt}$ ), we use the Jacobson and Ponsbach (JP) index that follows the Stockholm Stock Exchange. Our choice of market portfolio is driven partly by data restriction, and partly by the nature of the Finnish market in the 1970s. Commonly used international indices, such as the MSCI indices do not have daily data available until 1972. Also, consistent with today's emerging markets, the Finnish stock market was extremely segmented in the 1970s. Correlation of the daily returns of our equally-weighted index is below 3% for both FTSE and DAX-indices, while the JP index exhibits a 7.9% correlation with our index. Our findings are, however, essentially identical if we use alternative European indices. Given that controlling for market returns is somewhat questionable in a case where market returns do not appear to have hardly any influence on the Finnish returns, we will also report results based on regressions where the market portfolio is not present.

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<sup>10</sup> Exclusion of pre-event days has no effect on our results, which makes sense, given our discussion above about the nature of our events.

Table 3.  
**Market reactions to events related  
to the law change**

The table reports the robust t-statistics for the dummy variable specified in equation (6.1), that equals one during the (0,+1) event window for each event. The market returns ( $R_{mkt}$ ) are included in columns 1, 3, 5 and 7, whereas the rest of the columns show results based on regressions where the market returns are omitted. In Columns 5 and 6, we use a return series that is filtered for autocorrelation, as suggested by Jokivuolle (1995). The events are defined in Table 1. \*\*\*, \*\*, \* indicate statistical significance at the 1%, 5%, and 10% level, respectively.

Column	1	2	3	4	5	6	7	8
Index	ew-index	ew-index	adj. ew	adj. ew	ew-index	ew-index	hex	hex
Market pf	yes	no	yes	no	yes	no	yes	no
Autocorr.	yes	no	yes	no	yes	no	yes	no
Filter	no	no	no	no	no	yes	no	no
Event date								
24.4.1970	0.687	0.683	0.491	0.488	0.395	0.391	0.117	0.124
21.10.1970	0.451	0.298	1.041	0.999	0.143	0.024	2.414**	2.209**
21.12.1970	0.331	0.17	3.319***	3.383***	0.668	0.532	2.188**	2.152**
29.12.1970	-3.266***	-2.468**	-9.007***	-5.552***	-2.978***	-2.311**	0.847	0.655
1.9.1972	-0.329	-0.298	1.809*	0.890	-0.363	-0.338	-0.803	-0.767
24.1.1974	-5.581***	-6.978***	-0.912	-0.903	-3.941***	-5.026***	-0.389	-0.412
2.9.1974	1.341	1.101	1.367	1.089	1.981**	1.815*	0.796	0.618
8.11.1974	-1.518	-1.539	-1.804*	-1.904*	-1.572	-1.593	-3.116***	-3.349***
29.1.1975	-0.421	-0.335	-4.816***	-3.650***	-0.541	-0.475	-2.044**	-2.193**
24.10.1975	-1.065	-0.972	-1.208	-1.03	-0.976	-0.912	-2.126**	-1.717*
21.7.1976	1.146	1.06	5.702***	6.190***	1.346	1.258	1.375	1.341
18.2.1977	-1.219	-1.523	-4.802***	-4.594***	-1.376	-1.747*	-0.451	-0.871
22.3.1977	0.311	0.261	3.355***	9.450***	-0.705	-0.215	0.212	0.208
29.3.1977	4.153***	2.272**	0.490	-0.109	3.985***	2.134**	3.678***	2.098**
7.6.1977	-3.201***	-8.081***	-1.409	-2.266**	-2.840***	-7.073***	-1.325	-2.652**
15.6.1977	-0.805	0.307	1.723*	2.104**	1.177	1.587	0.669	0.843
12.9.1977	-3.747***	-2.563***	-5.117***	-10.281***	-3.681***	-2.353**	-17.552***	-20.616***
26.9.1977	1.439	3.040***	-0.259	-0.253	1.03	2.300**	0.286	0.285
19.1.1978	-0.559	-0.605	0.576	0.661	-0.565	-0.628	-1.054	-1.476

