Stock Valuation Analysis of Technology Sector Companies Listed in Indonesia Stock Exchange in the Year 2018-2022

Queen Umbaran[1], Ana Noveria[2], Sylviana Maya Damayanti[3]

[1,2,3] School of Business Management, Bandung Institute of Technology, Indonesia

ABSTRACT: In the year 2018, Indonesia's equity market experienced an IPO boom where there is a significant increase in the number of companies who went through initial public offering (IPO). In the next years, Indonesia IPO market continue to grow with no less than 50 companies going public each year, rendering Indonesia as the biggest IPO market in Southeast Asia since 2018. Indonesian IPO within the year 2018-2022 is dominated by four sectors, consumer, properties & real estate, basic materials, and technology. Though only the fourth largest IPO sector, the sector grew significantly by 240% and funds raised from technology companies IPO deals comprises 36% of total funds raised from IPO in 2018-2022. However, after a few years of trading, only 3 out of 24 technology sectors company are trading above their initial offering price and closing price of the first trading day. The decline in share price spreads evenly across the technology sectors companies that went public in 2018-2023 despite size and market capitalization. This research aimed to evaluate the values of technology sector companies who went public in the year 2018-2022 and analyze whether their current share price is undervalued or overvalued compared to the true value of the company. This study analyzed two aspects of company value, the relative value and the absolute value. The relative valuation of each sample company is conducted through comparable companies analysis and absolute valuation is conducted through discounted cash flows analysis. The sample of this research comprised of 22 technology sector companies that went through IPO within the year 2018-2022. The data used in this research is secondary data collected from the official website of each sample companies, Indonesia Stock Exchange, and Bloomberg Terminal. Based on the relative valuation conducted through comparable companies analysis, the current share price of NFCX, PGJO, CASH, DCII, EDGE, UVCR, RUNS, WGSH, and WIRG are overvalued in the market. On the other hand, the current share price of DIVA, LUCK, HDIT, TFAS, DMMX, GLVA, WIFI, ZYRX, BUKA, GOTO, AXIO, BELI, and NINE are undervalued in the market. Furthermore, based on the absolute valuation conducted through discounted cash flows analysis, the current share price of NFCX, TFAS, DMMX, PGJO, CASH, DCII, EDGE, RUNS, WIRG, and BELI are overvalued in the market and WGSH is fair valued in the market. On the other hand, the current share price of DIVA, LUCK, HDIT, GLVA, WIFI, ZYRX, UVCR, BUKA, GOTO, AXIO, and NINE are undervalued in the market.

KEYWORDS: Absolute Valuation, IPO, Relative Valuation, Technology Sector

INTRODUCTION

In the year 2018, Indonesia's equity market experienced an IPO boom where there is a significant increase in the number of companies who went through initial public offering. 57 companies went public in Indonesia Stock Exchange (IDX) during 2018, generating over US $ 1.02 billion in funds raised and the biggest number of Indonesian IPO since the privatization of the exchange in 1992. The number of IPO grew 58.3% from the previous year with 36 companies in 2017. In the next years, Indonesia IPO market continue to grow with no less than 50 companies going public each year, rendering Indonesia as the biggest IPO market in Southeast Asia since 2018. 40,6% out of the 924 public companies listed in the Indonesia Stock Exchange (IDX) as of April 2024, went public in the past 6 years. [1]

The growth of Indonesian IPO continues in 2019 with 55 companies going public generating over US $1.13 in funds raised. Deeply affected by COVID-19 in 2020, the Indonesian IPO market took a hit, generating only US $373 of funds raised from 51 companies who went public 2020. In 2021, Indonesia managed to recover and raise the highest funds from IPO in Southeast Asia with a total of US$4.5 billion from 54 companies going public. Indonesia IPO market remains strong in 2022 with 59 companies went public, the highest number of IPO in Southeast Asia that year generating US 2.23 billion in funds raised. Indonesia set another record of highest IPO number in Southeast Asia with 79 companies going public in Indonesia Stock Exchange and generating US $3.55 billions of funds raised in 2023. [1][2]

