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Master's Thesis of Business Administration

The value of antitakeover provisions on the onset of Covid-19
- Evidence from Korea -

경영권 방어수단의 가치:

Covid-19 한국 주식시장 충격을 중심으로

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Abstract

The value of antitakeover provisions
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In this paper, I address the question of whether antitakeover provisions (ATPs) are value-maximizing during the Covid-19 pandemic period in Korean stock market. During market shocks that cause stock prices to significantly drop (or make stock prices cheaper), firms having more ATPs might demonstrate smaller declines in value since they have protection from hostile takeovers. However, I document no significant relationship between ATPs and firm value during the first quarter of 2020. I also find that unlike previous literature, managerial entrenchment hypothesis does not fit well regarding the relationship between ATPs and firm value during normal times.

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1. Introduction

In the United States, it is deemed controversial as to whether antitakeover provisions (ATPs) that protect managers and shareholders from takeovers induce or hamper firm value. These mixed findings on ATP valuation effect also apply to when market conditions are abnormal. Korea also has controversial findings on the relationship between ATPs and firm value – in fact, research on ATPs began to actively conducted only in the 2010s. This is the first paper to test the relationship between ATPs and firm value in Korea before (normal times) and during a particular stock market crash, Covid-19 pandemic, when firm values were suddenly lower and there was a high possibility of opportunistic takeovers. There is a paper relating ATPs and firm value during the 2008 global financial crisis (Kim and Hwang, 2011), but it is targeted at companies that were delisted in 2009.

The main hypotheses surrounding ATPs include shareholder interest hypothesis and managerial entrenchment hypothesis. Shareholder interest hypothesis states that when management rights are unstable, there is a high possibility that managers make more short-sighted investments and thus negatively affects firm value; however, more long-term investments and firm-specific investments that positively affect firm value can be induced when management rights are stable (Deangelo and Rice, 1983; Heron and Lie, 2006). On the other hand, according to the managerial entrenchment hypothesis, ATPs have a negative impact on firm value by allowing managers to build trenches, further exacerbating agency problems between managers and shareholders and making managers to evade uncertain cash flows such as long-term investments for their own private interests. (Easterbrook and Fischel, 1981; Gompers et al., 2010). In this paper, the results

do not support managerial entrenchment hypothesis during normal times. Also, ATPs do not alleviate the negative impact of Covid-19 on firm value.

There is an ongoing debate in Korea as to whether we should allow firms to adopt stronger ATPs such as poison pill. The business community is strongly insisting on the additional adoption of ATPs in terms of 'securing management stability against hostile M&As', whereas the opposite side led by Solidarity for Economic Reform states that adopting more ATPs has a negative effect on firm value by making managers form trenches. As a result of analyzing the current status of the domestic M&A market between 2000 and 2015, hostile M&A was about 0.1%, which was an unusual event that fell short of 0.5 cases per year. The same is true of hostile takeover threats. As a result of analyzing the status of tender offers over the past nine years, there have been just one hostile takeover attempt against listed companies in Korea, and there have been no cases in which management rights have been acquired through tender offers (Economic Reform Research Institute, 2019). This partly explains why there is no significant relationship between ATPs and firm value during Covid-19, even if market shock provides a suitable environment to attempt hostile takeovers.

2. Related literature and hypothesis

2.1. Type of antitakeover provisions

The firm-level ATPs included in my ATP index are supermajority voting rule, staggered board, and golden parachute. In this section, I provide explanations for these ATPs and prior studies regarding them.

Supermajority voting rule refers to a type of antitakeover provision that requires higher shareholder approval than the requirements of the law of special resolution at the general shareholders' meeting (more than 2/3 of voting rights of shareholders and more than 1/3 of total issued shares) for agenda items such as dismissal of directors or approval of mergers and acquisitions.

Staggered board refers to a type of antitakeover provision that delays corporate control by decentralizing the term of directors so that all directors cannot be replaced even if the acquiring company purchases a majority of the company's shares. Thus, it is less likely for new major shareholders to dominate the board (DeAngelo and Rice, 1983). Zhao and Chen (2008) demonstrate that firms which successfully adopted staggered boards are less likely to be involved in fraudulent financial reporting, suggesting that managers may not make costly efforts to manage earnings. In contrast, Faleye (2007) finds that the relationship between staggered boards and firm valuations is negative, supporting managerial entrenchment hypothesis.

Golden parachute refers to a type of antitakeover provision that requires a company to provide expensive compensation packages to directors if they resign before their term ends due to hostile mergers and acquisitions. In this paper, bonuses ranging from 1 million won to 30 billion won are stated in articles of incorporation of companies adopting golden parachutes. Lambert and Larcker (1985) demonstrate that golden parachutes can help enhance corporate valuations and align managers' interests with shareholders' interests. However, when entrenched managers abuse the adoption of golden parachutes, it can possibly damage a firm's valuation (Buchholtz and Ribbens, 1994).

2.2. Development of hypothesis

Legal experts and practitioners have emphasized the importance of adopting ATPs to protect firms against takeover threat due to lower share quotes during pandemic-induced market crash. This view has also been supported by a group of people who believe ATPs exist to maximize the interests of shareholders, not those of managers (Gottfried and Donahue, 2020). For instance, Eldar and Wittry (2021) find that a set of 53 firms which adopted poison pills in times of pandemic show positive stock market reactions. Conversely, Ding et al. (2021) find that stock returns of companies from various countries which adopted more ATPs like poison pills and staggered boards responded negatively in the same period. This finding can be attributed to managers, with the help of ATPs, making trenches and ineffectively handling the crisis.

Following Scott et al. (2022), I develop two hypotheses to be tested to validate the relationship between ATPs and firm value during normal times and in times of market shock.

H1: ATPs are insignificantly associated with firm value in normal times.

H2: ATPs are positively associated with firm value during Covid-19.

Korea also has mixed findings on ATP valuation effect during normal times; Lee and Kim (2012) and Kim (2009) find that the adoption of ATPs is in general negatively related to firm value while Kim and Song (2021) find that ATPs are positively associated with firm value measured by Tobin's Q. Hence, it would be a pertinent step to also see if ATPs have valid impact on firm value before Covid-19.

