THE IMPACT OF EIOPA STATEMENT ON INSURERS' DIVIDENDS: EVIDENCE FROM EQUITY MARKET

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ABSTRACT

In an environment of a quick unfolding crisis with high uncertainty, the European Insurance and Occupational Pensions Authority issued on 2nd April 2020 a statement requesting (re)insurers to suspend all discretionary dividend distributions and share buy backs aimed at remunerating shareholders. Although, this should have a positive impact on the overall financial stability of the sector, it could have a negative impact on insurers' equity prices as a response to the published statement. Hence, this article empirically investigates this potential effect using an event study methodology. Although, negative drops were observed in some cases, the obtained empirical results suggest that they were not statistically significant for the overall European insurers' equity market when considering the event windows covering a few days after the publication.

4. INTRODUCTION

The insurance sector's financial stability is essential in order to ensure the access to, and continuity of, insurance services, safeguarding the ability of the industry to continue to perform its role as risk transfer mechanism from citizens and businesses and its capacity to mobilize savings and invest them in the real economy. This objective requires that (re)insurers take all necessary steps to continue to ensure a robust level of own funds to be able to meet promises to policyholders and absorb potential losses. In the wake of the coronavirus outbreak, safeguarding the stability of the sector is relevant not only from a business continuity perspective but also from a forward-looking perspective, as the sector might play a key role in supporting the economic recovery via long-term investments after the crisis. Towards this aim, the European Insurance and Occupational Pensions Authority (EIOPA) has urged insurance companies to halt dividends, buybacks and bonuses. In its statement on Thursday 2nd April evening, EIOPA said that insurance companies had to take all necessary steps to continue to ensure a robust level of own funds to be able to protect policyholders and absorb potential losses. Against this background of uncertainty, EIOPA urged that at the current situation (re)insurers temporarily suspend all discretionary dividend distributions and share buybacks aimed at remunerating shareholders.

111 European Insurance and Occupational Pensions Authority (EIOPA).

Shares in insurance companies have fallen sharply as a response to the outbreak of Covid-19. Apart from the potential for large claims, investors have been worried about the impact of the economic slowdown on the investment portfolios that the insurers hold against their liabilities. The EIOPA statement that aimed to cut dividends could potentially negatively affect insurers' share prices further as some investors might hold insurance companies largely for their pay-outs rather than capital gains that are currently quite low. However, it is assumed that despite this negative effect for the investors in short-term, it should be rather positive news for medium and long-term investors that are maximizing their profit over longer horizon. The reason is that preserving firms' capital in the time of financial and economic crises will allow company to move through this period without any serious consequences that might lead, in extreme case, to default. In addition, such a statement could help to reduce uncertainty on potential inadequate solvency positions that would not allow absorbing the shocks implied by potential future negative consequences of the Covid-19 outbreak.

The aim of this article is to provide an empirical assessment of potential share prices drops as a response to the published EIOPA statement. This could be done via an event study framework to statistically test whether any potential drops in equity prices are statistically significant. The article is organised as follows. First, the literature related to this study is presented. Second, the theoretical framework applied to test the mentioned hypothesis is described. Third, the data sample for the empirical part is outlined. Fourth, the results of the empirical analysis are introduced. Finally, the last section concludes based on the obtained results.

5. LITERATURE REVIEW

This study could be linked to the empirical research dealing with the investors' reactions on disclosure and announcements of supervisory actions. An impressive number of empirical studies have been written on the relationship between disclosure practices and stock return volatility in the last several years. Some studies show that disclosure can mitigate uncertainty and volatility on equity markets (Beltratti, 2011; Ellahie, 2012; Petrella and Resti, 2013; Morgan et al., 2014), other studies find that under certain preconditions, disclosure can cause higher volatility, as market participants might misunderstand incoming information (Baumann and Nier, 2004). Under the favourable scenario, disclosure should lead to a decline in the stock return volatility and cost of capital, while unfavourable disclosure increases risk measures (Kothari et al., 2009). Studies dedicated to macro prudential analysis observe rather limited or no effect of stress test disclosure results or announcements of supervisory actions, e.g. Ellahie (2012) find that the announcement of forthcoming public disclosure does not have any significant impact on equities of Eurozone banks. Schaefer et al (2013) report the reaction of the stock returns of European and US banks to several regulatory reforms and they find only a mild effect on equity prices. The observed volatility shows the instant reaction of financial markets during an announcement day while return provides only the outcome at the end of the trading day. A quantification of volatility reaction could become a powerful tool for both policy makers and practitioners as it provides a follow-up information to any statement about volatility of an asset price in response to announcements (Neugebauer 2019).