Column Index	1	2	3	4	5	6	7	8
Market pf	ew-index yes	ew-index no	adj. ew yes	adj. ew no	ew-index yes	ew-index no	hex yes	hex no
Autocorr.	no	no	no	no	no	yes	no	no
Filter	no	no	no	no	no	yes	no	no
2.6.1978	0.984	0.867	2.761***	2.588***	1.719*	1.57	1.912*	1.582
3.7.1978	0.022	0.031	0.692	0.68	-0.043	-0.032	-0.445	-0.408
29.9.1978	-0.756	-0.893	0.105	0.031	-0.557	-0.597	0.939	0.231
8.11.1978	0.136	0.117	0.675	0.636	0.14	0.139	0.875	0.786
1.12.1978	-2.712***	-3.959***	-0.540	-0.477	-2.477**	-3.325***	-3.111***	-3.653***
29.12.1978	1.538	1.538	1.353	1.352	0.776	0.772	0.846	0.855
27.3.1979	-0.752	-0.792	-3.655***	-4.446***	-0.261	-0.271	-0.144	-0.309
1.1.1980	-0.074	-0.341	-1.045	-4.100***	0.379	0.34	4.752***	5.355***

The abnormal portfolio returns are presented in Table 3. In the interest of space, we only report the t-statistics of the  $\beta_2$ -coefficient for the dummy variable  $D_{(0,+1)}$ . In the first two columns of the table, the equally-weighted index of the Finnish stock market is used to measure the market's reaction to each event. In columns 3 and 4, we adjust the Hanken School of Economics data in the following way. The daily data in the database contains several firms that are rarely traded. For firms that fail to trade on a certain day, the buy quote is reported (the sell quote did not exist for many of this, which motivates the use of the buy quote). However, if a stock fails to trade on day  $t$ , but then it trades on day  $t+1$ , we observe a part of the return that is connected with a move from a buy quote to a trade, which can be substantial for the most illiquid stocks with wide bid-ask spreads. For this reason, we manually observe prices for each stock during each of the event windows from the stock market page of *Kauppalehti* and replace 'buy quote to trade' returns with 'buy quote to buy quote' returns for those stocks.<sup>11</sup> We continue to use trade-to-trade returns for those firms for which such returns are available. The equally-weighted returns used in columns 3 and 4 are constructed from those firm-level returns. The results differ from those in columns 1 and 2 with regards to several events, suggesting that inclusion of 'buy quote-to-trade' returns is behind some of the findings (and non-findings) in columns 1 and 2. In columns 5 and 6, autocorrelation is filtered out of our Finnish market returns, using the methodology suggested by Jokivuolle (1995).<sup>12</sup> In columns 7 and 8, we replace the equally-weighted index with the HEX-index. We also use the market-weighted WI-index from the Hanken School of Economics as an alternative market-weighted measure. The results based on that index are practically identical to those based on the HEX-index (results not reported). Furthermore, in columns 1, 3, 5, and 7, we use the JP index for the market portfolio, while in columns 2, 4, 6, and 8, the analysis is done without controlling for the market portfolio returns.

Overall, a number of articles and law events are connected with statistically significant abnormal returns, suggesting that the events we study convey new information to the market. Autocorrelation does not appear to affect our results significantly, as the results based on filtered data are very similar to those based on raw data. We subsequently focus on returns of the adjusted equally-weighted index and the HEX-index, as those are less dependent on the technical problems with infrequently traded stocks.

Four of the article publication events exhibit consistent results for both the adjusted equally-weighted index and HEX index, regardless of whether we

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<sup>11</sup> Correcting for non-trades only within each event window causes our model parameters to be misspecified, as the bid-to-trade returns exist also within estimation periods. This concern is reduced to some extent by the very low loading on the market factor that is common among our sample firms. Also, this artificial volatility should bias us against finding significant results.

<sup>12</sup> Due to the complex nature of autocorrelation that we observe in our data, we use the ARMA (3,1) process to filter autocorrelation from the data. Not surprisingly, the use of Newey-West standard errors on the equally-weighted index returns results in qualitatively similar results.



control for the market portfolio returns or not. Out of those four, three articles were published on the front cover of *Kauppalehti*. Based on our judgment on the content of each article, it is difficult to draw consistent conclusions regarding these market-wide findings. The article with consistently positive findings (published on December 21, 1970) emphasized a delay in the progress and an increase in work load. However, two of the articles (November 8, 1974 and September 12, 1977) that were met with a negative reaction also included information about an increase in work load, and one (January 29, 1975) with a negative reaction emphasized a delay in the progress. The negative reaction to the November 8, 1974 event may, however, be a result of event contamination. On the same day, the Bank of Finland urged tightening of bank financing terms in Finland. The law's introduction to the parliament on March, 29 1977 seems to generate a positive and significant market reaction, however only for the HEX-index and for the non-adjusted ew-index. This finding is consistent with Korkeamäki et al (2007), who provide evidence suggesting that new information is released to the market when a law is introduced to the Finnish parliament.

