Proceeding of 3rd International Conference on Entrepreneurship (IConEnt)
"Entrepreneurship in Disruption Era"
Faculty of Economics and Business Universitas Pelita Harapan
E-ISSN 2988-2664
Tangerang, October 11th, 2023

Brand Equity and Stock Performance in Indonesia During the Stock Market Crash Period in 2020

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ABSTRACT

We study the relationship between brand equity and stock return in the Indonesian market during the market crash period (March 5th–March 24th, 2020). Using the brand valuation published in "Top 100 Most Valuable Brands" in Indonesia 2020 by Brand Finance, we find that during the crash period, stocks with high brand equity have significantly negative returns with significantly higher systematic risk. We continue further by also analyzing the non-crash period in 2020. We find that in 2020 as a whole, stocks with high brand equity will provide significantly higher returns while at the same time having significantly higher systematic risk compared to other stocks with lower brand equity.

Keywords: brand equity; COVID-19; stock performance; stock market crash; emerging market

INTRODUCTION

One of the phenomena that shocked the world in 2019 was the appearance of the COVID-19 virus, which was later declared as a global pandemic. In Indonesia, COVID-19 was officially confirmed to have spread for the first time by President Joko Widodo on March 2, 2020. After the official announcement by the Indonesian President, there were no significant changes seen on the Indonesian Composite Index until March 5, 2020. On March 5, 2020, there was a significant decrease in the value of the Indonesian Composite Index, which lasted for several weeks. This decline continued until its peak on March 24, 2020, when the Indonesian Composite Index was recorded as touching the lowest value in almost a decade. From March 5 to March 24, 2020, the Indonesia Stock Exchange dropped 31.6%, which in this study is described as a stock market crash period due to Covid-19.

In this crash period, it can be said that, in general, the stocks in Indonesian Stock Exchange experienced a decline in performance. On the other hand, there are still stocks with better performance during this period. Studying and analysing the stocks that had better performance during this kind of period is always an interesting topic to discuss further. Referring to several studies, such as those by Dorfleitner et al. (2019), Huang et al. (2021) and Johansson et al. (2012), it is stated that there are certain stocks that tend to perform better during declining market conditions. The stocks in discussion are those with the most valuable brand. In these studies, it is stated that stocks with the most valuable brand are stocks with high brand equity.

The study by Huang et al. (2021) shows that stocks with higher brand equity provided higher returns with lower risk compared to other stocks when the market crashed due to COVID-19. By using the study as a reference, this study uses brands mentioned in the annual report of the top 100 most valuable Indonesian brands in 2020 issued by Brand Finance, as a

representative of stocks with high brand equity. This study is conducted using the data from March 5–24, 2020, when the Indonesian stock market was in the crash period. Stock performance, which is the main subject of this study, consists of four indicators: raw return, abnormal return, and systematic risk and idiosyncratic risk. The performance of stocks with high brand equity will then be compared to other existing stocks in order to see the impact of brand equity on stock performance.

The next step of this study is comparing the impact of brand equity on stock performance in the crash period with the non-crash period. The non-crash period referred to consists of the period before and after Covid-19. The period before Covid-19 is from January 2 to March 4, 2020, while the period after Covid-19 is from March 25 to December 30, 2020. The aim of this comparison is to provide further analysis to clarify the relationship between brand equity and stock performance. By carrying out this further analysis, it is also possible to see the direct impact of brand equity on stock performance during the Indonesian stock market crash more clearly.

BRAND EQUITY AND STOCK RETURN

The term "brand equity" is frequently used in literature on marketing issues and significant business assets. In the literature, brand equity is mostly looked at from the perspective of consumers, finances, or a combination of both (Kim et al., 2003). The consumer-based perspective shows brand equity as a consumer's attitude or relationship with a trademark, which leads to the development of cognition and feelings towards the brand and contributes to the value that the brand represents to consumers (Arvidsson, 2006). From the financial perspective in general, brand equity can be seen as the total value of a trademark (brand), which, as an asset in itself, can be sold or included in a financial balance sheet based on its monetary value (Rojas-Lamorena et al., 2022). Anderson (2007) proposed a definition of brand equity from the combination perspective of consumer and financial, that is, brand equity as a financial value derived from a consumer's response to a brand's marketing activities. Another definition from the combination perspective is from Feldwick (1996), who provided three distinct concepts for the definition of brand equity: brand valuation, brand strength, and brand description. Brand valuation (brand value) is the overall value of a brand when it is sold or recorded on a balance sheet as a separate asset. Brand strength is a measurement of how strongly people are attached to a certain brand. Brand description describes the associations and opinions the consumer has about the brand. This combined perspective is providing opportunities for independent brand-related consulting firms, such as Brand Finance, to develop methods of brand valuation that incorporate both consumer-based and financial perspectives Bank et al. (2020).