3. Data and empirical methodology

3.1. Sample selection

My sample consists of 8,686 firm-quarter observations between the first quarter of 2019 and the first quarter of 2020. I exclude utility firms, financial firms, and quasi-public firms from KOSPI and KOSDAQ listed companies. Possible problems from outliers are deleted by winsorizing continuous variables at the 1% level within each quarter. I obtain the adoption status for supermajority voting rule and golden parachute from Data Analysis, Retrieval and Transfer System (DART) by sorting articles of incorporation from 2019 annual business reports of firms, respectively. I also obtain director tenure data from TS2000 and calculate whether a firm's directors have the same expiration date or not. To briefly present the distribution of ATPs for the sample period, out of 729 KOSPI listed firms, 32 (4%) firms adopt supermajority voting rules. 652 (89%) firms adopt staggered boards and 22 (3%) firms adopt golden parachutes. For 1,236 KOSDAQ listed companies, 161 (13%) firms adopt supermajority voting rule, 1,093 (88%) firms adopt staggered board, and 157 (13%) firms adopt golden parachutes. Combining the two, *ATP Index* takes a value of 0 for 35 firms, 1 for 1,746 firms, 2 for 133 firms and 3 for 51 firms out of 1,965 firms in total.

The reason why the rate of adoption of staggered boards is overwhelmingly higher than that of other two is that I count a firm to have adopted staggered board except for the case when all directors' tenures expire at the same date. There are studies where DART is used to obtain staggered board data, but whether a firm adopted staggered board or not is not clearly identified in articles of incorporation. Notwithstanding the inclusion of staggered board data to the original dataset consisting of supermajority voting rule and

golden parachute, the main results show no big differences. Table 1 provides summary statistics for the variables included in my regression models, and Appendix A provides variable definitions.

I define Covid-19 pandemic as a market shock when firm values are suddenly lower compared to pre-shock values, leading to a high possibility of opportunistic takeovers. Decomposing stock price index-KOSDAQ composite index of 2020, it is suitable to define Covid-19 pandemic as a market shock since the indices showed high volatility during the first quarter of 2020 and sharply declined in March before reaching their bottoms on March 24, 2020 (a date when Korean government announced the provision of Covid-19 rescue package).

3.2. Empirical methodology

To investigate whether ATPs positively or negatively affects firm value on the onset of the crisis, I use the following OLS regression model to estimate variations concerning ATPs:

$$y_{it} = \beta_1 Shock_t + \beta_2 Shock_t \times ATP\ Index_{t-1} + \beta_3 ATP\ Index_{t-1}$$
$$+ \gamma_1 X_{it-1} + \gamma_2 Shock_t \times X_{it-1} + \eta_k \times \omega_t + \varepsilon_{it} \quad\quad (1)$$

where y_{it} is an estimation of value for firm i in calendar-quarter t. Two measures of firm value are implemented: my first measure is Tobin's Q, which is estimated as the ratio of a firm's market value of assets to its book value of assets, and the second one is a firm's buy-and-hold shareholder return in a calendar-quarter.

I define *Shock* as an indicator variable that takes a value of one if the cumulative return on the stock price index-KOSDAQ composite index in a quarter is less than -10%,

which corresponds to the first quarter of 2020 in this paper, and zero otherwise. A main variable is the interaction term between *Shock* and *ATP Index*, which documents how values of firms with different amounts of ATPs are affected differentially by a negative market shock. As previously mentioned, the firm-level ATPs included in my *ATP Index* are supermajority voting rule, staggered board, and golden parachute. Rather than validating which specific ATPs among these three might matter the most or whether the adoption itself matters the most, I measure the degree of protection provided by the number of ATPs respective companies adopted (*ATP Index*), which takes values of zero to three and increases by one for each ATP adopted by a firm as of quarter *t*-1.

In some of the regressions, I include a set of firm-level characteristics (X_{it-1}) estimated in quarter t-1 to provide explanations for shared determinants of firm value that could possibly be associated with the decision of a firm to adopt more or less ATPs: the natural logarithm of book value of assets, the natural logarithm of firm age, return on assets, book leverage ratio, a firm's equity beta, Merton's distance to default, and major shareholder ownership. Changing firm values could be attributable to these factors when firms adopting more or less ATPs have different equity risk and financial distress.

[Insert Table 1]

3.3. Identification strategy

In Panel B of Table 1, I show that relative to firms with ATP index = 0 or 1 (lower values) in the quarter before Covid-19, firms with ATP Index = 2 or 3 (higher values) are

similar in regard to age, return on assets, equity beta, and default likelihood. However, firms with higher ATP index values have bigger firm values, smaller size, higher debt ratios, and lower major shareholder ownership. In all of my regressions, I resolve potential concerns associated with pre-shock discrepancies in these features by measuring β_2 with and without the vector of firm-level control variables (X_{it}-1) and its interaction with *Shock* (*Shock$_t$* × X_{it-1}).

To mitigate the possibility that specific industries might be more affected by the influence of Covid-19, I include industry × quarter fixed effects in my second set of regressions. Furthermore, contingent upon my second measure of firm value, I also include 125 firm characteristic fixed effects to evade that differences in firm characteristics with varying degrees of ATPs do not work as determinants of the results. Following the method of Daniel et al. (1997), I sort the firm sample into quintiles on the basis of their market value of equity, book-to-market ratio, and momentum. When these DGTW fixed effects are interacted with *Shock*, groups can have different mean returns before and on the onset of Covid-19. To make the returns quarterly characteristic-adjusted returns, I additionally include regression models in which I interact these 125 fixed effects with quarter fixed effects to make the returns as quarterly characteristic-adjusted returns. Instead of including DGTW fixed effects, I also control for a firm's market value of equity, book-to-market ratio, and past quarter returns to see if the shareholder return results are still similar in Table 4. Along with these controls, I control for a firm's size, book-to-market, and momentum factor loadings.

4. Main results

4.1. Covid-19, ATPs, and firm value

[Insert Table 2]

In Table 2, my main results investigating the effect of Covid-19 on firm value across firms with different ATP Index values are presented. The first 4 regressions show results with Tobin's Q as y_{it}, while the latter 4 regressions that range from columns 5 to 8 document results with shareholder returns as y_{it}. As previously mentioned, I do not include firm-level control variables in regressions of columns 1 and 5 and add variables with interacted ones with *Shock* term in regressions of columns 2 and 6. I also interact DGTW fixed effects with *Shock* term in columns 5 and 6. The regressions in columns 3-4 and 7-8 incorporate industry × quarter fixed effects, and columns 7 and 8 take one step further by including DGTW × quarter fixed effects.