Market-wide effects are difficult to detect as different types of firms may react differently to the news. Some markedly different reactions between the HEX-index and the equally-weighted index may suggest differing implications for small and large firms. The HEX-index includes only the 25 largest firms in the Helsinki Stock Exchange.<sup>13</sup> There are three events for which the adjusted ew-index indicates a positive abnormal return, while no significant reaction is present for the HEX-index. Out of those three, two events contained information about a delay in the legislative process, and one was a legislative step event. This provides further evidence of the delays being good news, at least for smaller firms. Indeed, when the ew-index is used, the events emphasizing a delay in the process were always met with either a positive reaction or an insignificant reaction, except for the aforementioned January 29, 1975 article.

All of the cases in which the equally-weighted index is the only one to react negatively emphasize an increase in investor protection. It is somewhat puzzling that smaller firms appear to suffer (in relative terms) from increases in investor protection, although shareholders of smaller firms could suffer more from creditor rights improvements. The two cases where only the HEX-index reacts negatively contain information about the increase in corporate reporting work load. This could be explained by an increase in requirements for consolidated book-keeping, mostly affecting larger firms. As mentioned above, the HEX-index is positively

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<sup>13</sup> The HEX-index includes the most frequently traded firms on the exchange, which reduces the technical concerns caused by infrequent trading, which were discussed above. It is also interesting to note that unlike later studies using Finnish data, our study is not plagued by 'the Nokia-effect', meaning that we do not have a single company representing a disproportionate share of the market. Even at the end of the 1970s, Nokia was only the fourth largest firm on the Helsinki Stock Exchange by sales, or third largest by the market capitalization.

affected by the law's introduction to the parliament, and also by an article publication emphasizing a delay and an increase in work load, published on October 21, 1970.

Next, we compile all events that emphasize an increase in work load, an increase in investor protection, or a delay in the legislative process, respectively. We use firm-level data to calculate the average  $\beta_2$  – coefficient in equation (6.1) for each firm across each type of events, and use it as the dependent variable.<sup>14</sup> Our explanatory variables include firm-specific averages of annual values for  $\ln(\text{market capitalization})$ , dividend yield, and the percentage owned by top-10 shareholders, foreigners, and government, respectively. We also include a dummy variable that takes on the value of one for banking institutions.<sup>15</sup> The results are reported in Table 4.

From Table 4, we see that news on delays in the legislative process and news on increases in workload provide fairly similar results. Both types of articles are met with a more positive than average reaction among stocks with high foreign ownership and high government ownership. This could be explained by those firms being less dependent on the Finnish stock market as a financing source. Similarly, firms with high dividend yields react negatively to news on delays and increases in workload. This finding is consistent with LLSV (2000) who suggest that firms that pay high dividends are more reliant on developed financing markets. Improvements in investor protection affect firms with high foreign ownership more negatively than average. Especially features that increase creditor protection could hurt foreign investors who perhaps do not rely on the letter of the law for shareholder protection, but are powerless when the law tips the balance of power towards creditors (as suggested by LLSV, 2000).

We next analyze the cross-sectional determinants of individual cumulative abnormal returns around each event. The results are reported in Table 5. The control variables for firm-specific returns around each event mirror those used above. While Panel A reports event-specific findings for each event, we have grouped the findings in Panel A by the types of the events in Panels B, C, and D. In Panel B, we report results on all events that indicated a delay in the legislative process. Delays appear to be better than average news for firms with high government or foreign ownership, which is consistent with the findings reported above. Firms in those groups may be less dependent on the Finnish stock market, which is why delays in the process do not affect them as much as the average firm. Firms with high ownership share among top-10 shareholders seem to suffer

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<sup>14</sup> The event type alone does not have a consistent effect on the market reaction. When we regress the firm-specific coefficients for the event dummy on the indicators for different types of the events, only the legislative process dummy enters with a significant (negative) sign (results not reported).

<sup>15</sup> It should be noted that these values are very stable for firms across the sample years, which motivates the use of average values.

from delays, and same holds to some extent for larger firms and firms with high dividends. It is possible that these firms' higher dependence on the Finnish equity markets makes them suffer when the reform faces delays.

Table 4. **Market reactions by type of the event**

Table displays OLS results where the dependent variable is the average coefficient on the dummy for each firm and each type of the event. Each explanatory variable is averaged for each firm across all sample years. Bank dummy is an indicator variable that takes on a value of one for banking firms, zero otherwise. Log(Mkt. cap) is the natural logarithm of market capitalization. Dividend yield is the percentage dividend yield offered by the firm. Ownership by top-10, foreign ownership, and gov't ownership indicate the percentage ownership of each respective shareholder group. Columns entitled 'Delay', 'Workload' and 'Protection' include only events that fall into each respective category, as indicated in Table 1. \*\*\*, \*\*, \* indicate statistical significance at the 1%, 5%, and 10% level, respectively.