Simon & Sullivan (1993) argue that the increase in the value of brand equity is calculated as the expected rate of return in the future, as they mentioned that the valuation of brand equity reflects the amount of discounted incremental cash flow attributable to a brand. A study by Aaker & Jacobson (1994) mentioned the relationship between perceived quality and stock returns. Barth et al. (1998) discovered a significant and positive relationship between brand value estimates and stock prices. Madden et al. (2006) show that stocks with a strong brand (higher brand value) deliver greater returns with less risk compared to other stocks with a lower brand value. Fehle et al. (2008), with similar studies, also found firms with strong brands offer statistically and economically significant returns above average. These findings are supported

by many other studies with similar results, such as Bharadwaj et al. (2011), Chehab et al. (2016), Hsu et al. (2013), Johansson et al. (2012), Kirk et al. (2013), Mizik & Jacobson (2008), etc.

The studies that have been mentioned are based on the American stock market, which is already a developed market. From the emerging markets, Bank et al. (2020) and Basgoze et al. (2016) found that stocks with higher brand valuation values have higher stock returns on the Turkish stock market. Oliveira et al. (2018) conducted research on the markets of five Latin American countries and found that stocks with strong brands (higher brand value) have lower risk. Using market data on the stock market in China, Wang & Jiang (2019) suggest that brand equity can increase the level of analyst recommendations for a stock, and brand equity can be an important signal for a firm to maintain its performance. Mousa et al. (2021) researched the stock markets of Arabian Gulf countries and also found similar results, namely that brand equity had a significant impact on stock returns, and it was stated that a strong brand adds value to the company and reduces risks related to the company's activities and on the stock market.

Johansson et al. (2012), in their study for the 2008 financial crisis period, showed evidence that brand equity is able to increase the performance of company shares during the crisis. A similar study was conducted by Huang et al. (2021), which examined the influence of brand equity on stock returns during the financial crisis caused by COVID-19. The result of this study also shows that stocks with higher brand value have higher returns with lower systematic risk and idiosyncratic risk during COVID-19 compared to other stocks. Stocks with high brand equity are deemed a "safe harbor" when the stock market falls due to consumer loyalty and the demand advantage brought by brand equity, which allows companies to maintain stable cash flows. With the various study results that have been mentioned, coupled with the fact that not many studies related to this topic have been carried out on the Indonesian stock market, the following hypothesis is formulated for this current study:

H1: **Brand equity brings positive impact on stock performance during the crash due to COVID-19 in Indonesia.**

DATA AND METHODOLOGY

3.1 Data

Inspired by several reference studies such as Bank et al. (2020), Fehle et al. (2008), Huang et al. (2021), and Madden et al. (2006), stocks with high brand equity are determined based on annual reports issued by an independent brand consulting and valuation company. Since the study is mainly conducted for the period of crash (March 5–24, 2020), the report that is used in this study is "The Top 100 Most Valuable Brands" in Indonesia 2020, published by Brand Finance. Stocks that brands include in this report will be categorized as stocks with high brand equity. Stocks with incomplete data will not be included as samples in this current study. After the filtering process, the effective sample of this study consists of 591 firms, which will be used to analyze the impact of brand equity on stock performance during the crash period.

3.2 Empirical Model

The main focus of this study, which is also the dependent variable, is the performance of stocks. Following Huang et al. (2021), stock performance is indicated by raw return, abnormal return, systematic risk, and idiosyncratic risk. Raw return is measured based on daily changes in share prices, which are seen from the difference in closing share prices in a period compared

to the previous period. Abnormal returns are obtained from the difference between the raw return and the expected return. The expected return obtained from the CAPM (Capital Asset Pricing Model) model, referring to Fama & French (2004), is written in the following form:

$$E(R_{i)} = R_f + \beta_{im}(R_{(m)} - R_f)$$

Where:

$E(R_{i)}$ is the expected rate of return of stock i.

R_f is the risk-free rate of return.

R_m is the return of the market.

*The regressions were conducted separately for each firm.