The importance of communication by supervisory authority is well-established in the literature (Blinder et al. 2008, Ehrmann 2019). Gertler and Horvath (2018) indicate stock market responses in relation to various communication tools around scheduled meetings such as media interviews, speeches, and conference discussions. Scholars suggest certain challenges might arise while assessing the impact of supervisory communication on asset prices (Alan et al. 2008). First, there are numerous unobservable factors that might affect asset prices. This means that observed volatility might be the result of shocks other than the communication. Second, the communication may be endogenous. Supervisory authorities might communicate at a certain time period due to a sudden change in the economic outlook. In this case, the prices of financial variables might be more volatile, but not mainly due to statements (Reeves and Sawicki 2007). Ehrmann et al. (2007c) suggest that such endogeneity is less of a problem when the dates of statements known in advance.

Several research papers report that economic and market conditions affect investor reactions to identical events (Gallo et al. 2016, Gupta et al. 2018). These studies suggest that the recent state of the economy or the recent direction of the market may have a bearing on the extent to which investors react to new information. Scott Docking and Koch (2005) conduct an event study to assess investor reaction to dividend increases or decreases. They find greater volatility in response to changes in dividend payment patterns when the changes were not in line with recent market trends during volatile times.

Insurance industry is typically devoted to relevant risk management activities, and there is rising need for financial markets and other stakeholders to analyse how risk information is disclosed and risk management activities are communicated (Malafronte et al. 2018). Although assessing the impact of regulatory statements on financial market have received wide attention of scholars (Bruno, et al. 2013, Neanidis 2019), there is still relatively limited research done on the regulatory statements that have different extend of binding. This article contributes into the emerging field of literature dealing with recommendations or advisory statements of supervisory authorities, in particular for insurance companies. Moreover, the growing importance of non-banking sector have an increasing impact on the economy. Hence, the announcement of supervisory authority for insurance sector may have effects not only on the insurance sector itself but also on the overall economy. While vast majority of the literature in this area focus on banking sectors, very limited was done for insurers. In this respect, this study contribute to the research that makes regulators and policy makers aware of potential consequences of supervisory announcements and communications on financial stability.

6. METHODOLOGY

The assessment of potential impact of the EIOPA statement is conducted via an event study that measures the impact of an economic event, such as the publication of EIOPA statement, on equity prices by using financial market data. In this respect, we follow an event study methodology described e.g. in Brown and Warner (1985), Thompson (1995), and MacKinlay (1997). Furthermore, Boehmer, Mucumeci and Poulsen (BMP) test, which is also known as the standardised cross-sectional test, is employed (Boehmer et al, 1991). However, when a specific event has slightly cross-correlation, the test statistics will reject the null hypothesis of zero average abnormal return too regularly when it is true (Kolari and Pynnönen (2010). Hence, the issue of cross-sectional correlation in event studies with partially overlapping event windows is addressed following Kolari and Pynnonen (2010). Given the considered event window is identical for all companies, the Adjusted Boehmer, Mucumeci and Poulsen (Adj-BMP) test, that is more robust test statistic, is used (Kolari and Pynnönen, 2010). This test takes cross-correlation and inflation of event-date variance into account in improving the power of test statistics. Apart from the mentioned parametric methods, a non-parametric rank test proposed by Corrado (1989) is used as a robustness check.

The investigated event happened on 2nd April in the evening after market close. Hence, the event day could be denoted as 3rd April. Given the rationality in equity markets, the effects of an event should be reflected in the observed security prices, and a measure of the event's economic impact can be constructed using equity prices collected over a relatively short period. Therefore, the event window is set up from Thursday 2nd April denoted as T_1 to Tuesday 14th April denoted as T_2 corresponding to 7 working days – 1 day before the event and 5 days after. In this way, we also include the first working day after the Easter holiday.