<b>Event type</b>	<b>Delay</b>	<b>Workload</b>	<b>Protection</b>
Dependent var.	D (0,+1)	D (0,+1)	D (0,+1)
CONSTANT	0.00797 (0.580)	0.0091 (0.392)	0.0040 (0.226)
Bank dummy	-0.0011 (-0.434)	0.0068** (2.121)	0.0022 (0.750)
Log (Mkt. cap)	-0.0004 (-0.691)	-0.0007 (-0.640)	-0.0004 (-0.417)
Dividend yield	-0.0118 (-7.294)	-0.0115*** (-4.191)	0.0019 (0.368)
Ownership by top-10	-0.0039 (-0.553)	0.0069 (0.847)	0.0094 (0.941)
Foreign ownership	0.0593*** (6.267)	0.0183*** (3.366)	-0.0394*** (-5.737)
Gov't ownership	0.0007*** (10.927)	0.0005*** (4.624)	-0.0001 (-0.501)
N	35	34	34
ADJ. R <sup>2</sup>	0.5535	0.2213	0.2622
F-test p-valu	0.000	0.043	0.186

Table 5. **Market reactions to events related to the law change**

The table reports event-specific OLS results for each event. The events are defined in Table 1. The dependent variable is the firm-specific abnormal return related to each event. Bank is an indicator variable that takes on a value of one for banking firms, zero otherwise. Assets is the natural logarithm of total assets. Div yield is the percentage dividend yield offered by the firm. Top own, For own, and Gov ownership indicate the percentage ownership of top-10 shareholders, foreigners, and the government, respectively. Robust t-statistics are reported in the parentheses. \*\*\*, \*\*, \* indicate statistical significance at the 1%, 5%, and 10% level, respectively.

<b>Panel A</b>									
	Bank	Assets	Div yield	Top own	For own	Gov own	Constant	N	Adj r <sup>2</sup>
24.4.1970	0.0005 (0.034)	-0.0044 (-0.720)	-0.1051 (-0.333)		0.0755 (0.656)	-0.0002 (-1.939)*	0.0283 (0.532)	41	-0.051
21.10.1970	-0.0041 (-0.851)	0.0021 (0.969)	-0.0113 (-0.413)		-0.0208 (-2.463)**	0.0003 (0.827)	-0.0092 (-0.688)	41	0.033
21.12.1970	-0.005 (-0.804)	0.0025 (0.844)	0.0986 (1.332)		0.1704 (5.486)***	0.0002 (2.781)***	-0.0193 (-1.064)	41	0.696
29.12.1970	0.019 (1.271)	0.0026 (0.377)	-0.3784 (-2.801)***		-0.1351 (-3.098)***	0.0003 (1.372)	0.0098 (0.220)	41	0.468
1.9.1972	0.0046 (0.530)	-0.0045 (-1.620)	-0.1471 (-1.206)		-0.0119 (-1.447)	-0.0007 (-5.230)***	0.0318 (1.863)*	43	0.126
24.1.1974	-0.0141 (-2.081)**	0.0015 (0.453)	-0.5937 (-1.952)*		-0.0810 (-6.151)***	-0.0006 (-2.405)**	0.0261 (1.465)	43	0.098
2.9.1974	-0.016 (-0.544)	-0.0013 (-0.170)	0.0449 (0.344)	-0.0384 (-1.586)	-0.2372 (-1.374)	0.0005 (1.152)	0.0185 (0.356)	35	-0.023
8.11.1974	0.0976 (1.755)*	-0.0319 (-2.383)**	-0.4138 (-2.100)**	0.0715 (1.821)*	1.0337 (4.146)***	0.0007 (1.241)	0.1709 (2.232)**	35	0.328
29.1.1975	-0.0149 (1.708)*	-0.002 (-1.024)	-0.1892 (-3.064)***	-0.0178 (-1.536)	-0.0001 (-0.001)	0.0003 (2.851)***	0.0279 (1.610)	35	0.14
24.10.1975	-0.0011 (-0.134)	0.0001 (0.043)	-0.0013 (-6.844)***	-0.0039 (-0.193)	0.0244 (1.173)	0.0004 (2.123)**	0.0007 (0.040)	37	-0.15