Table 2 suggest the result of not supporting managerial entrenchment hypothesis. The numbers demonstrate that ATPs have insignificant effect on firm value, with few exceptions of positive relationship during normal times. According to Table 1, companies with higher stock returns, lower major shareholder ownership, and smaller companies have relatively more ATPs, and companies with such firm characteristics can have a positive effect on firm value. A partly positive relationship between ATPs and firm value in column 7 could be attributed to the low stake of major shareholders, and it can be said that the stability of management rights has reduced the short-sighted investment tendency

of managers, which has a positive effect on a firm's long-term performance.

The coefficients on *Shock* in columns 1 and 2 show that firm value decreases by 0.176 and 0.153 during the first quarter of 2020 for firms with zero ATPs. Those numbers represent a 18.5% and 16.1% decrease in firm value compared to 0.949, which represents the mean of its value. The coefficients of 0.296 and 0.005 (t-stats 0.31 and -0.06) on *Shock × ATP Index* states that firms that experience a one standard deviation increase of the ATP Index value (0.15=0.455/3) experience decreases in Tobin's Q by 0.132 (=-0.176 + 0.296 × 0.15) and 0.006 during Covid-19, representing decreases of 13.9% and 0.6% compared to its mean. Seeing the signs of the coefficients change from column 1 to column 2, it can be said that a one standard deviation increase of the ATP index value does not have consistent reduction of sensitivity of Tobin's Q to Covid-19. The results largely correspond to my first hypothesis stating that ATPs are insignificantly associated with firm value during normal times. However, my second hypothesis does not fit well with the results, which can be shown by the coefficients of the interaction term, *Shock$_t$ × ATP Index$_{t-1}$*, that are insignificant across all of the regression models.

The reason why there is no marginal effect regarding ATPs and firm value is because business groups in Korea are de facto independent from the effects of ATPs; management rights are fully established in general and there is no big volatility imposed upon those rights by implementing ATPs. Furthermore, hostile M&A and takeover attempts have been negligible in Korea. The average hostile M&A case is 0.5 cases per year and management rights are virtually free from tender offers. It is true that since the 1997 financial crisis, restrictions on foreign investment limits and stock acquisition were lifted, making Korean capital market to be fully opened. As the share ratio of foreign

capital has soared, domestic blue-chip companies have been considered as threatened by hostile M&As, exacerbating the positive function of capital market expansion and management monitoring. Thus, the business community thought the threat was mainly caused by the absence of appropriate antitakeover provisions and the government made attempts to pass the amendment to the Commercial Law to allow the introduction of poison pill into the articles of incorporation through a special resolution at the general shareholders' meeting. However, it turned out that it is not the case: there is no realistic threat of hostile takeovers in Korea.

[Insert Table 3]

Table 3 presents the same regression coefficients by dividing firms into KOSPI listed companies and KOSDAQ listed companies. The purpose of decomposition is to see if a specific group of firms drives the results demonstrated in Table 2 or show significant discrepancies between the two groups. Table 3 also manifests that ATPs have insignificant effect on firm value, with few exceptions of negative relationship regarding KOSPI firms during a market crash. Although some of the coefficients of ATP Index with Tobin's Q as the dependent variable show positive signs regarding KOSDAQ firms, ATPs are in general not related to firm valuation effect during normal times. KOSDAQ firms having more positive relationships between ATP and firm value might be attributed to their comparatively small size and high returns in normal times.

[Insert Table 4]

Table 4 presents results focusing only on shareholder return as the dependent variable. As briefly explained in section 3, there is an alternative way to impose DGTW fixed effects, which is to control for a firm's size, book-to-market, and momentum factor loadings or control for a firm's market value of equity, book-to-market ratio, and returns in the past quarters. My shareholder returns remain similar with these alternative approaches: the coefficients of the interaction term, $Shock_t \times ATP\ Index_{t-1}$, show insignificant relationship with firm value both during normal times and during Covid-19.

4.2. Robustness tests and additional analyses

[Insert Table 5]

Table 5 presents results from regressions establishing natural logarithms of a firm's market value of equity, market value of assets, book assets, and asset growth as dependent variables, substituting Tobin's Q to check the robustness of Table 2. The result shows no significant differences with the main results in that there is no significant relationship between ATP Index and firm value during normal times. Also, coefficients of the interaction term have statistically insignificant t-statistics with few exceptions of negative signs when the dependent variable is Ln(MVE).

[Insert Table 6]

Table 6 presents the same regression coefficients by dividing firms that have high major shareholder ownership (higher than median 0.463) and firms that have low major shareholder ownership (lower then median 0.463) and also extract respective results of KOSPI listed companies. For firms with high level of major shareholder ownership, the relationship between ATPs and firm value are insignificant during normal times and largely insignificant during market shock. However, for firms with low level of major shareholder ownership, the relationship between ATPs and firm value show some positive signs of coefficients during normal times, especially when firm-level control variables are excluded from the regressions. This might indicate that the level of major shareholder ownership is one of the determinants of firm value. The second hypothesis is also rejected in that the coefficients of the interaction term are negligible.

5. Conclusion

There might be some possible explanations for mixed findings on the valuation effects of ATPs during market shocks: small sample idiosyncrasy, firm-level ATP endogeneity, and the uniqueness of COVID-19 pandemic. However, this paper shows that there is no strong relationship between APTs and firm value both in normal times and on the onset of Covid-19. There have been no results in support of managerial entrenchment hypothesis that ATPs play a role in building trenches that allow managers to pursue their own private benefits. Rather, they partly have a positive relationship with firm value.

Moreover, there is no valuation effect of ATPs during Covid-19, a specific market crash as defined in this paper. It might be due to extremely low possibility of hostile takeover in Korea; it is necessary to consider whether it is beneficial to allow stronger ATPs in Korea in addition to already existing ATPs.

Moreover, Korea's rate of implementation of staggered boards varies by a large amount according to what method does research use to define a firm to have adopted staggered board. It is necessary to establish a unified method to figure out the presence of staggered boards and what role do they play in the business environment. Nevertheless, the inclusion of staggered board does not change This paper does not investigate the effectiveness of individual ATPs, but further research should ponder more on what is more effective and what is less effective.