Systematic and idiosyncratic risk are also obtained from the CAPM (Capital Asset Pricing Model) model by using the daily return over the span of the study period. The regressions were also conducted separately for each firm. The value of systematic risk is the beta (β) value from the CAPM regression, and the idiosyncratic risk value is the standard deviation of the residual value from the regression results. The CAPM model, also referring to Fama & French (2004), is written as follows:

$$R_{it} - R_{ft} = \alpha_i + \beta_{im}(R_{mt} - R_{ft}) + \varepsilon_{it}$$

Where:

R_{it} = return of portfolio i at time t.

R_{ft} = risk-free rate of return at time t.

$R_{mt} - R_{ft}$ = excess return on market portfolio.

ε_{it} is the residual value of stock i in period t.

The baseline model for this current research, following Huang et al. (2021), is written as follows:

$$Performance_i = \beta_0 + \beta_1 Brand_i + \beta_2 Size_i + \beta_3 MTB_i + \beta_4 Shortdebt_i + \beta_5 Longdebt_i + \beta_6 Cash_i + \beta_7 Profit_i + \beta_8 Firmage_i + \beta_9 Liquidity_i + \beta_j + \varepsilon_i$$

$Performance_i$ is the performance (dependent variable) of stock i. $Brand_i$ is the independent variable that represents brand equity. It has a value of 1 (one) for firms that are included in the "Top 100 Most Valuable Brands" in Indonesia 2020 by Brand Finance, and 0 (zero) otherwise. All the other variables in the model are the control variables, which might play a role in the relationship between stock performance and brand equity. Inspired by Huang et al. (2021), the description of control variables is as follows:

$Size_i$ is the market capitalization of stock i during the intended period. The value is obtained from the natural logarithm of the firm's market value (total asset value minus the company's book value plus the outstanding shares multiplied by the average share price value for the research period).

MTB_i is the ratio of the market capitalization to the company's book value at the end of the fiscal year.

Table 1. Summary Statistics

Variable	Obs.	Mean	Std. dev.	Min	Median	Max
Dependent Variable						
Raw Return	591	-0.19	0.25	-0.91	-0.14	0.94
Abnormal Return	591	-0.01	0.28	-0.74	-0.01	1.75
Systematic Risk	591	0.50	0.69	-2.10	0.37	2.86
Idiosyncratic Risk	591	0.04	0.03	0.00002	0.03	0.14
Independent Variable						
Brand	591	0.13	0.34	0.00	0.00	1.00
Control Variable						
Size	591	28.73	1.93	24.02	28.65	35.14
Market-to-book	591	2.39	6.38	0.10	0.88	65.28
Short debt	591	0.30	0.23	0.00007	0.24	1.31
Long debt	591	0.62	3.00	0.00	0.13	53.08
Cash	591	0.11	0.14	0.00018	0.07	0.98
Profit	591	-0.15	2.04	-48.39	0.01	1.45
Age	591	2.00	1.43	-3.05	2.46	3.77
Liquidity	591	123.13	405.88	0.00	1.08	5568.69

$Shortdebt_i$ is the value of the firm's current liabilities divided by the total assets.

$Longdebt_i$ is the value of long-term debt divided by the firm's book value.

$Cash_i$ is the value of cash held by the firm and short-term investments, divided by total assets.

$Profit_i$ is the ratio between income before extraordinary items and the firm's book value for the fiscal year.

$Firmage_i$ is the natural logarithm of the firm's age at the beginning of the study period, starting from the first date the shares were listed on the Indonesian Stock Exchange (IDX).

$Liquidity_i$ is the cumulative ratio of absolute daily return to the daily dollar volume during the estimated period, as suggested by Amihud (2002).

β_j represents the industry fixed effect, which is based on IDX Industrial Classification (IDX-IC) issued by the Indonesian stock exchange.

4. Empirical Results

As can be seen from Table 1, there were 591 stocks that became sample objects after going through the data selection process. The average rate of return for all stock samples is -19%,

with a median value of -14%, the minimum value of -91%, and the maximum of 94%. The abnormal return rate shows an average and median value of around -1%, with a minimum value of -74% and a maximum value of 175%. The systematic risk variable has an average value of 0.50, a median value of 0.37, a minimum value of -2.1, and a maximum value of 2.86. The idiosyncratic risk variable has a mean value of 0.04, a median value of 0.03, a minimum value of 0.00002, and a maximum value recorded at 0.14. From these descriptive statistics, it can be said that in general, stocks in Indonesia had poor performance when the Indonesian stock market crashed (March 5–March 24, 2020).