Panel A

	Bank	Assets	Div yield	Top own	For own	Gov own	Constant	N	Adj r2
21.7.1976	0.0027 (0.318)	0.0027 (1.051)	0.0855 (0.833)	0.0083 (0.709)	-0.0116 (-0.724)	0.0002 (0.527)	-0.0279 (-1.187)	43	-0.01
18.2.1977	0.0066 (0.737)	0.0013 (0.402)	0.2572 (1.287)	0.0543 (2.432)**	-0.0514 (-1.505)	-0.001 (-2.131)**	-0.0432 (-1.295)	43	0.056
22.3.1977	0.0021 (0.273)	0.0018 (0.646)	-0.0016 (-0.010)	0.023 (1.422)	-0.0185 (-0.674)	0.0002 (0.448)	-0.0199 (-0.746)	43	-0.031
29.3.1977	0.0051 (0.697)	-0.0027 (-0.799)	-0.3811 (-1.794)*	-0.0488 (-1.964)*	0.0969 (2.363)**	0.0009 (2.407)**	0.0515 (1.427)	43	0.209
7.6.1977	0.0198 (3.928)***	-0.0053 (-2.970)***	-0.0787 (-0.871)	0.0013 (0.119)	-0.004 (-0.430)	-0.0007 (-4.905)***	0.0361 (2.493)**	45	0.239
15.6.1977	0.006 (1.007)	-0.003 (-1.469)	-0.0042 (-0.034)	-0.0005 (-0.038)	0.0411 (3.726)***	0.0012 (3.985)***	0.0217 (1.225)	45	0.274
12.9.1977	0.0215 (2.423)**	-0.0076 (-3.165)***	0.0712 (0.498)	0.0086 (0.603)	-0.0107 (-0.781)	-0.0001 (-0.631)	0.0342 (2.256)**	46	0.062
26.9.1977	0.0319 (1.196)	-0.0008 (-0.353)	0.1293 (0.610)	0.0138 (1.233)	-0.011 (-0.983)	0 (0.129)	-0.0171 (-0.925)	46	0.052
19.1.1978	-0.0086 (-0.833)	0.0001 (0.042)	-0.1712 (-1.596)	0.0036 (0.316)	-0.0192 (-1.803)*	-0.0003 (-1.865)*	0.0169 (1.002)	46	-0.056
2.6.1978	-0.0118 (-2.178)**	0.0005 (0.380)	0.0472 (0.490)	-0.0133 (-1.455)	0.0071 (0.773)	0.0002 (1.696)*	0.0024 (0.207)	45	-0.031
3.7.1978	0.0068 (1.537)	-0.0076 (-2.552)**	-0.0092 (-0.089)	-0.0379 (-2.310)**	0.0678 (7.290)***	0.0005 (2.559)**	0.065 (2.634)**	45	0.26
29.9.1978	-0.0232 (-1.784)*	0.0011 (0.737)	0.0797 (0.850)	-0.003 (-0.395)	0.0028 (0.279)	-0.0003 (-1.933)*	-0.006 (-0.492)	45	0.079
8.11.1978	-0.0012 (-0.241)	0.0012 (1.048)	0.0613 (0.952)	0.0117 (1.814)*	0.0053 (0.984)	0.0003 (2.280)**	-0.0152 (-1.677)	45	0.158
1.12.1978	-0.0158 (-0.895)	0.0005 (0.330)	0.0632 (0.810)	-0.0005 (-0.055)	0.0086 (0.766)	0.0004 (1.750)*	-0.0073 (-0.559)	45	0.035