Table 1

Summary Statistics

This table reports summary statistics for the main variables in my regression models over the period 2019Q1 to 2020Q1 and includes 8,686 firm-quarter observations in Panel A. Continuous variables are winsorized at their 1st and 99th percentiles each quarter. Panel B presents differences in means for firms with a 0 and 1, 2, 3 *ATP Index* in the quarter just before Covid-19 (2019Q4). *ATP Index* is an index of firm-level antitakeover provisions that ranges from 0 to 3 and increases by a value of one for each ATP that was adopted by the firm. Firms with a *Low ATP Index* have a firm-level ATP Index that takes a value of 0 or 1. Firms with a *High ATP Index* have a firm-level ATP Index that takes a value of 2 or 3. t-statistics for a test of the differences in means are calculated from standard errors clustered at the firm level. *, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively. Appendix provides further definitions of the variables.

Panel A: Full Sample

	Mean	Std Dev	P5	P25	P50	P75	P95
Tobin's Q_t	0.949	2.311	0.008	0.064	0.202	0.558	2.890
Shareholder Return$_t$	0.045	0.079	-0.022	0.000	0.013	0.036	0.117
Shock$_t$	0.200	0.894	0.000	0.000	0.000	0.000	1.000
ATP Index$_{t-1}$	1.125	0.455	1.000	1.000	1.000	1.000	2.000
Book Assets$_{t-1}$	1725.7	4347.7	24.102	69.571	151.24	407.94	3450.8
Age$_{t-1}$	6.284	8.599	1.000	4.000	7.000	11.000	22.000
ROA$_{t-1}$	0.014	0.034	-0.021	-0.019	0.005	0.010	0.021
Book Leverage$_{t-1}$	0.748	2.308	0.008	0.063	0.202	0.557	2.881
Beta$_{t-1}$	0.957	0.420	0.194	0.700	0.989	1.246	1.576
Default$_{t-1}$	0.417	0.875	0.048	0.063	0.300	0.493	1.798
Ownership$_{t-1}$	0.455	0.182	0.143	0.310	0.463	0.644	0.670

Panel B: Differences in Means in Quarter Before Covid-19

	Low ATP Index(Obs = 1,781)	High ATP Index(Obs = 184)		
	Mean	Mean	Difference	t-statistic
Tobin's Q_t	0.903	0.951	0.0481	3.16***
Shareholder Return$_t$	0.013	0.029	0.0160	2.98***
Ln(Book Assets$_{t-1}$)	19.343	19.080	-0.2630	-4.64***
Ln(Age$_{t-1}$)	2.080	1.609	-0.4705	-1.04
ROA$_{t-1}$	0.018	0.166	0.1476	0.12
Book Leverage$_{t-1}$	0.402	0.429	0.0272	3.13***
Beta$_{t-1}$	0.863	0.722	-0.1404	0.77
Default$_{t-1}$	0.237	0.178	-0.0587	-0.64
Ownership$_{t-1}$	0.464	0.387	-0.0771	-6.19***

Table 2

Antitakeover Provisions, Covid-19, and Firm Value

This table reports the results from OLS regressions relating firm value and stock returns to Covid-19 and antitakeover provisions over the period 2019Q1 to 2020Q1. The dependent variable *Tobin's Q* in columns 1-4 is the ratio of a firm's market value of assets to its book value of assets. The dependent variable *Shareholder Return* in columns 5-8 is a firm's cumulative stock return over a quarter. *Shock* is an indicator variable that equals one if the cumulative return on the market portfolio over a quarter is less than or equal to -10% (2020Q1), and zero otherwise. *ATP Index* is an index of firm-level antitakeover provisions normalized to be between 0 and 1. Firm-level control variables measured in quarter *t*-1 include: *Ln(Book Assets)*, *Ln(Age)*, *ROA*, *Book Leverage*, *Beta*, *Default*, and *Ownership*. Industry fixed effects and DGTW, which are a set of 125 fixed effects based on forming portfolios (5 × 5 × 5) on size, book-to-market ratios, and momentum are included. Appendix provides further definitions of the variables. t-statistics in parentheses are calculated from standard errors clustered at the firm level and year x quarter. *, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively.

	Tobin's Q_t				Shareholder Return$_t$			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Shock$_t$	-0.176***	-0.153***			-0.151***	-0.150***		
	(-11.50)	(-6.84)			(-4.69)	(-4.66)		
Shock$_t$ × ATP Index$_{t-1}$	0.296	-0.005	-0.120	-0.115	-0.807	-0.629	-0.208	-0.210
	(0.31)	(-0.06)	(-0.86)	(-1.03)	(-0.65)	(-0.50)	(-1.44)	(-1.43)
ATP Index$_{t-1}$	0.016	0.012	0.118	0.020*	0.120	0.097	0.170*	0.112
	(0.18)	(0.90)	(1.21)	(1.71)	(1.13)	(1.11)	(1.89)	(1.06)
Controls$_{t-1}$		√		√		√		√
Shock$_t$ × Controls$_{t-1}$		√		√		√		√
Ind × Qtr FEs			√	√			√	√
DGTW FEs					√	√		
Shock$_t$ × DGTW FEs					√	√		
DGTW × Qtr FEs							√	√
Observations	8,686	8,686	8,679	8,679	8,686	8,686	8,679	8,679
Adjusted R^2	0.242	0.267	0.253	0.288	0.098	0.117	0.153	0.197

Table 3

Antitakeover Provisions, Covid-19, and Firm Value: KOSPI and KOSDAQ

This table reports the results from OLS regressions relating firm value and stock returns to Covid-19 and antitakeover provisions over the period 2019Q1 to 2020Q1. Panel A presents the results of KOSPI listed companies whereas Panel B presents those of KOSDAQ listed companies. The dependent variable *Tobin's Q* in columns 1-4 is the ratio of a firm's market value of assets to its book value of assets. The dependent variable *Shareholder Return* in columns 5-8 is a firm's cumulative stock return over a quarter. *Shock* is an indicator variable that equals one if the cumulative return on the market portfolio over a quarter is less than or equal to -10% (2020Q1), and zero otherwise. *ATP Index* is an index of firm-level antitakeover provisions normalized to be between 0 and 1. Firm-level control variables measured in quarter t-1 include: *Ln(Book Assets)*, *Ln(Age)*, *ROA*, *Book Leverage*, *Beta*, *Default*, and *Ownership*. Industry fixed effects and DGTW, which are a set of 125 fixed effects based on forming portfolios (5 × 5 × 5) on size, book-to-market ratios, and momentum are included. Appendix provides further definitions of the variables. t-statistics in parentheses are calculated from standard errors clustered at the firm level and year x quarter. *, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively.