Event studies assess the impact of the investigated event on equity prices by calculating their abnormal returns as the difference between the observed and expected returns. The observed daily logarithmic return of insurer *i* at time *t* is calculated as follow

$$R_{i,t} = \ln(P_{i,t}/P_{i,t-1}) - 1 \quad (1)$$

where

$P_{i,t}$ is equity closing price of insurer *i* at time *t*.

The expected returns of insurers' equities are estimated via simple ordinary least squares (OLS) regression employing the STOXX Europe 600 Index as a proxy for market return using daily data for the period prior the event window that we can denote as $[T_0 T_1 - 1]$. In concrete, the period since the beginning of 2017 until 1st April 2020 was employed.

The abnormal return of insurers *i* at time *t* can be expressed as

$$AR_{i,t} = R_{i,t} - (\alpha_i + \beta_i R_{m,t}) \quad (2)$$

where

$R_{m,t}$ is daily logarithmic market return at time *t* and α_i and β_i (representing beta of insurer *i*) are the estimated parameters from OLS regression.

Furthermore, the abnormal return observed trough the time and across the securities are aggregated. Given *n* insurers, the cumulative average abnormal return for the event window is calculated as

$$\overline{\mathrm{CAR}} = \sum_{t=T_1}^{T_2} AAR_t \quad (3)$$

where

$$AAR_t = \frac{1}{n}\sum_{i=1}^{n} AR_{i,t} \quad (4)$$

where T_1, T_2 represents the first and the last day of the considered event window.

The null hypothesis that the cumulative average abnormal returns are zero could be tested via the following test statistic (MacKinlay, 1997).

$$t_S = \frac{\overline{\mathrm{CAR}}}{\sqrt{var(\overline{\mathrm{CAR}})}} \quad (5)$$

where the variance of abnormal cumulative returns could be calculated as

$$\mathrm{var}(\overline{\mathrm{CAR}}) = var(AAR_t)L = \sigma^2 L \quad (6)$$

where L is the length of event window and σ^2 corresponds to a standard error of the average abnormal return cross all insurers estimated on the sample prior the event window corresponding to the interval $[T_0, T_1]$.The test statistic t_s is asymptotically standard normal distributed under the null hypothesis.

However, Brown and Warner (1985) showed that the cross-sectional test is prone to event-induced volatility. Thus, the test has low power. Hence, a standardized cross-sectional test (BMP test) proposed by Boehmer, Musumeci and Poulsen (1991), that is robust to the variance induced by the event, is employed. The test statistics can be defined as

$$t_{BMP} = \frac{\overline{\mathrm{SCAR}}}{\sqrt{var(\overline{\mathrm{SCAR}})}} \quad (7)$$

where

$$\mathrm{var}(\overline{\mathrm{SCAR}}) = var(SAAR_t)L = \sigma_s^2 L \quad (8)$$

where σ_s^2 corresponds to a standard error of the average standardised abnormal return cross all insurers estimated on the sample prior the event window corresponding to the interval $[T_0, T_1]$. The test statistic t_{BMP} is asymptotically standard normal distributed under the null hypothesis. Furthermore,

$$\overline{\mathrm{SCAR}} = \sum_{t=T_1}^{T_2} SAAR_t \quad (9)$$

$$SAAR_t = \frac{1}{n}\sum_{i=1}^{n} SAR_{i,t} \quad (10)$$

$$SAR_{i,t} = \frac{AR_{i,t}}{\sqrt{var(AR_i)}} \quad (11)$$

where $\sqrt{var(AR_i)}$ is a standard error of the abnormal return corresponding to a standard error of the model for expected market returns for insurer *i* estimated by OLS regression.

Furthermore, the Adj-BMP test is performed using the following statistics.

$$t_{AD\_BMP} = t_{BMP}\sqrt{\frac{1-\bar{r}}{1+(n-1)\bar{r}}} \quad (12)$$

where $\bar{r}$ is the average of the sample cross-correlations of the estimation period residual – corresponding to the period $[T_0, T_1]$.

The test statistic t_{AD_BMP} is asymptotically distributed as $N(0,1 + (n\text{-}1)\bar{r})$ under the null hypothesis.