<b>Panel A</b>									
	Bank	Assets	Div yield	Top own	For own	Gov own	Constant	N	Adj r2
29.12.1978	-0.0179 (-0.924)	0.0102 (1.704)*	0.0827 (0.259)	0.0022 (0.081)	-0.0055 (-0.207)	0.0006 (0.535)	-0.0639 (-1.126)	45	0.023
27.3.1979	0.0221 (3.506)***	-0.0027 (-1.334)	-0.1288 (-1.215)	0.0068 (0.506)	0.006 (0.817)	0.0003 (2.330)**	0.0156 (1.054)	45	0.111
1.1.1980	-0.0227 (1.817)*	0.0105 (2.581)**	-0.3205 (-1.513)	-0.028 (-0.975)	-0.0071 (-0.330)	-0.0004 (-1.006)	-0.0333 (-1.171)	44	0.094
<b>Panel B</b>									
	Delay	Assets	Div yield	Top own	For own	Gov own	Constant	N	Adj r2
24.4.1970	0.0005 (0.034)	-0.0044 (-0.720)	-0.1051 (-0.333)		0.0755 (0.656)	-0.0002 (-1.939)*	0.0283 (0.532)	41	-0.051
21.10.1970	-0.0041 (-0.851)	0.0021 (0.969)	-0.0113 (-0.413)		-0.0208 (-2.463)**	0.0003 (0.827)	-0.0092 (-0.688)	41	0.033
21.12.1970	-0.005 (-0.804)	0.0025 (0.844)	0.0986 (1.332)		0.1704 (5.486)***	0.0002 (2.781)***	-0.0193 (-1.064)	41	0.696
29.1.1975	-0.0149 (1.708)*	-0.002 (-1.024)	-0.1892 (-3.064)***	-0.0178 (-1.536)	-0.0001 (-0.001)	0.0003 (2.851)***	0.0279 (1.610)	35	0.14
21.7.1976	0.0027 (0.318)	0.0027 (1.051)	0.0855 (0.833)	0.0083 (0.709)	-0.0116 (-0.724)	0.0002 (0.527)	-0.0279 (-1.187)	43	-0.01
15.6.1977	0.006 (1.007)	-0.003 (-1.469)	-0.0042 (-0.034)	-0.0005 (-0.038)	0.0411 (3.726)***	0.0012 (3.985)***	0.0217 (1.225)	45	0.274
3.7.1978	0.0068 (1.537)	-0.0076 (-2.552)**	-0.0092 (-0.089)	-0.0379 (-2.310)**	0.0678 (7.290)***	0.0005 (2.559)**	0.065 (2.634)**	45	0.26

Panel C									
	Work	Assets	Div yield	Top own	For own	Gov own	Constant	N	Adj r2
21.10.1970	-0.0041 (-0.851)	0.0021 (0.969)	-0.0113 (-0.413)		-0.0208 (-2.463)**	0.0003 (0.827)	-0.0092 (-0.688)	41	0.033
21.12.1970	-0.005 (-0.804)	0.0025 (0.844)	0.0986 (1.332)		0.1704 (5.486)***	0.0002 (2.781)**	-0.0193 (-1.064)	41	0.696
8.11.1974	0.0976 (1.755)*	-0.0319 (-2.383)**	-0.4138 (-2.100)**	0.0715 (1.821)*	1.0337 (4.146)***	0.0007 (1.241)	0.1709 (2.232)**	35	0.328
24.10.1975	-0.0011 (-0.134)	0.0001 (0.043)	-0.0013 (-6.844)***	-0.0039 (-0.193)	0.0244 (1.173)	0.0004 (2.123)**	0.0007 (0.040)	37	-0.15
22.3.1977	0.0021 (0.273)	0.0018 (0.646)	-0.0016 (-0.010)	0.023 (1.422)	-0.0185 (-0.674)	0.0002 (0.448)	-0.0199 (-0.746)	43	-0.031
7.6.1977	0.0198 (3.928)***	-0.0053 (-2.970)***	-0.0787 (-0.871)	0.0013 (0.119)	-0.004 (-0.430)	-0.0007 (-4.905)***	0.0361 (2.493)**	45	0.239
12.9.1977	0.0215 (2.423)**	-0.0076 (-3.165)***	0.0712 (0.498)	0.0086 (0.603)	-0.0107 (-0.781)	-0.0001 (-0.631)	0.0342 (2.256)**	46	0.062
26.9.1977	0.0319 (1.196)	-0.0008 (-0.353)	0.1293 (0.610)	0.0138 (1.233)	-0.011 (-0.983)	0 (0.129)	-0.0171 (-0.925)	46	0.052
3.7.1978	0.0068 (1.537)	-0.0076 (-2.552)**	-0.0092 (-0.089)	-0.0379 (-2.310)**	0.0678 (7.290)***	0.0005 (2.559)**	0.065 (2.634)**	45	0.26
8.11.1978	-0.0012 (-0.241)	0.0012 (1.048)	0.0613 (0.952)	0.0117 (1.814)*	0.0053 (0.984)	0.0003 (2.280)**	-0.0152 (-1.677)	45	0.158
1.12.1978	-0.0158 (-0.895)	0.0005 (0.330)	0.0632 (0.810)	-0.0005 (-0.055)	0.0086 (0.766)	0.0004 (1.750)*	-0.0073 (-0.559)	45	0.035
29.12.1978	-0.0179 (-0.924)	0.0102 (1.704)*	0.0827 (0.259)	0.0022 (0.081)	-0.0055 (-0.207)	0.0006 (0.535)	-0.0639 (-1.126)	45	0.023
27.3.1979	0.0221 (3.506)***	-0.0027 (-1.334)	-0.1288 (-1.215)	0.0068 (0.506)	0.006 (0.817)	0.0003 (2.330)**	0.0156 (1.054)	45	0.111