Panel A: KOSPI

	Tobin's Q_t				Shareholder Return$_t$			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Shock$_t$	-0.189***	-0.210***			-0.271***	-0.274***		
	(-6.00)	(-3.46)			(-2.82)	(-2.83)		
Shock$_t$ × ATP Index$_{t-1}$	0.034	0.028	-0.021	-0.036**	-0.028	-0.024	-0.022	-0.035**
	(0.14)	(0.00)	(-1.20)	(-2.03)	(-1.00)	(-0.86)	(-0.63)	(-1.96)
ATP Index$_{t-1}$	-0.051	-0.070	0.019	0.026**	0.019	0.013	0.026**	0.011
	(-0.30)	(-0.40)	(1.47)	(2.06)	(0.95)	(0.57)	(2.05)	(0.46)
Controls$_{t-1}$		√		√		√		√
Shock$_t$ × Controls$_{t-1}$		√		√		√		√
Ind × Qtr FEs			√	√			√	√
DGTW FEs					√	√		
Shock$_t$ × DGTW FEs					√	√		
DGTW × Qtr FEs							√	√
Observations	3,256	3,256	3,255	3,255	3,256	3,256	3,255	3,255
Adjusted R^2	0.201	0.222	0.118	0.242	0.094	0.102	0.103	0.154

Panel B: KOSDAQ

	Tobin's Q_t				Shareholder Return$_t$			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Shock$_t$	-0.138***	-0.140***			-0.118***	-0.117***		
	(-11.70)	(-6.47)			(-3.70)	(-3.74)		
Shock$_t$ × ATP Index$_{t-1}$	0.042	-0.006	-0.009	-0.009	0.042	0.028	-0.021	-0.030
	(0.39)	(-0.06)	(-1.46)	(-1.43)	(0.29)	(0.20)	(-0.13)	(-0.04)
ATP Index$_{t-1}$	0.005	0.017***	0.010***	0.020***	0.015	0.068	0.012	0.018
	(1.05)	(2.23)	(2.18)	(2.68)	(1.45)	(0.67)	(0.10)	(0.04)
Controls$_{t-1}$		√		√		√		√
Shock$_t$ × Controls$_{t-1}$		√		√		√		√
Ind × Qtr FEs			√	√			√	√
DGTW FEs					√	√		
Shock$_t$ × DGTW FEs					√	√		
DGTW × Qtr FEs							√	√
Observations	5,430	5,430	5,426	5,426	5,430	5,430	5,426	5,426
Adjusted R^2	0.228	0.393	0.228	0.396	0.039	0.041	0.042	0.081

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Table 4

Antitakeover Provisions, Covid-19, and Shareholder Returns

This table reports the results from OLS regressions relating stock returns to Covid-19 and antitakeover provisions over the period 2019Q1 to 2020Q1. The dependent variable *Shareholder Return* is a firm's cumulative stock return over a quarter. *Shock* is an indicator variable that equals one if the cumulative return on the market portfolio over a quarter is less than or equal to -10% (2020Q1), and zero otherwise. *ATP Index* is an index of firm-level antitakeover provisions normalized to be between 0 and 1. *Beta SMB*, *Beta HML*, and *Beta MOM* are the factor betas obtained by regressing a firm's daily stock return in excess of the risk-free rate on the excess market portfolio return, and the returns of the Fama-French small-minus-big and high-minus-low book-to-market portfolios and momentum portfolios over quarter t-1. *Book-to-Market* is the ratio of a firm's book value of equity to market value of equity at the end of quarter t-1. *MVE* is the firm's market value of equity at the end of quarter t-1. Momentum is the firm's nine-month buy-and-hold return over quarter t-4 to t-1. Other firm-level control variables measured in quarter t-1 include: *Ln(Book Assets)*, *Ln(Age)*, *ROA*, *Book Leverage*, *Beta*, and *Ownership*. Industry fixed effects are included. Appendix provides further definitions of the variables. t-statistics in parentheses are calculated from standard errors clustered at the firm level and year x quarter. *, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively.

	Shareholder Return$_t$	
	(1)	(2)
Shock$_t$ × ATP Index$_{t-1}$	-0.901	-0.966
	(-0.72)	(-0.81)
ATP Index$_{t-1}$	0.102	0.103
	(1.16)	(1.22)
Beta SMB$_{t-1}$	-0.507***	
	(-4.49)	
Shock$_t$ × Beta SMB$_{t-1}$	-0.867***	
	(-3.13)	
Beta HML$_{t-1}$	-0.383*	
	(-1.89)	
Shock$_t$ × Beta HML$_{t-1}$	0.131*	
	(1.74)	
Beta MOM$_{t-1}$	0.022	
	(0.99)	
Shock$_t$ × Beta MOM$_{t-1}$	-0.030	
	(-1.08)	
Ln(MVE)$_{t-1}$		0.108**
		(2.13)
Shock$_t$ × Ln(MVE)$_{t-1}$		-0.225***
		(-3.42)
Book-to-Market$_{t-1}$		0.001***
		(5.01)
Shock$_t$ × Book-to-Market$_{t-1}$		-0.000**
		(-2.52)
MOM$_{t-1}$		0.020
		(0.91)
Shock$_t$ x MOM$_{t-1}$		-0.023
		(-0.89)
Controls$_{t-1}$	√	√
Shock$_t$ × Controls$_{t-1}$	√	√
Ind × Qtr FEs	√	√
Observations	8,679	8,679
Adjusted R^2	0.152	0.155

Table 5

Antitakeover Provisions, Covid-19, and Firm Value: Robustness on Tobin's Q

This table reports the results from OLS regressions relating firm value to Covid-19 and antitakeover provisions over the period 2019Q1 to 2020Q1. The dependent variables $Ln(MVE)$ and $Ln(MVA)$ are the natural logarithm of a firm's market value of equity and assets, respectively. $Ln(Book Assets)$ is the natural logarithm of a firm's book value of assets. Assets Growth is a firm's quarterly growth rate in book assets (atq_t/atq_{t-1}-1). *Shock* is an indicator variable that equals one if the cumulative return on the market portfolio over a quarter is less than or equal to -10% (2020Q1), and zero otherwise. *ATP Index* is an index of firm-level antitakeover provisions normalized to be between 0 and 1. Firm-level control variables measured in quarter t-1 include: $Ln(Book Assets)$, $Ln(Age)$, *ROA*, *Book Leverage*, *Beta*, *Default*, and *Ownership*. Industry fixed effects are included. Appendix provides further definitions of the variables. t-statistics in parentheses are calculated from standard errors clustered at the firm level and year x quarter. *, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively.