Indonesian IPO within the year 2018-2022 is dominated by four sectors. The largest IPO by sectors was the consumer sectors with a total 98 companies going public in 2018-2022, growing the sector 64%. The second largest was properties and real estate sector with 32 companies going public in 2018-2022, growing the sector 62%. Basic materials sector is placed third with 27 companies going public in 2018-2022 leading to 39% growth in the sector. The fourth was technology sector with 24 companies going public in 2018-2022, growing the sector significantly by 240% in the span of five years.[3]

Though only the fourth largest IPO sector, funds raised from technology companies IPO deals comprises 36% of total funds raised from IPO in 2018-2022. This phenomenon is caused by several Indonesian tech startups and unicorns going public during 2018-2022 such as Distribusi Voucher Nusantara Tbk in 2018, Digital Mediatama Maxima Tbk in 2019, Cashlez Worldwide Indonesia in 2020, Bukalapak.com Tbk in 2021, also GoTo Gojek Tokopedia Tbk and Global Digital Niaga Tbk (BliBli) in 2022. Bukalapak.com Tbk was the biggest IPO in Indonesia and the second largest IPO in Southeast Asia by funds raised, raising over $1.5 billion in funds. GoTo Gojek Tokopedia Tbk was the biggest listing in Indonesia and Southeast Asia in 2022 raising over $1.1 billion in funds. Following second was Global Digital Niaga Tbk raising $508 million in funds and the fifth largest IPO in Southeast Asia in 2022. [1][2]

The technology sector in Indonesia have been growing significantly since the IPO boom in 2018. Before the year 2018, there are only 10 companies listed in Indonesia Stock Exchange technology sectors. As of April 2024, there are currently 47 technology sector companies listed in IDX. During the period of 2018-2022, 24 technology companies went public, comprising 51% of technology companies listed in IDX. The technology sectors also continue to grow beyond the 2018-2022 period, as 10 technology companies went public in 2023, the largest tech IPO deals in a year the IDX technology sector has ever seen by number. The trend continues through 2024 with 3 tech companies already went public as of May 2024.

However, the technology sector one of the biggest contributors of funds raised from IPO in 2018-2022 experienced a significant decline in majority of technology companies who went public during the period despite size and market capitalization. In 2018-2022, 24 technology sectors companies went public and started trading in Indonesia Stock Exchange (IDX). After a few years of trading, only 3 out of 24 technology sectors company are trading above their closing price of the first trading day. The rest of the technology companies who did IPO in 2018-2022 suffered decline in their share price post IPO with two companies currently being suspended from trading activities by IDX as of May 2024. The decline in share price experienced by the tech companies varies from -6.6% to -98.5% with a median decline of -73.6%.

This study aims to evaluate the values of technology sector companies who went public in the year 2018-2022 and analyze whether their current share price is undervalued, overvalued, or fair-valued. This research intent to analyze two aspects of company value, the relative value and the intrinsic value. The relative value of the technology sector companies who went public in 2018-2022 will be examined by conducting comparable company analysis as a proxy to measure the relative value of each sample company. Moreover, the intrinsic value of the technology sector companies who went public in 2018-2022 will be examined by conducting discounted cash flows analysis as a proxy to measure the intrinsic value of each company. Comparable company analysis will examine the company financial performance in accordance with the company's market situation and its current value in the market. On the other hand, discounted cash flow analysis will analyze the firm current and future financial condition and its value in the future. Based on the result of both valuation analysis, we can conclude whether the stock of technology sector companies who went public in 2018-2022 are overvalued, fair-valued, or overvalued.

LITERATURE REVIEW

The value of any firm is determined by four factors, its capacity to generate cash flows from assets in place, the expected growth rate of these cash flows, the length of time it will take for the firm to reach stable growth, and the cost of capital.[4] three approach in valuing a company. [4] The first approach to valuing a firm is discounted cash flow valuation, which extends the present value principles developed to analyze projects to value a firm. The second way of valuing a firm or its equity is to base the value on how the market is valuing similar or comparable firms; this approach is called relative valuation or pricing. The third approach to valuing a firm applies for highly levered firms, where the equity acquires the characteristics of a call option. In this special case, equity becomes more valuable, as debt maturity increases and the volatility in asset value goes up.[4]