Panel D	Protect	Assets	Div yield	Top own	For own	Gov own	Constant	N	Adj r2
29.12.1970	0.019 (1.271)	0.0026 (0.377)	-0.3784 (-2.801)***		-0.1351 (-3.098)***	0.0003 (1.372)	0.0098 (0.220)	41	0.468
24.1.1974	-0.0141 (-2.081)**	0.0015 (0.453)	-0.5937 (-1.952)*		-0.081 (-6.151)***	-0.0006 (-2.405)**	0.0261 (1.465)	43	0.098
8.11.1974	0.0976 (1.755)*	-0.0319 (-2.383)**	-0.4138 (-2.100)**	0.0715 (1.821)*	1.0337 (4.146)***	0.0007 (1.241)	0.1709 (2.232)**	35	0.328
24.10.1975	-0.0011 (-0.134)	0.0001 (0.043)	-0.0013 (-6.844)***	-0.0039 (-0.193)	0.0244 (1.173)	0.0004 (2.123)**	0.0007 (0.040)	37	-0.15
18.2.1977	0.0066 (0.737)	0.0013 (0.402)	0.2572 (1.287)	0.0543 (2.432)**	-0.0514 (-1.505)	-0.001 (-2.131)**	-0.0432 (-1.295)	43	0.056
22.3.1977	0.0021 (0.273)	0.0018 (0.646)	-0.0016 (-0.010)	0.023 (1.422)	-0.0185 (-0.674)	0.0002 (0.448)	-0.0199 (-0.746)	43	-0.031
7.6.1977	0.0198 (3.928)***	-0.0053 (-2.970)***	-0.0787 (-0.871)	0.0013 (0.119)	-0.004 (-0.430)	-0.0007 (-4.905)***	0.0361 (2.493)**	45	0.239
29.9.1978	-0.0232 (-1.784)*	0.0011 (0.737)	0.0797 (0.850)	-0.003 (-0.395)	0.0028 (0.279)	-0.0003 (-1.933)*	-0.006 (-0.492)	45	0.079
8.11.1978	-0.0012 (-0.241)	0.0012 (1.048)	0.0613 (0.952)	0.0117 (1.814)*	0.0053 (0.984)	0.0003 (2.280)**	-0.0152 (-1.677)	45	0.158
27.3.1979	0.0221 (3.506)***	-0.0027 (-1.334)	-0.1288 (-1.215)	0.0068 (0.506)	0.006 (0.817)	0.0003 (2.330)**	0.0156 (1.054)	45	0.111



The findings on work load increase are reported in Panel C. Similar to the delay news, foreign ownership and government ownership is generally related to better-than-average stock reactions. Also, larger firms and firms with high dividends again seem to suffer more than the average firm. Banks' reactions to work load increases are almost monotonously positive. This is possibly explained by the required reporting procedures already being in place in banks prior to the reform, so that implementation costs of the new law were lower for banking industry.

The results on investor protection-related news are reported in Panel D. Consistent evidence is provided by variables for Asset size (negative effect), Dividend yield (negative effect), and percentage of top-10 ownership (positive effect). Other variables enter with varying signs, depending on the events.

## 7 Conclusions

From 1970 towards the end of a millennium, the Finnish stock market transformed from a very thinly traded emerging market to a modern financial market. We study the first one in a series of institutional changes that made this transformation possible. As of 1970, the regulations covering most corporate activity in Finland were based on an outdated corporate law which was enacted in 1895. The focus of this study is the complex process – a joint effort of Scandinavian countries lasting over a decade – which led into the new corporate law on January 1, 1980.

Our results are mixed, and thus they fail to offer consistent support for market-wide benefits from the new legislation to the Finnish firms. In a closer examination of the events leading to the reform, we find that firms that are likely to be more dependent on raising equity financing in the Finnish public market suffer from delays in the legislative process. Regarding increased corporate reporting work load that resulted from the reform, our results are consistent with Zhang (2007) evidence that in the US, the vastly increased disclosure requirements introduced by the Sarbanes-Oxley Act in 2002 were met by a negative stock market response. While the literature emphasizes the importance of investor protection and disclosure requirements in development of stock markets, the compliance costs imposed by reforms should not be overlooked.