Moreover, as a robustness check, non-parametric rank test proposed Corrado (1989) for a single day and further elaborated by Campell and Wasley (1993) for a multiday event period is used. In a first step, we transforms abnormal returns into ranks. Ranking is done for all abnormal returns of both the event and the estimation period. If ranks are tied, the midrank is used.

$$K_{i,t} = \frac{rank(AR_{i,t})}{1+M+L} \quad (13)$$

where M is the number of observations in the estimation period $[T_0, T_1]$.

The null hypothesis that the cumulative average abnormal return is zero could be tested via the following test statistic.

$$t_{RANK} = \sqrt{L}\frac{\bar{K}_{T_1,T_2}-0.5}{\sqrt{var(\bar{K})}} \quad (14)$$

where $var(\bar{K})$ represents variance of average rank of abnormal returns estimated for both estimated period and event window corresponding to the period $[T_0, T_2]$.

$$\bar{K}_{T_1,T_2} = \frac{1}{L}\sum_{t=T_1}^{T_2} \bar{K}_t \quad (15)$$

$$\bar{K}_t = \frac{1}{n}\sum_{i=1}^{n} K_{i,t} \quad (16)$$

This test statistic t_{RANK} is asymptotically standard normal distributed under the null hypothesis.

7. DATA SAMPLE

The impact of the EIOPA statement was tested for equity prices of 33 European (re) insurers listed via the described methodology. Simple descriptive statistics show that negative abnormal returns were observed in most cases (for almost 85% of the sample) on Friday 3rd April after the publication of the statement with average value -3.23%. However, many of those daily negative abnormal returns were recovered by positive abnormal returns in two subsequent working days with average values 0.67% and 2.55% respectively (see table below). The positive trend in market performance was changed again on 8th April with average negative return 1.08%.This losses were again received on 9th April to move again in negative territory on 14 April with average market drop by 2.11%

Table 1: Abnormal returns for 33 European (re)insurers listed

				Abnormal return							
Business line	**Coun-try**	**Insurance com-pany**	**Beta**	**02-Apr**	**03-Apr**	**06-Apr**	**07-Apr**	**08-Apr**	**09-Apr**	**14-Apr**	**Cumu-lative**
Life	NL	Aegon NV	1.599	3.33%	-7.24%	0.98%	3.84%	-0.62%	2.31%	-5.12%	-2.53%
	IT	Poste Italiane SpA	1.162	4.48%	1.83%	-1.65%	-0.77%	1.42%	-1.51%	-0.37%	3.44%
	NL	NN Group NV	1.178	2.39%	-5.54%	-0.68%	1.60%	-0.25%	1.55%	-4.31%	-5.23%
	CH	Swiss Life Holding AG	1.104	-0.69%	-0.74%	1.25%	2.17%	-0.73%	0.76%	-1.64%	0.39%
	NO	Storebrand ASA	1.197	-2.97%	-1.74%	4.46%	2.13%	-4.67%	-1.87%	3.35%	-1.32%
	FR	CNP Assurances SA	1.480	5.45%	-8.51%	-0.52%	6.71%	-3.97%	2.77%	-6.06%	-4.13%
	GB	Phoenix Group Holdings PLC	1.079	-4.11%	-7.20%	-1.46%	2.69%	-0.66%	4.01%	-2.41%	-9.14%
	GB	Legal & General Group PLC	1.373	2.88%	-9.24%	10.40%	6.39%	-3.84%	6.17%	-3.90%	8.85%
	GB	Prudential PLC	1.512	-1.23%	-0.92%	4.88%	3.05%	-3.68%	-2.00%	-4.14%	-4.05%
	GB	Old Mutual Ltd	1.091	-10.82%	-1.55%	-3.83%	10.79%	-1.97%	-0.65%	3.01%	-5.02%
	GB	St. James's Place PLC	1.161	-0.06%	-2.80%	-0.71%	2.74%	1.72%	3.15%	-0.33%	3.70%
Composite	NO	Gjensidige Forsikring ASA	0.718	-1.54%	0.08%	-0.51%	-1.38%	1.67%	-1.16%	4.88%	2.04%
	FR	AXA SA	1.187	-1.14%	-3.49%	1.28%	1.85%	-0.40%	-0.37%	-0.95%	-3.23%
	IT	Assicurazioni Generali SpA	0.932	1.54%	-0.27%	-0.50%	0.16%	-0.01%	-0.79%	1.45%	1.58%
	BE	Ageas SA	1.076	11.58%	-4.37%	-6.66%	-4.09%	0.48%	-1.06%	-5.09%	-9.21%
	CH	Baloise Holding AG	0.974	-0.67%	1.18%	1.07%	5.30%	-1.18%	1.96%	-0.49%	7.15%
	FI	Sampo plc	1.062	5.86%	-3.49%	-2.74%	3.23%	-0.85%	0.11%	1.45%	3.58%
	ES	Mapfre SA	1.007	0.40%	-1.40%	2.78%	3.22%	-1.95%	1.80%	-0.81%	4.04%
	CH	Zurich Insurance Group AG	1.105	0.43%	-8.40%	-2.68%	0.53%	-0.66%	0.01%	-0.83%	-11.60%
	NL	ASR Nederland NV	1.158	2.57%	-5.15%	-1.35%	1.44%	-1.63%	3.47%	-1.60%	-2.27%
	DE	Allianz SE	1.232	-1.97%	-0.24%	1.35%	0.35%	-1.07%	0.45%	0.90%	-0.23%
	CH	Helvetia Holding AG	1.005	-0.15%	-2.22%	3.75%	2.23%	-0.51%	0.44%	2.70%	6.24%
	GB	Aviva PLC	1.114	2.93%	-5.52%	1.16%	6.07%	-4.99%	2.57%	-3.91%	-1.68%