Comparable company analysis is one of the primary methodologies used for valuing a given focus company, division, business, or collection of assets. Comparable company analysis provides a market benchmark against which an analyst can establish

valuation for a private company or analyze the value of a public company at a given point in time for a broad range of applications, such as mergers & acquisitions. initial public offerings, restructurings, and investment decisions. [5] The foundation for comparable company analysis is built upon the premise that similar companies provide a highly relevant reference point for valuing a given company as they share key business and financial characteristics, performance drivers, and risks. Therefore, valuation parameters can be established for the company by determining its relative positioning among peer companies. These peer companies are then benchmarked against one another and the target company based on various financial statistics and ratios. Trading multiples are then calculated for the universe, which serve as the basis for extrapolating a valuation range for the target. This valuation range is calculated by applying the selected multiples to the target's relevant financial statistics. Comparable company analysis is designed to reflect the current valuation based on prevailing market conditions and sentiment. [5]

Discounted cash flow analysis is a fundamental valuation methodology broadly used to derive the intrinsic value of a company, division, business, or collection of assets from the present value of its projected free cash flow (FCF), applicable to support merger and acquisition, IPOs, restructurings, and investment decisions. Discounted cash flow valuation is based on the foundation of present value rule where the value of the any asset is the present value of expected future cash flows on it. [6] A company's projected free cash flows is derived from a variety of assumptions and judgments about expected financial performance, including sales growth rates, profit margins, capital expenditures, and net working capital (NWC) requirements. [5] Given the inherent difficulties in accurately projecting a company's financial performance over an extended period of time, a terminal value is used to capture the remaining value of the target beyond the projection period. The projected free cash flows and terminal value are then discounted to the present at the target's weighted average cost of capital (WACC), which is a discount rate commensurate with its business and financial risks. The present value of the FCF and terminal value are summed to determine an enterprise value, which serves as the basis for the DCF valuation. [5] In determining the terminal value of a company through discounted cash flow analysis, there are two main methods of approach, the exit multiple method and the perpetuity growth method. the exit multiple method calculates the remaining value of a company's free cash flows produced after the projection period based on the multiple of its terminal year EBITDA or EBIT. On the other side, the perpetuity growth method calculates terminal value by treating a company's terminal year free cash flows as a perpetuity growing at an assumed rate.

RESEARCH METHODOLOGY

The research methodology used in this research is descriptive study with quantitative methods. Descriptive study is described as a study that is designed to describe the distribution of one or more variables, without regard to any causal or other hypothesis. [7] Descriptive study is used when the objective of the research is to describe the specific situation occurring accurately and systematically in an environment and its characteristics. Quantitative research methods can be described as a research method used to examine a certain populations or samples. Sampling techniques are carried out by collecting data using documentation studies and quantitative/statistical data analysis. Descriptive study with quantitative method is used in this research as this research aims to describe whether the stock of technology sector companies who went public in Indonesia Stock Exchange within the year 2018-2022 are undervalued, fair-valued, or overvalued compared to its relative value and absolute value using the technology sector companies' financial information.

This research uses quantitative data in the form of numbers or nominal. Quantitative data in this research was extracted directly from the nominal value stated in the annual report and financial statements published by the sample company without any changes. In this research, secondary data is used as a source of research data. Secondary data is obtained indirectly through the publication of literary documents such as books, journals, articles, reports, and other sources related to research. Secondary data used in this research was obtained from annual and quarterly financial reports published by technology sector companies listed on the Indonesia Stock Exchange for the financial year of 2020-2023 through the official websites of each company, as well as the official website of the Indonesian Stock Exchange, and Bloomberg Terminal.

The population of this research covers all technology companies who went through initial public offering (IPO) within the year 2018-2022 and are listed under the Technology Sector (I) in Indonesia Stock Exchange. The technology sector and industry include companies with operations in selling technology product and services such as non-provider internet services companies, IT service providers and consultants, software development companies, manufacturers of network devices, computer equipment,

electronic devices and components, and semiconductors companies listed in the Indonesian Stock Exchange. the sample of this research contain 22 companies and 4 financial year with a total of 88 observations. The sample for this research is as follows:

Table 1. Research Sample

No.	Company Name	Ticker	Listing Date	Industry
1	NFC Indonesia Tbk	NFCX	12-Jul-18	Application & Internet Services
2	Distribusi Voucher Nusantara Tbk	DIVA	27-Nov-18	Application & Internet Services
3	Sentral Mitra Informatika Tbk	LUCK	28-Nov-18	Hardware & Technology Equipment
4	Hensel Davest Indonesia Tbk	HDIT	12-Jul-19	Application & Internet Services
5	Telefast Indonesia Tbk	TFAS	17-Sep-19	Application & Internet Services
6	Digital Mediatama Maxima Tbk	DMMX	21-Oct-19	Application & Internet Services
7	Galva Technologies Tbk	GLVA	23-Dec-19	Electronic Devices, Instruments and Components
8	Tourindo Guide Indonesia Tbk	PGJO	08-Jan-20	Application & Internet Services
9	Cashlez Worldwide Indonesia Tbk	CASH	04-May-20	Application & Internet Services
10	Solusi Sinergi Digital Tbk	WIFI	30-Dec-20	IT Consulting & Services
11	DCI Indonesia Tbk	DCII	06-Jan-21	IT Consulting & Services
12	Indointernet Tbk	EDGE	08-Feb-21	Application & Internet Services
13	Zyrexindo Mandiri Buana	ZYRX	30-Mar-21	Computer Hardware
14	Trimegah Karya Pratama	UVCR	27-Jul-21	Application & Internet Services
15	Bukalapak.com Tbk	BUKA	06-Aug-21	Application & Internet Services
16	Global Sukses Solusi Tbk	RUNS	08-Sep-21	Software
17	Wira Global Solusi Tbk	WGSH	06-Dec-21	Software
18	WIR ASIA Tbk	WIRG	04-Apr-22	Software
19	GoTo Gojek Tokopedia Tbk	GOTO	11-Apr-22	Application & Internet Services
20	Tera Data Indonesia Tbk	AXIO	20-Jul-22	Computer Hardware
21	Global Digital Niaga Tbk	BELI	08-Nov-22	Application & Internet Services
22	Techno9 Indonesia Tbk	NINE	05-Dec-22	Computer Hardware

In this research, the documentation method is used as a data collection method. Using the documentation method, secondary data regarding technology sector companies listed on the Indonesia Stock Exchange within the year 2018-2022 was obtained by downloading the annual reports and annual financial reports of the technologies companies for the financial year of 2020-2023 on the official company websites of each company, the official Indonesia Stock Exchange website, and Bloomberg Terminal. Apart from the documentation method, literature study method was also used as a data collection method in this research. Literature study is carried out by reading and studying the results of previous research in the form of books, articles, papers, journals, and other literature that is related and relevant to the topic and research variables. The data obtained in this research is then analyzed through mathematical modelling by dividing into relative valuation and absolute valuation. Comparable Companies Analysis will be used as a proxy to calculate the sample companies' relative valuation and Discounted Cash Flows Analysis will be used as a proxy to calculate the sample companies' absolute valuation.

RESEARCH RESULTS
A. Relative Valuation
In this research, relative valuation will be calculated through comparable company analysis to find the implied share price of technology companies who went public in Indonesia Stock Exchange within the year 2018-2022. Below are stages of calculating comparable company analysis and its findings:
1. Market Valuation Calculation
The market valuation of technology companies who went public in Indonesia Stock Exchange (IDX) within the year 2018-2022 are valued using equity value and enterprise value. The table below describes the result of market valuation calculation of the sample companies using equity value and enterprise value:

International Journal of Current Science Research and Review

ISSN: 2581-8341

Volume 07 Issue 08 August 2024

DOI: 10.47191/ijcsrr/V7-i8-35, Impact Factor: 7.943

IJCSRR @ 2024

www.ijcsrr.org

Table 2. Market Valuation Calculation

(Rp in millions, except per share data)										
No.	Ticker	Current Price		Fully Diluted Shares Outstanding	Equity Value		Total Debt	Noncontrolling Interest	Cash & Cash Equivalents	Enterprise Value	
1	NFCX	Rp	1,230	658	Rp	809,533	167,190	517,804	(228,030)	Rp	1,266,497
2	DIVA	Rp	97	1,400	Rp	135,799	107,485	63,347	(75,793)	Rp	230,838
3	LUCK	Rp	58	716	Rp	41,513	16,785	-	(35,469)	Rp	22,830
4	HDIT	Rp	12	1,525	Rp	18,296	5,000	4,595	(43)	Rp	27,849
5	TFAS	Rp	137	1,657	Rp	226,984	58,681	2,252	(3,117)	Rp	284,800
6	DMMX	Rp	88	7,259	Rp	638,830	24,741	8,106	(106,745)	Rp	564,932
7	GLVA	Rp	300	1,500	Rp	450,000	346,517	47,186	(51,304)	Rp	792,399
8	PGJO	Rp	88	765	Rp	67,343	62	0	(598)	Rp	66,807
9	CASH	Rp	83	1,431	Rp	118,783	8,495	21,929	(15,364)	Rp	133,843
10	WIFI	Rp	161	2,255	Rp	363,107	607,210	2,084	(40,073)	Rp	932,328
11	DCII	Rp	37,475	2,384	Rp	89,330,878	1,089,369	107,533	(420,700)	Rp	90,107,080
12	EDGE	Rp	3,910	2,020	Rp	7,899,178	577,674	1,539,462	(154,519)	Rp	9,861,795
13	ZYRX	Rp	136	1,333	Rp	181,333	95,436	-	(5,128)	Rp	271,641
14	UVCR	Rp	78	2,000	Rp	156,011	10,874	-	(2,724)	Rp	164,162
15	BUKA	Rp	141	103,100	Rp	14,537,095	35,877	12,891	(11,752,490)	Rp	2,833,373
16	RUNS	Rp	56	984	Rp	55,079	18,920	-	(11,683)	Rp	62,317
17	WGSH	Rp	55	1,043	Rp	57,338	488	-	(16,184)	Rp	41,641
18	WIRG	Rp	95	11,939	Rp	1,134,169	60,022	57,676	(106,828)	Rp	1,145,039
19	GOTO	Rp	70	1,074,346	Rp	75,204,205	4,133,975	(2,320,033)	(20,311,118)	Rp	56,707,029
20	AXIO	Rp	189	5,840	Rp	1,103,784	129,263	21,053	(28,743)	Rp	1,225,357
21	BELI	Rp	452	123,210	Rp	55,691,144	2,885,160	216,104	(2,964,279)	Rp	55,828,129
22	NINE	Rp	6	2,157	Rp	12,942	1,759	-	(1,796)	Rp	12,905

The current share price of each company is based on each company respective closing share price on 27th May 2024. Fully diluted shares outstanding, total debt, noncontrolling interest, and cash and cash equivalents are acquired from each company's Q1 2024 Financial Reports except for Tourindo Guide Indonesia Tbk (PGJO), Cashlez Worldwide Indonesia (CASH), Solusi Sinergi Digital (WIFI), Global Sukses Solusi (RUNS), Wira Global Solusi (WGSH), and Techno9 Indonesia Tbk (NINE) which uses the 2023 Annual Financial Reports due to the unavailability of their Q1 2024 Reports.

2. Benchmarking Analysis & Financial Ratios

The calculation of the sample companies' market valuation, financial metrics, and financial ratios are used in benchmarking analysis. Benchmarking analysis is used to determine each companies' relative rankings and its closes comparable companies. The mean, median, high, and low of the sample companies' financial metrics and ratios are calculated in benchmarking analysis. In this research benchmarking analysis, the 22 samples of tech companies are divided into 4 tiers: High Market Capitalization, Medium Market Capitalization, Medium-Low Market Capitalization, and Low Market Capitalization. The categorization of the sample companies is based on the size of their equity value. By putting the samples companies into categories, each company can be compared with other companies with approximately the same market valuation in the IDX stock market.