Panel A: All Sample

	$Ln(MVE)_t$		$Ln(MVA)_t$		$Ln(Book Assets)_t$		Asset Growth$_t$	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Shock$_t$ × ATP Index$_{t-1}$	-0.157	-0.232*	-0.132	-0.144	0.131	0.142	-0.071	-0.001
	(-1.37)	(-1.61)	(-1.34)	(-1.36)	(0.87)	(1.35)	(-0.42)	(-0.79)
ATP Index$_{t-1}$	0.022	0.014	0.023	0.105**	-0.022	-0.011	-0.016	-0.002
	(0.05)	(1.10)	(1.12)	(2.14)	(-1.11)	(-1.12)	(-0.90)	(-0.34)
Controls$_{t-1}$		√		√		√		√
Shock$_t$ × Controls$_{t-1}$		√		√		√		√
Ind × Qtr FEs	√	√	√	√	√	√	√	√
Observations	8,679	8,679	8,679	8,679	8,679	8,679	8,672	8,672
Adjusted R^2	0.513	0.847	0.683	0.926	0.684	0.847	0.021	0.048

Panel B: KOSPI

	$Ln(MVE)_t$		$Ln(MVA)_t$		$Ln(Book Assets)_t$		Asset Growth$_t$	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Shock$_t$ × ATP Index$_{t-1}$	-0.314*	-0.318**	-0.307	-0.086	-0.031	-0.083	-0.025	-0.015
	(-1.65)	(-2.15)	(-0.05)	(-0.15)	(-0.05)	(-0.19)	(-0.08)	(-0.08)
ATP Index$_{t-1}$	0.031	0.026	0.032	0.012	-0.065	-0.012	-0.024	0.019
	(1.29)	(1.02)	(0.62)	(1.17)	(-0.62)	(-1.19)	(-0.14)	(0.21)
Controls$_{t-1}$		√		√		√		√
Shock$_t$ × Controls$_{t-1}$		√		√		√		√
Ind × Qtr FEs	√	√	√	√	√	√	√	√
Observations	3,255	3,255	3,255	3,255	3,255	3,255	3,253	3,253
Adjusted R^2	0.477	0.577	0.440	0.495	0.440	0.595	0.023	0.078

Panel C: KOSDAQ

	Ln(MVE)$_t$		Ln(MVA)$_t$		Ln(Book Assets)$_t$		Asset Growth$_t$	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Shock$_t$ × ATP Index$_{t-1}$	0.087	-0.206*	0.021	-0.042	0.009	0.021	0.012	-0.008
	(0.27)	(-1.92)	(0.73)	(-1.38)	(0.27)	(0.73)	(0.01)	(-0.70)
ATP Index$_{t-1}$	0.019	0.010	0.036	0.083	-0.010	0.004	0.018	0.002
	(0.53)	(1.19)	(0.09)	(1.60)	(-0.59)	(0.09)	(0.94)	(0.15)
Controls$_{t-1}$		√		√		√		√
Shock$_t$ × Controls$_{t-1}$		√		√		√		√
Ind × Qtr FEs	√	√	√	√	√	√	√	√
Observations	5,424	5,424	5,424	5,424	5,424	5,424	5,419	5,419
Adjusted R^2	0.789	0.866	0.434	0.514	0.564	0.632	0.144	0.222

Table 6

Antitakeover Provisions, Covid-19, and Firm Value: Ownership

This table reports the results from OLS regressions relating firm value and stock returns to Covid-19 and antitakeover provisions over the period 2019Q1 to 2020Q1. Panel A presents the results of companies who have higher ownership ratio than the median ratio whereas Panel B presents those of companies who have lower ownership ratio than the median ratio. Panel C and D present only the results of KOSPI listed companies from two datasets of Panel A and B, respectively. The dependent variable *Tobin's Q* in columns 1-4 is the ratio of a firm's market value of assets to its book value of assets. The dependent variable *Shareholder Return* in columns 5-8 is a firm's cumulative stock return over a quarter. *Shock* is an indicator variable that equals one if the cumulative return on the market portfolio over a quarter is less than or equal to -10% (2020Q1), and zero otherwise. *ATP Index* is an index of firm-level antitakeover provisions normalized to be between 0 and 1. Firm-level control variables measured in quarter *t*-1 include: *Ln*(*Book Assets*), *Ln*(*Age*), *ROA*, *Book Leverage*, *Beta*, *Default*, and *Ownership*. Industry fixed effects and DGTW, which are a set of 125 fixed effects based on forming portfolios (5 × 5 × 5) on size, book-to-market ratios, and momentum are included. Appendix provides further definitions of the variables. t-statistics in parentheses are calculated from standard errors clustered at the firm level and year x quarter. *, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively.