Table 2. Brand Equity and Stock Performance - Regression Results

	Raw Return	*Abnormal Return*	*Systematic Risk*	*Idiosyncratic Risk*
Brand	-0.1767*** (-4.95)	-0.0443 (-0.95)	0.3740*** (3.39)	0.0043 (1.22)
Size	-0.0414*** (-5.31)	-0.0076 (-0.80)	0.0957*** (4.15)	-0.0011 (-1.21)
MTB	0.0026 (1.03)	-0.0005 (-0.13)	-0.0084** (-2.10)	-0.0001 (-0.12)
Short Debt	0.0419 (0.78)	-0.0184 (-0.27)	-0.1702 (-1.03)	-0.0015 (-0.20)
Long Debt	0.0050*** (2.84)	-0.0049 (-1.54)	-0.0278*** (-3.20)	0.0001 (0.11)
Cash	-0.0649 (-0.83)	-0.0968 (-0.91)	-0.0901 (-0.37)	0.0097 (0.78)
Profit	0.0158*** (3.49)	-0.0021 (-0.43)	-0.0504*** (-4.92)	0.0001 (0.12)
Age	0.0004 (0.04)	-0.0020 (-0.16)	-0.0066 (-0.27)	-0.0025** (-2.19)
Liquidity	0.0002** (2.45)	0.0002** (2.25)	0.0001 (0.59)	0.0001*** (3.74)
Constant	1.049*** (4.96)	0.0774 (0.31)	-2.7361*** (-4.30)	0.0536** (2.24)
Industry Fixed Effect	Yes	Yes	Yes	Yes
Observation	591	591	591	591
R2	0.3815	0.2561	0.3116	0.2545

Note: *Brand* is a dummy variable that is equal to one for firms with high brand equity and zero otherwise. The definition of all control variables can be found in the previous section. The classification of industry types that are part of the regression model is not shown in this table. ***, **, * indicate significance levels at 1%, 5%, and 10%, respectively.

Table 2 shows that the brand equity variable appears to have a significant negative influence on stock returns, which is coupled with a positive and significant influence on the systematic risk of stocks. Brand equity also has a positive relationship with abnormal returns and a negative relationship with idiosyncratic risk, but the relationships are not significant.

Stocks with strong brands (high brand equity) have a significant -17.67% lower raw return and significant 37.40% higher systematic risk, compared to the other stocks with lower brand equity. This implies that stocks with strong brands had significantly negative performance during the crash due to negative returns and high risk. Of course, this finding is contradictory to the finding of Huang et al. (2021), which stated that stocks with strong brands performed better during a crisis.

In order to provide a clearer picture, the study continued by comparing brand equity and stock performance during the crash period with other periods in 2020. The other period referred to

Table 3. Brand Equity and Stock Performance – Crash vs Non-Crash Period

	Raw Return	*Abnormal Return*	*Systematic Risk*	*Idiosyncratic Risk*
Brand	0.2364*** (3.96)	0.0508 (0.84)	0.3826*** (4.98)	-0.001 (-0.52)
Covid	-0.4147*** (-14.18)	-0.1040*** (-3.55)	0.0173 (0.44)	0.0005 (0.31)
Brand x Covid	-0.5513*** (-8.86)	-0.1642** (-2.17)	-0.0706 (-0.65)	0.0066** (2.19)
Size	0.0081 (0.80)	0.0096 (1.06)	0.0998*** (7.97)	-0.0014*** (-3.15)
MTB	-0.0049** (-2.21)	-0.0055** (-2.35)	-0.0095*** (-2.94)	-0.0001 (-1.32)
Short Debt	0.1334* (1.91)	0.1328** (2.26)	-0.1755** (-2.17)	0.0037 (1.26)
Long Debt	0.0010 (0.21)	-0.0030 (-0.56)	-0.0171** (-2.09)	0.0002 (1.18)
Cash	0.1701* (1.85)	0.1580 (1.60)	0.1169 (1.04)	0.006 (1.08)
Profit	0.0064 (0.90)	0.0002 (0.02)	-0.0478*** (-5.70)	0.0001 (0.28)
Age	0.0156 (1.24)	0.0153 (1.46)	-0.0061 (-0.43)	-0.0022*** (-3.98)
Liquidity	0.0001** (2.22)	0.0001** (2.55)	-0.0001 (-0.66)	0.0000*** (3.98)
Constant	-0.0013 (-0.00)	-0.1204 (-0.44)	-2.0427*** (-5.17)	0.0844*** (6.42)
Industry Fixed Effect	Yes	Yes	Yes	Yes
Observation	1154	1154	1154	1154
R2	0.3347	0.1406	0.2432	0.2100