## References

- Berglund, T – Wahlroos, B – Grandell, L (1983) **KOP:s och UNITAS generalindex för Helsingfors fondbörs i ljuset av ett nytt värdevägt index.** Finnish Journal of Business Economics 32, 30–40.
- Berglund, T – Liljeblom, E (1988) **Market serial correlation on a small security market: A note.** Journal of Finance 43, 1265–1274.
- Binder, J J (1985) **Measuring the Effects of Regulation with Stock Price Data.** Rand Journal of Economics 16, 167–183.
- Campbell, J Y – Lo, A W – MacKinlay, A C (1997) **The Econometrics of Financial Markets.** Princeton University Press, Princeton, NJ.
- Chen, Y – Hasan, I (2006) **The transparency of the banking system and the efficiency of information-based bank runs.** Journal of Financial Intermediation 15, 307–331.
- Drees, B – Pazarbasiouglu, C (1995) **The Nordic banking crises: Pitfalls in financial liberalization?** IMF Working Paper 95/61.
- Fang, L – Peress, J (2009) **Media coverage and the cross-section of stock returns.** Journal of Finance 64, 2023–2052.
- Glaeser, E – Johnson, S – Shleifer, A (2001) **Coase versus the Coasians.** Quarterly Journal of Economics 116, 853–899.
- Hyytinen, A – Takalo, T (2002) **Enhancing bank transparency: A re-assessment.** European Finance Review 6, 429–445.
- Johnson, S – Boone, B – Breach, A – Friedman, E (2000) **Corporate governance in the Asian financial crisis.** Journal of Financial Economics 58, 141–186.
- Jokivuolle, E (1995) **Measuring True Stock Index Value in the Presence of Infrequent Trading.** Journal of Financial and Quantitative Analysis 30, 455–464.
- Korkeamäki, T – Koskinen, Y – Takalo, T (2007) **Phoenix rising: Legal reforms and changes in valuations in Finland during the economic crisis.** Journal of Financial Stability 3, 33–58.

- Lantto, R (1990) **Owners and Power in Finland's Listed Companies**. Kajaani: Startel Oy.
- La Porta, R – Lopez-de-Silanes, F – Shleifer, A (2006) **What Works in Securities Laws?** Journal of Finance 61, 1–32.
- La Porta, R – Lopez-de-Silanes, F – Shleifer, A – Vishny, R (1997) **Legal Determinants of External Finance**. Journal of Finance 52, 1131–1150.
- La Porta, R – Lopez-de-Silanes, F – Shleifer, A – Vishny, R (1998) **Law and Finance**. Journal of Political Economy 106, 1113–1155.
- La Porta, R – Lopez-de-Silanes, F – Shleifer, A – Vishny, R (2000) **Agency Problems and Dividend Policies around the World**. Journal of Finance 55, 1–33.
- Miller, D – Reisel, N (2009) **Do country level investor protections impact security level contract design? Evidence from foreign bond covenants**. Unpublished manuscript.
- Mikkelson, W H – Partch, M M (1986) **Valuation Effects of Security Offerings and the Issuance Process**. Journal of Financial Economics 15, 31–60.
- Mitton, T (2002) **A cross-firm analysis of the impact of corporate governance on the East Asian financial crisis**. Journal of Financial Economics 64, 215–241.
- Pistor, K (2000) **Patterns of Legal Change: Shareholder and Creditor Rights in Transition Economies**. European Business Organisation Law Review 1, 59–108.
- Pohjola, M (1988) **Concentration of shareholder voting power in Finnish industrial companies**. Scandinavian Journal of Economics, 90, 245–253.
- Pörssitieto, various issues, Kock, G T ed. Tietoteos, Helsinki.
- Rainio, E (2006) **Legislation, investor protection and financial growth**. Bank of Finland Discussion Paper 16/2006.
- Rajan, R – Zingales, L (2003) **The Great Reversals: The Politics of Financial Development in the Twentieth Century**. Journal of Financial Economics 69, 5–50.

- Scholes, M – Williams, J (1977) **Estimating Betas from Daily Data.** Journal of Financial Economics 5, 209–327.
- Schwert, W (1981) **Using Financial Data to Measure Effects of Regulation.** Journal of Law and Economics 24, 121–158.
- Spamann, H (2008) **'Law and finance' revisited.** Harvard Law School Discussion Paper No. 12.
- Tetlock, P C (2007) **Giving content to investor sentiment: The role of media in the stock market.** Journal of Finance 62, 1139–1168.
- Vihriälä, V (1997) **Banks and the Finnish Credit Cycle 1986–1995.** Bank of Finland Studies, E:7.
- Zhang, I X (2007) **Economic consequences of the Sarbanes-Oxley Act of 2002.** Journal of Accounting and Economics 44, 74–115.

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