Panel A: High Ownership

	Tobin's Q_t				Shareholder Return$_t$			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Shock$_t$	-0.236***	-0.170***			-0.157***	-0.155***		
	(-6.25)	(-4.60)			(-4.54)	(-4.45)		
Shock$_t$ × ATP Index$_{t-1}$	-0.028	-0.010	-0.024	-0.015*	0.010	0.018	-0.023**	-0.021*
	(-0.21)	(-1.56)	(-0.55)	(-1.75)	(0.56)	(0.67)	(-2.36)	(-1.70)
ATP Index$_{t-1}$	0.043	0.099	0.044	0.016	0.021*	0.013	0.014	0.016
	(1.18)	(1.31)	(1.24)	(1.48)	(1.74)	(0.93)	(0.72)	(1.28)
Controls$_{t-1}$		√		√		√		√
Shock$_t$ × Controls$_{t-1}$		√		√		√		√
Ind × Qtr FEs			√	√			√	√
DGTW FEs					√	√		
Shock$_t$ × DGTW FEs					√	√		
DGTW × Qtr FEs							√	√
Observations	4,343	4,343	4,340	4,340	4,343	4,343	4,340	4,340
Adjusted R^2	0.153	0.318	0.152	0.325	0.057	0.064	0.078	0.131

Panel B: High Ownership (KOSPI)

	Tobin's Q_t				Shareholder Return$_t$			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Shock$_t$	-0.160***	-0.225***			-0.210***	-0.228***		
	(-7.58)	(-4.99)			(-6.25)	(-8.01)		
Shock$_t$ × ATP Index$_{t-1}$	-0.038	-0.009	-0.044	-0.016	0.033	0.037	-0.027***	-0.016***
	(-0.25)	(-1.31)	(-0.77)	(-1.46)	(0.81)	(0.94)	(-2.84)	(-2.63)
ATP Index$_{t-1}$	0.044	0.011	0.044	0.001*	0.020	0.049	0.017	0.014
	(1.06)	(1.09)	(1.34)	(1.80)	(0.75)	(0.36)	(1.16)	(1.33)
Controls$_{t-1}$		√		√		√		√
Shock$_t$ × Controls$_{t-1}$		√		√		√		√
Ind × Qtr FEs			√	√			√	√
DGTW FEs					√	√		
Shock$_t$ × DGTW FEs					√	√		
DGTW × Qtr FEs							√	√
Observations	1,927	1,927	1,926	1,926	1,927	1,927	1,926	1,926
Adjusted R^2	0.157	0.340	0.158	0.340	0.078	0.076	0.100	0.134

Panel C: Low Ownership

	Tobin's Q_t				Shareholder Return$_t$			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Shock$_t$	-0.209***	-0.250***			-0.252***	-0.252***		
	(-9.80)	(-4.58)			(-6.54)	(-2.62)		
Shock$_t$ × ATP Index$_{t-1}$	0.067	-0.013	0.021	-0.029	-0.031	-0.030	-0.020	-0.028
	(0.52)	(-1.31)	(0.17)	(-1.16)	(-0.79)	(-0.75)	(-0.90)	(-1.53)
ATP Index$_{t-1}$	0.097	0.112	0.070*	0.020***	0.020***	0.125	0.105*	0.097
	(1.04)	(1.59)	(1.74)	(2.37)	(2.91)	(1.02)	(1.68)	(1.30)
Controls$_{t-1}$		√		√		√		√
Shock$_t$ × Controls$_{t-1}$		√		√		√		√
Ind × Qtr FEs			√	√			√	√
DGTW FEs					√	√		
Shock$_t$ × DGTW FEs					√	√		
DGTW × Qtr FEs							√	√
Observations	4,343	4,343	4,339	4,339	4,343	4,343	4,339	4,339
Adjusted R^2	0.219	0.287	0.228	0.294	0.041	0.074	0.099	0.188

Panel D: Low Ownership (KOSPI)

	Tobin's Q_t				Shareholder Return$_t$			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Shock$_t$	-0.234***	-0.260***			-0.217***	-0.230***		
	(-13.00)	(-9.20)			(-9.41)	(-5.21)		
Shock$_t$ × ATP Index$_{t-1}$	0.092	-0.031	-0.006	-0.024	-0.031	-0.025	-0.021	-0.023
	(0.30)	(-1.15)	(-0.63)	(-1.55)	(-0.81)	(-0.66)	(-0.74)	(-1.43)
ATP Index$_{t-1}$	0.021	0.028	0.018	0.024*	0.022*	0.150	0.111***	0.025*
	(0.94)	(1.42)	(1.11)	(1.65)	(1.87)	(0.55)	(2.73)	(1.70)
Controls$_{t-1}$		√		√		√		√
Shock$_t$ × Controls$_{t-1}$		√		√		√		√
Ind × Year × Qtr FEs			√	√			√	√
DGTW FEs					√	√		
Shock$_t$ × DGTW FEs					√	√		
DGTW × Qtr FEs							√	√
Observations	1,329	1,329	1,329	1,329	1,329	1,329	1,329	1,329
Adjusted R^2	0.220	0.276	0.224	0.288	0.082	0.093	0.101	0.152

Appendix A. variable definitions

This table provides the definitions for the main variables used in this study.

Variable	Definition
Age	One plus the number of years that a firm has been publicly traded, determined based on the first date the firm has non-missing returns in the DataGuide database.
ATP Index	An index that ranges from 0 to 3. The index increases by a value of one for each ATP law that was adopted by the firm. ATP laws are supermajority voting rule, staggered board, and golden parachute. In the regressions, I normalize the index to have a value
Beta	A firm's stock return beta estimated from the CAPM using a firm's daily excess return less the risk-free rate over quarter t-1 and the returns on the value-weighted market portfolio less the risk-free rate (a firm must have 21 days of returns to enter the
Book-to-Market	Book value of equity scaled by markets scaled by market value of equity. I calculate a firm's market value using prices and shares from DataGuide as of the last day before each calendar quarter (January, April, July, and October). I match these values to the firm's most recent reported quarterly book value of assets and equity such that the fiscal period ends before the start of a calendar quarter (January, April, July, and October).
Book Assets	Book value of assets (in thousands and 2019 won).
Book Leverage	Value of debt in current liabilities plus long-term debt scaled by book value of assets.
Default	A firm's average expected default likelihood over quarter t-1 based on the Merton distance to default model, as implemented in Bharath and Shumway (2008).
Ownership	Percentage of a firm's shares outstanding owned by major shareholders at the end of quarter t-1.
Momentum	A firm's cumulative stock return over the three calendar quarters ending on the last day before the start of a calendar quarter (January, April, July, and October). We require a firm to have stock returns for all nine months over the three quarters.
ROA	Operating income before depreciation scaled by book assets.
Shareholder Return	A firm's cumulative stock return over a calendar quarter, with the returns ending the last day of each calendar quarter (March, June, September, and December). We require a firm to have stock returns for all three months over the quarter.
Shock	An indicator variable that equals one if the cumulative return on the stock price index-KOSDAQ composite index over a quarter is less than or equal to -10%, and zero otherwise. Cumulative returns over a quarter end the last day of each calendar quarter (March, June, September, and December).
Tobin's Q	Market value of assets scaled by book value of assets. Market value of assets equals market value of equity plus book value of assets minus book value of equity. I calculate a firm's market value using prices and shares from DataGuide as of the last day of each calendar quarter (March, June, September, and December). I match these values to the firm's most recent reported quarterly book value of assets and equity such that the fiscal period ends on or before the end of a calendar quarter (March, June, September, and

References

Scott Guernsey, Simone M. Sepe, Matthew Serfling, Blood in the water: The value of antitakeover provisions during market shocks, Journal of Financial Economics 143: 1070-96.