The table below represent the bench marking analysis of the sample companies' financial statistics which includes the calculation of each sample companies' sales, adjusted gross profit, adjusted EBITDA, adjusted EBIT, and adjusted net income:

Table 3. Financial Statistics

Ticker	Equity Value	Enterprise Value	Sales	Gross Profit	EBITDA	EBIT	Net Income
Tier 1 : High Market Capitalization							
DCII	Rp 89,330,878	Rp 90,107,080	Rp 1,345,021	Rp 855,359	Rp 896,558	Rp 701,926	Rp 591,623
GOTO	Rp 75,204,205	Rp 56,707,029	Rp 15,532,288	Rp 9,929,746	Rp (2,205,419)	Rp (4,510,282)	Rp (5,096,388)
BELI	Rp 55,691,144	Rp 55,828,129	Rp 14,811,340	Rp 2,567,941	Rp (2,782,349)	Rp (3,208,060)	Rp (3,409,682)
BUKA	Rp 14,537,095	Rp 2,833,373	Rp 4,601,018	Rp 1,005,116	Rp (479,351)	Rp (552,050)	Rp (588,815)
EDGE	Rp 7,899,178	Rp 9,861,795	Rp 975,934	Rp 450,228	Rp 410,844	Rp 344,630	Rp 276,729
Tier 2 : Medium Market Capitalization							
WIRG	Rp 1,134,169	Rp 1,145,039	Rp 2,541,913	Rp 300,456	Rp 152,031	Rp 108,842	Rp 77,138
AXIO	Rp 1,103,784	Rp 1,225,357	Rp 1,327,716	Rp 255,143	Rp 181,165	Rp 157,007	Rp 114,528
NFCX	Rp 809,533	Rp 1,266,497	Rp 8,538,632	Rp 144,599	Rp 105,700	Rp 34,805	Rp 30,287
DMMX	Rp 638,830	Rp 564,932	Rp 1,748,834	Rp 82,888	Rp 80,047	Rp 28,224	Rp 26,428
GLVA	Rp 450,000	Rp 792,399	Rp 2,062,893	Rp 276,390	Rp 121,653	Rp 92,896	Rp 49,144
Tier 3 : Medium-Low Market Capitalization							
WIFI	Rp 363,107	Rp 932,328	Rp 439,326	Rp 171,976	Rp 228,055	Rp 124,150	Rp 57,103
TFAS	Rp 226,984	Rp 284,800	Rp 562,439	Rp 32,346	Rp 9,393	Rp 6,036	Rp (2,609)
ZYRX	Rp 181,333	Rp 271,641	Rp 265,041	Rp 79,274	Rp 54,193	Rp 52,772	Rp 20,054
UVCR	Rp 156,011	Rp 164,162	Rp 728,268	Rp 40,631	Rp 2,457	Rp 950	Rp 298
DIVA	Rp 135,799	Rp 230,838	Rp 3,897,080	Rp 507,874	Rp 440,191	Rp 424,542	Rp 446,386
CASH	Rp 118,783	Rp 133,843	Rp 194,879	Rp 16,444	Rp (28,778)	Rp (33,725)	Rp (28,694)
Tier 4 : Low Market Capitalization							
PGJO	Rp 67,343	Rp 66,807	Rp 9,953	Rp 1,514	Rp (2,790)	Rp (5,697)	Rp (5,740)
WGSH	Rp 57,338	Rp 41,641	Rp 33,147	Rp 13,460	Rp 7,535	Rp 5,322	Rp 4,400
RUNS	Rp 55,079	Rp 62,317	Rp 27,716	Rp 21,996	Rp (3,952)	Rp (5,928)	Rp (4,634)
LUCK	Rp 41,513	Rp 22,830	Rp 107,674	Rp 31,018	Rp 14,845	Rp 4,315	Rp 2,945
HDIT	Rp 18,296	Rp 27,849	Rp 1,666,024	Rp (8,792)	Rp (33,835)	Rp (41,705)	Rp (41,662)
NINE	Rp 12,942	Rp 12,905	Rp 14,775	Rp 3,850	Rp (3,928)	Rp (4,919)	Rp (4,091)

On the next stage of benchmarking analysis, the sample companies' profitability margin, growth rates, beta, return on investment ratio, leverage ratio, and coverage ratio are compared against each other. Below are the benchmarking analysis tables for comparison of profitability margin, growth rates, beta., return on investment ratio, leverage ratio, and coverage ratio of technology companies who went public in Indonesia Stock Exchange within the year 2018-2022:

