EFFECT OF INTANGIBLE INVESTMENT ON NON-FINANCIAL PERFORMANCE OF THE FOOD AND BEVERAGE SECTOR IN INDONESIA DURING THE COVID-19 PANDEMIC

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Abstract: This study is created to know if intangible investment affect non-financial performance in food and beverage industry in Indonesia during Covid-19 pandemic from 2017 to 2021. The data used in this study were obtained from financial statements of manufacturing companies that move in food and beverage industry and consistently the annual report listed in Indonesia Stock Exchange from 2017 to 2021. This study used purposive sampling which is why the sample used in this study amounted to 100 samples. This study also use multiple linear regression models to test the hypothesis. The result of this study had proven that market capitalization and leverage have an influence on non-financial performance. While the other independent variables do not have an influence on non-financial performance.
Keywords: Intangible Investment, Covid-19, Financial nonperformance, Firm size, profitability Firm age, leverage, board gender diversity, cash flow adequacy

INTRODUCTION

The current economic growth places companies under great pressure to efficiently use soft resources such as knowledge and human capital, which are important factors for economic growth. According to Quereshi and Siddiqui (2020), investment in intangible assets has an impact on productivity, in some cases, investment is suitable for those who have capital such as property, factories, and equipment. So it is very important to measure the implications of intangible investment to evaluate the growth of the company. Intangible investment is considered an important resource that helps companies to maintain their advantage.

Because companies want to become more knowledgeable and information-based, currently intangible investment is increasing nationally and globally Salem et al., (2021). There are several kinds of intangible investments such as patents, copyrights, trademarks, licenses, and trademarks. Perspectives in non-financial focus on the company's success, in the long run, consists of the perspective of customers, learning, internal business, and company growth. According to Quershi and Siddiqui (2020), research shows that intangible investment relates to all aspects of the company, including product development, marketing, development, accounting, law, and finance. Satisfying and retaining customers is one of the important goals for every entity for survival and to maintain competitive opportunities. At the beginning of 2020, the Covid-19 pandemic hit the world, this became the world's biggest challenge. The World Health Organization declared that the Covid-19 pandemic was a global health emergency, on March 11, 2020, with the increasing number of victims of the virus and the speed at which it is spreading in all countries in the world. Bos et al., (2021), examined the impact of the Covid-19 pandemic on the performance of companies in Indonesia. They used 214 companies in

2020. They found that the Covid-19 pandemic positively affected the short-term activity ratio and leverage ratio but had a negative effect. to Profitability ratio.

Intangible Investment
Intangible investment determines the company's growth and ability to remain competitive. Intangible resources are strategic assets that can create sustainable advantages that positively affect non-financial performance Husnah et al., (2013). Firdaus and Rahman, (2019), examined the effect of intangible assets on the company's non-financial performance using a sample of 49 listed manufacturing companies. They found that intangible investment has a positive effect on earnings per share, and also, has a negative effect on company performance.

Covid-19
The impact of the Covid-19 Pandemic on intangible investment on non-financial performance is very influential. The research was conducted with three considerations, first, the literature on the impact of intangible investments on non-financial performance is very rare. Second, some research has been conducted in a limited way in developing countries, third, where the latest literature proves that the handling of the Covid-19 pandemic is Salem et al., (2021). Of course, employee satisfaction is one of the main non-financial indicators influencing company sustainability.

Firm Size
Company size can help describe the company's capabilities and indicate whether the company is large or small. Usually, it can be measured through the total assets owned by the company, the market value of the company's shares, and the sales generated by the company. Based on research conducted by Cahyana and Suhendah (2020), larger firm size is considered capable of dealing with existing problems in carrying out business operations. Based on research conducted by Cahyana & Suhendah (2020), firm size does not affect financial performance. Meanwhile, based on research conducted by Mulyana and Dalam (2020) states that firm size influences company performance.

Profitability
Profitability is a measuring tool that can be used to measure company performance by showing the company's ability to generate profits in a period. According to Mulyana and Dalam (2020), profitability can be used to assess a company's performance by using net profit and then dividing it by the total assets owned by a company. Based on this research, profitability influences company performance.

Firm Age
Firm age is the age of a company from when the company existed until now the company is operating. The higher the age of the company, it can be said the company has a lot of experience in solving a problem that can reduce the risks that will be faced, especially in the current conditions of the Covid-19 pandemic. Based on research conducted by Mwangi & Murigu, (2015), there is no effect of firm age on company performance, while based on research conducted by Cahyana & Suhendah (2020) firm age has a positive influence on company performance.