Note: *Brand* is a dummy variable that is equal to one for firms with high brand equity and zero otherwise. *Covid* is a dummy that is equal to one during the crash period and zero otherwise. The definition of all control variables can be found in the previous section. The classification of industry types that are part of the regression model is not shown in this table. ***, **, * indicate significance levels at 1%, 5%, and 10%, respectively.

is 2 January–4 March 2020 and 25 March–30 December 2020, which is called the non-crash period. Firms that are included in the samples for this part are also required to have complete data, otherwise they will be removed. Following Huang et al. (2021), a new dummy variable that represents the crash period is introduced. This dummy variable is named *Covid*, which has a value equal to one during the crash period (March 5–March 24, 2020) and zero during the non-crash period. With the additional variable, the main empirical model is modified and written as follows:

Table 4. Robustness Test – Crash Period

	Raw Return	*Abnormal Return*	*Systematic Risk*	*Idiosyncratic Risk*
Brand	-0.1632*** (-4.46)	-0.0428 (-0.86)	0.3400*** (3.09)	0.0032 (0.93)
Size	-0.0371*** (-4.28)	-0.0060 (-0.55)	0.0878*** (3.66)	-0.0030*** (-3.33)
MTB	0.0027 (1.08)	-0.0004 (-0.13)	-0.0089* (-1.7)	0.0000 (-0.14)
Short Debt	0.0187 (0.32)	-0.0373 (-0.45)	-0.1584 (-0.86)	0.0008 (0.12)
Long Debt	0.0054*** (2.80)	-0.0045 (-1.25)	-0.0280** (-2.15)	-0.0001 (-0.26)
Cash	-0.0009 (-0.01)	-0.0891 (-0.75)	-0.2490 (-0.99)	-0.0047 (-0.39)
Profit	0.0168*** (4.35)	-0.0017 (-0.33)	-0.0522*** (-2.76)	-0.0002 (-0.43)
Age	-0.0068 (-0.61)	-0.0039 (-0.31)	0.0081 (0.32)	-0.0009 (-0.8)
Liquidity	0.0001*** (2.72)	0.0001** (2.26)	0.0000 (-0.02)	0.0000*** (3.25)
Constant	0.9510*** (4.05)	0.0442 (0.15)	-2.5531*** (-2.76)	0.1030*** (4.27)
Industry Fixed Effect	Yes	Yes	Yes	Yes
Observation	537	537	537	537
R2	0.4057	0.2698	0.3194	0.2675

Note: This is a regression that excludes stocks with zero liquidity in any given period during this study. *Brand* is a dummy variable that is equal to one for firms with high brand equity and zero otherwise. The definition of all control variables can be found in the previous section. The classification of industry types that are part of the regression model is not shown in this table. ***, **, * indicate significance levels at 1%, 5%, and 10%, respectively.

$$Performance_i = \beta_0 + \beta_1 Brand_i \times Covid_i + \beta_2 Brand_i + \beta_3 Covid_i + \beta_4 Size_i + \beta_5 MTB_i + \beta_6 Shortdebt_i + \beta_7 Longdebt_i + \beta_8 Cash_i + \beta_9 Profit_i + \beta_{10} Firmage_i + \beta_{11} Liquidity_i + \beta_j + \varepsilon_i$$

Another variable is also introduced, $Brand_i \times Covid_i$. According to Huang et al. (2021), this variable estimates the direct impact of brand equity on stock performance during the crisis due to COVID-19. Other than these two new variables, everything remains the same and consistent with the main regression.