				Abnormal return							
Business line	**Coun-try**	**Insurance com-pany**	**Beta**	**02-Apr**	**03-Apr**	**06-Apr**	**07-Apr**	**08-Apr**	**09-Apr**	**14-Apr**	**Cumu-lative**
Non-Life	GB	Beazley PLC	0.747	2.27%	-10.67%	0.20%	6.94%	7.43%	1.37%	-8.80%	-1.25%
	GB	Admiral Group PLC	0.625	0.05%	-1.91%	-3.47%	0.12%	-0.05%	-0.47%	-0.62%	-6.36%
	BM	Hiscox Ltd	0.686	-3.70%	-1.96%	2.10%	4.57%	1.61%	7.06%	-20.39%	-10.72%
	DK	Tryg A/S	0.601	2.53%	0.13%	0.29%	3.45%	0.54%	-0.98%	1.82%	7.78%
	GB	RSA Insurance Group PLC	0.971	-0.38%	-5.35%	0.98%	2.03%	-5.63%	-1.51%	-3.28%	-13.13%
	GB	Direct Line Insurance Group PLC	0.715	-4.11%	-5.20%	5.44%	3.39%	-8.26%	3.24%	-5.23%	-10.73%
Re-insurance	FR	Scor SE	1.198	2.57%	-2.95%	4.01%	-0.58%	2.25%	3.01%	-5.00%	3.29%
	CH	Swiss Re AG	1.085	2.28%	0.63%	-0.01%	1.68%	-1.60%	1.61%	-0.64%	3.94%
	DE	Muenchener Rueckver-sicherungs Gesellschaft AG in Muenchen	1.153	0.43%	-2.23%	1.89%	1.19%	-0.68%	1.11%	-0.41%	1.29%
	DE	Hannover Rueck SE	1.107	0.84%	-0.08%	0.58%	1.11%	-2.75%	2.60%	-3.02%	-0.72%
Average			**1.073**	**0.64%**	**-3.23%**	**0.67%**	**2.55%**	**-1.08%**	**1.19%**	**-2.11%**	**-1.37%**
Average cumulative				**0.64%**	**-2.58%**	**-1.92%**	**0.63%**	**-0.44%**	**0.74%**	**-1.37%**	
Share of negative returns				**42.42%**	**84.85%**	**42.42%**	**12.12%**	**75.76%**	**33.33%**	**75.76%**	**57.58%**

Source: Thomson Reuters
Note: Abnormal returns are estimated via ordinary least squares (OLS) regressions employing the STOXX Europe 600 Index as a proxy for market return using daily data for the period prior the event window.