Firm size audits
The size of an audit company will determine the quality of the audit produced in a financial report. The size of the audit company can show how reliable the existing

financial statements are and this will also affect the level of fraud that a company might commit. Based on research conducted by Mansur et al., (2022) shows that there is a relationship between Audit Firm Size and the company's non-financial performance.

Gender Diversity Board
There is gender diversity on the board of commissioners which will help the company deal with a problem due to different views from stakeholders. This can also affect the independence that exists within a company because usually they are not directly related to the company's operations. Based on research conducted by Mansur et al., (2022) shows that the Gender Diversity Board influences the company's non-financial performance.

Effect of Intangible Investment to Financial Non-Performance
Intangible investments from the results of research by Devi et al., (2020); Achim et al., (2021); Shen et al., (2020); Bos et al., (2021), show that the impact of intangible investment on non-financial performance in the industrial sector has a positive effect on the perspective of non-financial performance. This also indirectly shows that in the food sector, intangible investment has a positive effect on learning and growth, while it has a positive effect on customer satisfaction and internal business processes so it can be said that intangible assets influence long-term company success. Based on this, the first hypothesis can be formulated as follows:

H_1: the effect of intangible investment on non-financial performance

Effect of Covid-19 to Financial Non-Performance
of research by Devi et al., (2020); Achim et al., (2021); Shen et al., (2020); Bos et al., (2021)), results revealed that the Covid 19 pandemic had a positive impact on non-financial performance, the Covid-19 pandemic had a positive impact on learning and growth in the food and beverage sector so that the moderating effect of Covid-19 reduced the positive effects of intangible investment on customer satisfaction. Also, the Covid-19 pandemic has weakened the positive effect of intangible investment on non-financial performance. Based on this, the second hypothesis can be formulated as follows:

H_2: the effect of the Covid-19 Pandemic on non-financial performance

Effect of firm-size, Profitability, Firm age,leverage, Board gender diversity, Cash flow adequacy to Financial Non-Performance
Regarding control variables, research by Wardhani et al., (2021); Seo & Kim, (2020); Qureshi & Siddiqui,(2020); Ferdous & Rahman,(2019); Ocak & Fsayandik, (2019); Ismail, (2019 shows that customer satisfaction is positively influenced by ROA, big4 and CFA. This shows a negative effect on company size on internal business processes. The findings of the control variable on Learning and growth show a negative effect on ROA and Big4, and a positive effect on each Leverage, Firm age, and Cash flow adequacy. Based on this, the third hypothesis is formulated as follows

H_3: There is an effect of firm size, Profitability, Firm age, leverage, Board gender diversity, and Cash flow adequacy on non-financial performance
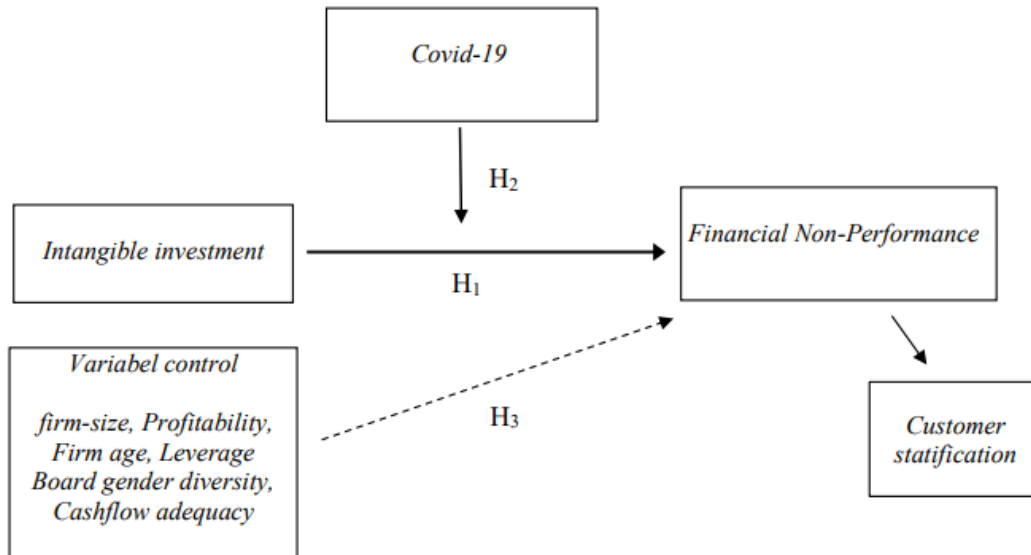

Figure 1. Thinking Framework
Source: Research, (2022)

Based on this description, this study has the following hypotheses: (1) the relationship between Intangible investment and financial non-performance. (2) the influence of Covid-19 between Intangible investment and financial non-performance; (3) the influence of control variables on financial non-performance

METHODS
Research Methodology In this study the sampling method used was purposive sampling. This has been considered because this study focuses on companies with certain criteria. The sample used in this study includes companies in the building industry subsector and the food sector which are listed on the Indonesia Stock Exchange for 5 years (2017-2021). The method used in data collection is the secondary data method where the data obtained is taken from published data. The data source used comes from the Indonesian Stock Exchange website (https://www.idx.co.id) and the website of each company that will be sampled.