Table 3 shows that firms with strong brands have a significant and positive raw return of 23.64% higher than others in 2020 overall. Considering the significant negative return of stocks with strong brands during the crash, and also the negative return of stocks in general during this period, the positive 23.64% shows that stocks with strong brands do have much better returns in the non-crash period. While stocks with strong brands have a higher return in general,

Table 5. Robustness Test – Crash vs Non-Crash Period

	Raw Return	*Abnormal Return*	*Systematic Risk*	*Idiosyncratic Risk*
Brand	0.2130*** (3.45)	0.0379 (0.7)	0.3721*** (4.37)	-0.007 (-0.38)
Covid	-0.4809*** (-15.28)	-0.1373*** (-4.57)	0.0254 (0.59)	0.0026* (1.69)
Brand x Covid	-0.5051*** (-7.85)	-0.1407** (-2.19)	-0.0853 (-0.80)	0.0049* (1.67)
Size	0.0066 (0.64)	0.0058 (0.59)	0.0938*** (7.18)	-0.0024*** (-5.47)
MTB	-0.0044** (-1.98)	-0.0050** (-2.21)	-0.0102*** (-3.16)	-0.0002 (-1.5)
Short Debt	0.1316* (1.74)	0.1398* (1.93)	-0.1159 (-1.34)	0.0068** (2.36)
Long Debt	-0.0023 (-0.44)	-0.0065** (-2.42)	-0.0181** (-2.37)	0.0002 (1.29)
Cash	0.1808* (1.9)	0.1501 (1.59)	0.0015 (0.01)	-0.0035 (-0.60)
Profit	0.0040 (0.52)	-0.0023 (-0.23)	-0.0505*** (-4.39)	0.0000 (0.12)
Age	0.0201 (1.55)	0.0205 (1.60)	0.0020 (0.13)	-0.0017*** (-3.17)
Liquidity	0.0001** (2.17)	0.0001** (1.99)	-0.0001* (-1.85)	0.0000*** (3.66)
Constant	0.05626 (0.16)	-0.0089 (-0.03)	-1.8339*** (-4.55)	0.1129*** (8.56)

Industry Fixed Effect	Yes	Yes	Yes	Yes
Observation	1046	1046	1046	1046
R2	0.3832	0.1635	0.2519	0.2250

Note: This is a regression that excludes stocks with zero liquidity in any given period during this study. *Brand* is a dummy variable that is equal to one for firms with high brand equity and zero otherwise. *Covid* is a dummy that is equal to one during the crash period and zero otherwise. The definition of all control variables can be found in the previous section. The classification of industry types that are part of the regression model is not shown in this table. ***, **, * indicate significance levels at 1%, 5%, and 10%, respectively.

it is also easily noticeable that these stocks with strong brands have a significantly 38.26% higher systematic risk compared to the other stocks. These findings imply that, in general, stocks with strong brands in Indonesia provide a higher return with a higher risk. One factor that might contribute to this finding is the fact that firms with strong brands accounted for almost 73% of the total Indonesian stock market capitalization in 2020. These stocks are showing signs of recovering and rebounding after the strong downtrend during the crash, which may cause them to generate higher returns while being volatile, which also means higher risk. One other thing to mention is the negative and not significant difference of 7.06% between the variable *Brand x Covid* and systematic risk. Results in Table 2 clearly show that stocks with strong brands have a higher systematic risk during the crash period. The results in Table 3 are due to the model itself. The result implies that although the relationship between systematic risk and stocks with strong brands was significantly positive during the crash, the systematic risk is even higher during the rest of the period in 2020.

5. Robustness Test

One of the control variables used in this research is liquidity. Looking at the data that has been collected, there are several stocks that have zero liquidity in certain periods in this study. These stocks will have a rate of return of zero percent and relatively lower risk because the return is always the same. In practice, stocks like this cannot be said to have good performance because there are no changes in the price at all. Therefore, there is a concern that these stocks will influence the results of the various tests in the previous section. To answer this concern, another regression will be carried out, as was done in the previous section, excluding the stocks with zero liquidity. The results can be viewed in Table 4 for the crash period only and Table 5 for the crash against the non-crash period. The results are quite consistent with the previous regressions, without any meaningful or significant differences.

6. Conclusion

The main focus of this research is to see the influence of brand equity on stock performance when the stock market crashed due to COVID-19 in Indonesia. The results show that stocks with strong brand (high brand equity) provide significant and negative returns during the crash period, with significant and positive systematic risk too. These results contradict many studies that are used as references, particularly Huang et al. (2021). Upon further analysis, it was found that in 2020 as a whole, stocks with high brand equity have a

positive and significant relationship with stock returns, while at the same time having significantly higher risk compared to other stocks with lower brand equity. The results of this study are also robust after considering some concerns regarding some stocks with zero liquidity at certain times in the period of this study.

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