The STOXX Europe 600 Index was used as a proxy for market return. In order to calculate expected return, daily data for insurance companies using the period prior the event window were employed. In concrete, the period since the beginning of 2017 until 1st April 2020 that can be denotes as was used.

8. EMPIRICAL RESULTS

The described methodological framework was employed to empirically test the impact of the EIOPA statement on the insurers' equity prices. In this respect, we started with simple test statistic (5) proposed by MacKinlay (1997). First, we can check the significance of the abnormal return changes for singe day window using the test statistics defined by formula (5).

Table 2: Test statistic for single days

	02/04/2020	03/04/2020	06/04/2020	07/04/2020	08/04/2020	09/04/2020	14/04/2020
Average abnormal return	0.64%	-3.23%	0.67%	2.55%	-1.08%	1.19%	-2.11%
Test testitsic t_S	1.2439	-6.2304	1.2896	4.9193	-2.0771	2.2898	-4.0808
Cumulative distribution function	89.32%	0.00%	90.14%	100.00%	1.89%	98.90%	0.00%
Significance of negative abnormal return		***			**		***

Source: Own calculations
Note: Test statistics are calculated according to formula (5). The numbers for cumulative distribution function provide the quantiles for standard normal distribution rounded to two decimal numbers. It means for the numbers close to 100% abnormal returns are significantly positive, for the numbers close to 0% abnormal returns are significantly negative. *** represents confidence level lower than 1%, ** lower than 5% and ** lower than 10% for the significance of negative abnormal return.

The obtained numbers for the test statistics suggest a significant drop in equity prices on 3rd April on the first day after the publication of the statement and further on the fourth and sixth days after the publication. On the contrary, the test statistic indicates a significant positive development in insurers' equity prices on the second, third and fifth days after the publication (see Table 2). In order to statistically test whether the negative drops are not compensated by subsequent increases, the concept of average cumulative abnormal return as defined by formula (3) to test for any significant drops for different event windows from one day to seven days (2nd period – 14th April).

Table 3: Test statistic for different lengths of event window

	02/04/2020	03/04/2020	06/04/2020	07/04/2020	08/04/2020	09/04/2020	14/04/2020
Average cumulative abnormal return	0.64%	-2.58%	-1.92%	0.63%	-0.44%	0.74%	-1.37%
Test testitsic t_S	1.2439	-3.5259	-2.1344	0.6112	-0.3822	0.5859	-1.0000
Cumulative distribution function	89.32%	0.02%	1.64%	72.95%	35.11%	72.10%	15.87%
Significance of negative abnormal return		***	**				

Source: Own calculations
Note: Test statistics are calculated according to formula (5). Each column represents the event window starting from 2nd April and ending on the day reported in the header of the column. *** represents confidence level lower than 1%, ** lower than 5% and ** lower than 10% for the significance of negative abnormal return.

The empirical results reveal that the negative drop in equity prices after the publication of statement was significant only when considering the event window up to two days after the event (see Table 3). For event windows starting from 2nd April and ending from three to seven days after the publication, a null hypothesis that the cumulative average abnormal returns are zero could not be rejected.

However, as the cross-sectional test used could have a lower power, a standardized cross-sectional test (BMP test) is further employed.

Table 4: BMP test statistic for different lengths of event window

	02/04/2020	03/04/2020	06/04/2020	07/04/2020	08/04/2020	09/04/2020	14/04/2020
Average cumulative st. abnormal return	0.6636	-2.0294	-1.4901	0.5268	-0.4456	0.5085	-1.0488
Test testitsic t_{BMP}	1.4823	-3.1984	-1.9120	0.5834	-0.4397	0.4561	-0.8670
Cumulative distribution function	93.09%	0.07%	2.79%	72.02%	33.01%	67.59%	19.30%
Significance of negative st. ab. return		***	**				

Source: Own calculations
Note: Test statistics are calculated according to formula (7). Each column represents the event window starting from 2nd April and ending on the day reported in the header of the column. *** represents confidence level lower than 1%, ** lower than 5% and ** lower than 10% for the significance of negative abnormal return.