There are stages in testing the regression model in this study which are described as follows:
Chouw test
In the results of the chow test, there are 2 options that must be determined, namely the common effect or the fixed effect. In this study, the chow test is used to determine which model is more appropriate. The chow test is based on the null hypothesis where there is no individual heterogeneity and the alternative hypothesis where there is

heterogeneity in the cross-section. The hypothesis in the chow test is stated as follows:

  H0: The correct model is the common effect

  Ha: The right model is the fixed effect In the decision-making criteria:

If the probability of cross-section of chi-square < 0.05, H0 is rejected If the probability of cross-section of chi-square is > 0.05, H0 is accepted

Based on the Chow test table above, the two probability values of Cross-section F and Cross-section Chi-square are smaller than alpha 0.05 so that H0 is rejected. So the best and most appropriate model for the research conducted is the fixed effect model.

  Hausman test

In the Hausman test results, there are two options that must be determined, namely the random effect or the fixed effect. In this study, the Hausman test is useful for determining which model is more appropriate. The hypothesis in the chow test is stated as follows:

H0: The correct model is the common effect

Ha: The right model is the fixed effect In the decision-making criteria:

If the cross-section probability of random < 0.05, H0 is rejected If the cross-section probability of random is > 0.05, H0 is accepted

RESULTS AND DISCUSSION

Chow Test and Hausman Test Results Based on the Hausman test table above, the probability value of a random cross-section is 0.0002, meaning that the p-value <0.05. So the best and most appropriate model to use in this study is the fixed effect..:

Table 1. Chow Test and Hausman Test

Test Summary	statistic	prob	keputusan
Cross-section Chi square	60.129010	0.0000	Ditolak H0 Fixed Effectterpilih
Cross-section random	36.898442	0,0002	Ditolak H0 Fixed Effectterpilih

Source: Eviews 9, Processed Data (2022)

Based on the statistical descriptive table below, customer satisfaction has an average value of 0.0974, and a standard deviation of 0.3315. The maximum value of customer satisfaction is 2.4729 which is owned by PT Prima Cakrawala Abadi Tbk and the minimum value is -0.7020 which is owned by PT Tiga Pilar Sejahtera Food Tbk. Covid19*intncr has an average value of 0.0052, and a standard deviation of 0.2487. The maximum value of X1 is 0.1734 which is owned by PT Tiga Pilar Sejahtera Food Tbk and the minimum value is 0 which is owned by PT Tunas Baru Lampung Tbk. Covid19*instast has an average value of 0.0036, and a standard deviation of 0.1752. The maximum value of X2 is 0.1295 which is owned by PT Tiga Pilar Sejahtera Food Tbk and the minimum value is 0 which is owned by PT Bakrie Sumatera Plantation Tbk.

Covid19*intmark has an average value of 5.7485, and a standard deviation of 1.815. The maximum value of X3 is 1.166 which is owned by PT Indofood CBP Sukses Makmur Tbk and the minimum value is 0 which is owned by PT Tiga Pilar Sejahtera Food Tbk.

Covid19 has an average value of 0.40, and a standard deviation of 0.4452. The maximum value of Covid19 is 1 which is owned by PT Tiga Pilar Sejahtera Food Tbk and the minimum value is 0 which is owned by PT Campina Ice Cream Industry Tbk. INTNCR has an average value of 0.1756, and a standard deviation of 0.4452. The maximum value of INTNCR is 0.2233 which is owned by PT Tiga Pilar Sejahtera Food Tbk and the minimum value is 0 which is owned by PT Tri Banyan Tirta Tbk. INTAST has an average value of 0.0108, and a standard deviation of 0.0280. The maximum value of INTAST is 0.1295 which is owned by PT Tiga Pilar Sejahtera Food Tbk and the minimum value is 0 which is owned by PT Tri Banyan Tirta Tbk.