Wenzhi Ding, Ross Levine, Chen Lin, Wensi Xie, Corporate immunity to the COVID-19 pandemic, Journal of Financial Economics 141: 802-830.

Ofer Eldar, Michael D. Wittry, Crisis Poison Pills, Review of Corporate Finance Studies, forthcoming, 13-25.

Sreedhar T Bharath and Tyler Shumway, Forecasting Default with the KMV-Merton Model, 2004.

Baek, J.S., Kang, J.K., Park, K.S., Corporate Governance and firm value: evidence from the Korean financial crisis, Journal of Financial Economics 71: 265-313.

Lee Eun-suh, Yu So-Jin, Lee Man-Woo, Antitakeover Provisions and Discretionary Accruals, Korea International Accounting Review, Vol. 66, 2016, 201-211.

Sojin Yu, Eunsuh Lee, Junyoup Lee, CEO Equity Incentive and Antitakeover Provision, Korea International Accounting Review, Vol.83, 2019, 232-241.

Sunwoo Hwang and Woochan Kim, Managerial Entrenchment of Anti-Takeover Devices: Quasi-Experimental Evidence from Korea, 2011, 4-10.

Todd A. Gormley, David A. Matsa, Playing it safe? Managerial preferences, risk, and agency conflicts, Journal of Financial Economics 122: 431-455.

Frank H. Easterbrook, Daniel R. Fischel, Corporate Control Transactions, Chicago Unbound, 1981.

Paul Gompers and David Scharfstein, Performance persistence in entrepreneurship, Journal of Financial Economics 96: 18-32.

Harry DeAngelo and Edward M. Rice, Antitakeover charter amendments and stockholder wealth, Journal of Financial Economics 11: 329-359.

Randall A. Heron and Erik Lie, On the Use of Poison Pills and Defensive Payouts by Takeover Targets, The Journal of Business 79: 1783-1808.

Yijiang Zhao, Kung H. Chen, The Influence of Takeover Protection on Earnings Management, Journal of Business Finance & Accounting 35: 347-375.

Olubunmi Faleye, Classified boards, firm value, and managerial entrenchment, Journal of Financial Economics 83: 510-529.

Richard A. Lambert and David F. Larcker, Golden parachutes, executive decision-making, and shareholder wealth, Journal of Accounting and Economics 7: 179-203.

Ann K. Buchholtz and Barbara A. Ribbens, Role of Chief Executive Officers in Takeover Resistance: Effects of CEO Incentives and Individual Characteristics, The Academy of

Management Journal 37: 554-579.

Keith Gottfired, Sean Donahue, The Impact of COVID19 on Shareholder Activism, Harvard Law School Forum on Corporate Governance, 2020.

Daniel, Grinblatt, Titman, Wermers, Measuring Mutual Fund Performance with Characteristic-Based Benchmarks, Journal of Finance 52: 1035-1058.

Andrei Shleifer and Lawrence H. Summers, Breach of Trust in Hostile Takeovers, University of Chicago Press Corporate Takeovers: Causes and Consequences: 33-68.

박동빈, 국내 상장기업 경영권 방어조항 도입 현황, 한국기업지배구조원, 2019.

김우찬, 황선우, 경영권 방어장치 도입의 공시효과와 기업이윤, 현금배당, 상장폐지에 미치는 영향, 경제개혁연구소, 2011-2호, 2011, 12.

김영환, 송동엽, 경영권 방어수단, 경영위험, 기업가치에 관한 연구, 재무관리연구, 제38권 제2호, 2021, 177-185.

이철수, 김현아, 경영권 방어수단 도입이 기업가치에 미치는 영향, 경영교육연구, 제27권 제1호, 2012, 53-81.

정성창, 김영환, 경영권 방어수단 확보와 기업의 특허등록, 대한경영학회지, 제28권 제2호, 2015, 327-347.

강정민, 적대적 공개매수 위협 과연 어느 정도인가? 2010~2018년 공개매수 신고서 분석, 경제개혁연구소, 2019-01호, 2019, 1-9.

엄수진, 국내 상장사의 다양한 M&A 방어수단 도입현황, 한국기업지배구조원, 70-87.

국문 초록

본 연구는 시장이 충격을 받아 주가 하락으로 적대적 M&A의 위협이 커질 시 경영권 방어수단을 많이 도입할수록 기업가치를 보호할 수 있는지 연구하였다. 기존 연구들과는 달리 최초로 한국시장에서 Covid-19 시장 충격 전 그리고 동안에 경영권 방어수단이 기업가치에 미치는 영향에 대해 테스트를 했다는 점에 의의를 둔다. 본 논문의 주요한 발견은 다음과 같다. 첫째, 시장 충격이 없는 보통의 기간(Covid-19 전) 동안 경영권 방어수단이 기업가치와 양의 관계를 보이는 부분들이 있기는 하지만 robust하지 않다. 둘째, Covid-19 시장 충격 동안 경영권 방어수단의 도입과 기업가치 간 관계는 무의미하다. 즉 기업의 주가가 하락하면 적대적으로 인수될 가능성이 커지는데, 이 때 경영권 방어수단이 공개매수 시도를 막아 기업가치를 부양하는 효과가 없는 것으로 밝혀졌다. 셋째, 초다수결의제와 황금낙하산만을 대상으로 한 연구 결과와 이에 시차임기제를 추가했을 시의 연구 결과는 큰 차이를 보이지 않았다.

주요어: 경영권 방어수단, Covid-19 시장 충격, 기업가치

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