Although, the significance for BMP test slightly lower, it did not have impact on the main conclusion made before (Table 4). Furthermore, as this event study contains only one identical event window for all insurance companies included in the sample, BMP-adjusted test is used to address cross-sectional correlation (Kolari and Pynnonen, 2010).

Table 5: BMP-adjusted test statistic for different lengths of event window

	02/04/2020	03/04/2020	06/04/2020	07/04/2020	08/04/2020	09/04/2020	14/04/2020
Average cumulative st. abnormal return	0.6636	-2.0294	-1.4901	0.5268	-0.4456	0.5085	-1.0488
Test testitsic t_{AD_BMP}	1.4635	-3.1579	-1.8877	0.5760	-0.4341	0.4503	-0.8560
Cumulative distribution function	92.33%	0.10%	3.28%	71.29%	33.60%	66.98%	20.18%
Significance of negative st. ab. return		***	**				

Source: Own calculations
Note: Test statistics are calculated according to formula (12). Each column represents the event window starting from 2nd April and ending on the day reported in the header of the column. *** represents confidence level lower than 1%, ** lower than 5% and ** lower than 10% for the significance of negative abnormal return.

Using BMP adjusted test further reduced the significance of the obtained numbers, but the main conclusions were not affected (Table 5). Moreover, the non-parametric rank test using test statistic defined by formula (14) was employed as a robustness check (Campell and Wasley, 1993).

Table 6: Rank test statistic for different lengths of event window

	02/04/2020	03/04/2020	06/04/2020	07/04/2020	08/04/2020	09/04/2020	14/04/2020
Average rank of abnormal returns	0.5784	0.3760	0.4451	0.5436	0.4981	0.5240	0.4921
Test testitsic t_{RANK}	0.5423	-1.2136	-0.6586	0.6029	-0.0292	0.4071	-0.1443
Cumulative distribution function	70.62%	11.25%	25.51%	72.67%	48.83%	65.80%	44.26%
Significance of negative st. ab. return							

Source: Own calculations
Note: Test statistics are calculated according to formula (12). Each column represents the event window starting from 2nd April and ending on the day reported in the header of the column. *** represents confidence level lower than 1%, ** lower than 5% and ** lower than 10% for the significance of negative abnormal return.

In this case, an additional decline in significance could be observed and negative returns turn statistically insignificant at 10% confidence level even for a short event window covering only two days after the publication of statement (Table 6).

CONCLUSION

A negative impact of the ongoing Covid-19 crisis on insurers is expected to gradually reduce their relatively high level of pre-crisis solvency positions increasing vulnerabilities towards potential further economic deteriorations. From broader financial stability perspectives, it is important that this crisis, which is predominantly an economic crisis, does not evolve into a financial crisis. Considering extremely high level of uncertainty on future economic developments, the EIOPA statement on postponing dividend distributions until this uncertainty resides, aims at preserving firms' capital. This should ensure insurers' smooth transition trough the distress period limiting any serious consequences that, in case of further adverse developments, might ultimately lead to a financial crisis and, potentially, the need for public sector intervention.

The statement could help to reduce uncertainty on potential adverse evolutions solvency positions that would not allow absorbing the shocks implied by the expected negative implications of the Covid-19 outbreak. However, it could also have a potential negative impact on insurers' equity prices driven by investment behaviour of short-term investors maximizing their immediate profit. In this respect, this article empirically investigates whether the statement had such effect that would be statistically significant. Based on the event study methodology, the obtained empirical results suggest that despite some negative impact was observed following the announcement, it was not statistical significant over the event windows covering a few days after the publication. These results seems to be robust to different specifications using parametric tests as BMP or adjusted BMP as well as non-parametric rank test.

Hence, it could be concluded that market investors make a rational assessment focusing on long-term rather than short-term profit. This is based on the assumption that insurers with robust solvency positions can withstand market shocks, such a drop in equities or credit downgrades, without forced selling and therefore having a countercyclical role instead of amplifying the crisis. As insurers have a crucial role in the economy providing long-term funding and act as shock absorbers transferring risks from households and corporate sectors, the issued statement could contribute to ensure financial stability of the European insurance sector to support the real economy allowing quick economic recovery and avoiding deep and long recession.

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