INTMARK has an average value of 1.5400, and a standard deviation of 2.8531. The maximum value of INTMARK is 1.3119 which is owned by PT Indofood CBP Sukses Makmur Tbk and the minimum value is 0 which is owned by PT Buyung Poetra Sembada Tbk.

LEV has an average value of 0.5032, and a standard deviation of 0.4082. The maximum value of LEV is 2.6892 which is owned by PT Tiga Pilar Sejahtera Food Tbk and the minimum value is 0.1085 which is owned by PT Campina Ice Cream Industry Tbk. ROA has an average value of 0.5760, and a standard deviation of 0.3145. The maximum value of ROA is 0.6072 which is owned by PT Tiga Pilar Sejahtera Food Tbk and the minimum value is -2.6410 which is owned by PT Tiga Pilar Sejahtera Food Tbk. SIZE has an average value of 12.4647, and a standard deviation of 0.7073. The maximum value of SIZE is 14.2537 which is owned by PT Indofood Sukses Makmur Tbk and the minimum value is 11.0143 which is owned by PT Prima Cakrawala Abadi Tbk.

BGD has an average value of 13.3910%, and a standard deviation of 17.5088%. The maximum value of BGD is 75% which is owned by PT Nippon Indosari Corporindo Tbk and the minimum value is 0 which is owned by PT Indofood Sukses Makmur Tbk. AGE has an average value of 41.65, and a standard deviation of 22.742. The maximum value of AGE is 110 which is owned by PT Bakrie Sumatera Plantation Tbk and the minimum value is 3 which is owned by PT Prima Cakrawala Abadi Tbk. BIG4 has an average value of 0.31, and a standard deviation of 0.465. The maximum value of BIG4 is 1 which is owned by PT Wilmar Cahaya Indonesia Tbk and the minimum value is 0 which is owned by PT Nippon Indosari Corporindo Tbk.

CFA has an average value of 0.8760, and a standard deviation of 3.3510. The maximum value of CFA is 33.1845 which is owned by PT Campina Ice Cream Industry Tbk. and a minimum value of -1.5257 owned by PT Prima Cakrawala Abadi Tbk.

Table 2. Analysis Deskriktif Statistik

Variabel	Minimum	Maximum	Mean	Std. Dev
Customer satisfaction	-0,7020	2,4729	0,097355	0,3314869
Covid19*intncr	0,5937	0,1734	0,005220	0,248689
Covid19*intast	0,7446	0,1295	0,003566	0,175224

Covid19*intmark	0,06800	1,1166277	5,7484723	1,8154461
Covid19	0	1	0,40	0,492366
INTNCR	0,001222	0,2233	0,17557	0,44524
INTAST	0,30022	0,1295	0,01081	0,02802
INTMARK	0,60330	1,3119	1,5400	2,8531
LEV	0,1085	2,6892	0,503185	0,4082036
ROA	-2,6410	0,6072	0,57596	0,3145462
SIZE	11,0143	14,2537	12,464699	0,7072634
BGD	0,00%	75,00%	13,3910%	17,50878%
AGE	3	110	41,65	22,742
BIG4	0	1	0,31	0,465
CFA	-15257	33,1845	0,875984	3,3510407

Source: Eviews 9, processed data (2022)

Table 4. Hypothesis Testing

Variabel Independen	Variabel Dependen Customer satisfaction		
	Koefisien	Probabilitas	Kesimpulan
intncr	1.336305	0.8845	Tidak Signifikan
intast	1.830070	0.3434	Tidak Signifikan
intmark	2.343258	0.6871	Tidak Signifikan
Covid19	0.036798	0.6948	Tidak signifikan
LEV	0.124774	0.2698	Tidak Signifikan
ROA	0.236270	0.0775	Tidak Signifikan
SIZE	0.050730	0.4382	Tidak Signifikan
BGD	0.001326	0.3947	Tidak Signifikan
AGE	0.189217	0.2345	Tidak Signifikan
BIG4	0.005830	0.9411	Tidak Signifikan
CFA	0.001241	0.8863	Tidak Signifikan
Covid19*intncr	1.300292	0,7927	Tidak Signifikan
Covid19*intast	1.510070	0,8475	Tidak Signifikan
Covid19*intmark	4.352356	0,0101	Positif Signifikan

Source: Eviews 9, Processed Data (2022)

The panel data regression model previously used by Mansur et al. (2022) can be written as follows:
CS = 0,8517 – 1,3003 X1 + 1,5101 X2 + 4,3524 X3 + 0,1248 LEV + 0,2363 ROA + 0,0507 SIZE – 0,0013
  BGD + 0,1892 AGE – 0,0058 BIG4 + 0,0012 CFA + ε
  CS = Customer Satisfaction
  X1 = Covid-19 x Intnct

X2 = Covid-19 x Intast
X3 = Covid-19 x Intmark
Cov19 = Covid 19
LEV = Leverage
ROA = Return on Asset/Profitability
SIZE = Firm Size
BGD = Board Gender Diversity
AGE = Firm Age
BIG4 = Audit Firm Size
CFA = Cash Flow Adequacy
ε = Error

Covid19*intncr has no effect on customer satisfaction. This is concluded based on the sig. of 0.7927 the value is greater than 0.05 so that H01 is not accepted. These results are not in line with research conducted by Mansur and Hussaney (2022) which states that there is a positive effect of intangible investment on customer satisfaction which is reinforced by co-19 moderation.
H1: there is no effect of Covid19 on customer satisfaction.

Covid19* instant has no effect on customer satisfaction. This is concluded based on the sig. of 0.8475 this value is greater than 0.05 so that H01 is not accepted. These results are not in line with research conducted by Mansur and Hussaney (2022) which states that there is a positive effect of intangible investment on customer satisfaction which is reinforced by co-19 moderation.
H2: there is no effect of Covid19 on customer satisfaction.

Covid19*intmark has an influence on customer satisfaction. This is concluded based on the sig. of 0.0101 the value is smaller than 0.05 so that H01 is accepted. These results are in line with research conducted by Mansur and Hussaney (2022) which states that there is a positive effect of intangible investment on customer satisfaction which is reinforced by co-19 moderation.
H3: there is an influence of Covid19 on customer satisfaction

LEV has no influence on customer satisfaction. This is concluded based on the sig. of 0.2698 this value is greater than 0.05 so that H01 is not accepted. These results are not in line with research conducted by Mansur and Hussaney (2022) which states that there is an effect on company financial performance on customer satisfaction.
H4: there is an effect of LEV on customer satisfaction.

ROA has no influence on customer satisfaction. This is concluded based on the sig. of 0.0775 this value is greater than 0.05 so that H01 is not accepted. These results are not in line with research conducted by Mansur and Hussaney (2022) which states that there is an effect on company financial performance on customer satisfaction.
H5: there is no effect of ROA on customer satisfaction.

SIZE has no effect on customer satisfaction. This is concluded based on the sig. of 0.4382 this value is greater than 0.05 so that H01 is not accepted. These results are not in line with research conducted by Mansur and Hussaney (2022) which states that there is an effect on company financial performance on customer satisfaction.
H6: there is no effect of SIZE on customer satisfaction.

BGD has no influence on customer satisfaction. This is concluded based on the sig. of 0.2345 the value is greater than 0.05 so that H01 is not accepted. These results are not in line with research conducted by Mansur and Hussaney (2022) which states that there is an effect on company financial performance on customer satisfaction.
H7: there is no effect of BGD on customer satisfaction.

AGE has no influence on customer satisfaction. This is concluded based on the sig. of 0.3947 the value is greater than 0.05 so that H01 is not accepted. These results are not in line with research conducted by Mansur and Hussaney (2022) which states that there is an effect on company financial performance on customer satisfaction.
H8: there is no effect of AGE on customer satisfaction.

BIG4 has no influence on customer satisfaction. This is concluded based on the sig. of 0.9411 this value is greater than 0.05 so that H01 is not accepted. These results are not in line with research conducted by Mansur and Hussaney (2022) which states that there is an effect on company financial performance on customer satisfaction.
H9: there is no BIG4 effect on customer satisfaction.

CFA has no influence on customer satisfaction. This is concluded based on the sig. of 0.8863 this value is greater than 0.05 so that H01 is not accepted. These results are not in line with research conducted by Mansur and Hussaney (2022) which states that there is an effect on company financial performance on customer satisfaction.
H10: there is no effect of CFA on customer satisfaction.

CONCLUSION

The Covid-19 moderating variable as measured by the dummy variable is the same as (1) in that year for covid 19*intncr, covid 19*instan has no significant effect on intangible investment, while covid19*intmark has a positive and significant effect on intangible investment and these results are not in line with previous research conducted by Mansur and Hussaney (2022). Based on the research results and conclusions obtained in conducting this research, there are implication benefits for financial managers and for investors that can be taken into consideration in making decisions. Some of the implications are obtained as follows. For Finance Managers Financial managers can pay more attention to market capitalization having a significant positive effect on intangible investment. In this case, it can be taken into consideration for financial managers in making decisions to be able to improve the company's non-financial performance. Companies also need to be more selective so that companies can improve the company's non-financial performance.

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