Table 4. Financial Ratios

Ticker	Equity Value	Enterprise Value	Gross Profit (%)	EBITDA (%)	EBIT (%)	Net Income (%)	Sales Hist. 1-year	EBITDA Hist. 1-year	EPS Hist. 1-year	Beta	ROIC (%)	ROE (%)	ROA (%)	Implied Div. Yield (%)	Debt / Tot. Cap. (%)	Debt / EBITDA (x)	Net Debt / EBITDA (x)	EBITDA / Int. Exp. (x)	EBITDA - Cpx / Int. Exp. (x)	EBIT / Int. Exp. (x)
Tier 1 : High Market Capitalization																				
DCII	Rp 89,330,878	Rp 90,107,080	63.6%	66.7%	52.2%	44.0%	25.1%	17.2%	40.7%	0.30	25.2%	27.3%	15.9%	0.0%	32.7%	1.2x	0.8x	9.5x	5.3x	7.4x
GOTO	Rp 75,204,205	Rp 56,707,029	63.9%	-14.2%	-29.0%	-32.8%	30.3%	-79.9%	-71.4%	1.70	-26.7%	-13.5%	-10.0%	0.0%	9.9%	-1.9x	9.5x	-5.2x	-18.4x	-10.7x
BELI	Rp 55,691,144	Rp 55,828,129	17.3%	-18.8%	-21.7%	-23.0%	-3.6%	-32.0%	-35.5%	0.55	-37.3%	-43.7%	-24.6%	0.0%	26.6%	-1.0x	-0.4x	-18.3x	-19.4x	-21.1x
BUKA	Rp 14,537,095	Rp 2,833,373	21.8%	-10.4%	-12.0%	-12.8%	22.7%	-70.7%	-63.2%	1.53	-5.4%	-2.3%	-2.3%	0.0%	0.1%	-0.1x	31.6x	-107.0x	-140.4x	-123.2x
EDGE	Rp 7,899,178	Rp 9,861,795	46.1%	42.1%	35.3%	28.4%	15.6%	30.8%	-71.9%	0.86	19.4%	18.4%	10.1%	0.0%	27.4%	1.4x	0.8x	1241.2x	88.6x	1041.2x
Mean			42.6%	13.1%	5.0%	0.7%	18.0%	-26.9%	-40.3%	0.99	-5.0%	-2.8%	-2.2%	0.0%	19.3%	-0.1x	8.5x	224.1x	-298.0x	178.7x
Median			46.1%	-10.4%	-12.0%	-12.8%	22.7%	-32.0%	-63.2%	0.86	-5.4%	-2.3%	-2.3%	0.0%	26.6%	-0.1x	0.8x	-5.2x	-19.4x	-10.7x
Tier 2 : Medium Market Capitalization																				
WIRG	Rp 1,134,169	Rp 1,145,039	11.8%	6.0%	4.3%	3.0%	47.0%	58.3%	46.8%	2.63	18.1%	11.4%	6.6%	0.0%	8.0%	0.4x	-0.4x	41.7x	-17.6x	29.8x
AXIO	Rp 1,103,784	Rp 1,225,357	19.2%	13.6%	11.8%	8.6%	-14.4%	15.7%	11.9%	0.52	26.9%	22.2%	12.6%	9.0%	20.0%	0.7x	0.4x	16.6x	14.9x	14.4x
NFCX	Rp 809,533	Rp 1,266,497	1.7%	1.2%	0.4%	0.4%	-3.2%	15.7%	12.8%	1.57	23.7%	9.3%	2.0%	0.0%	35.3%	1.6x	-1.9x	13.9x	2.6x	4.6x
DMMX	Rp 638,830	Rp 564,932	4.7%	4.6%	1.6%	1.5%	0.4%	42.5%	243.7%	1.75	4.9%	4.1%	3.1%	0.0%	3.8%	0.3x	-1.1x	23.7x	8.3x	8.3x
GLVA	Rp 450,000	Rp 792,399	13.4%	5.9%	4.5%	2.4%	-11.4%	14.0%	7.7%	0.46	15.8%	13.9%	5.4%	5.0%	48.9%	2.8x	2.0x	4.2x	3.2x	3.2x
Mean			10.2%	6.3%	4.5%	3.2%	3.6%	27.2%	64.6%	1.39	17.9%	12.2%	5.9%	2.8%	23.2%	1.2x	-0.2x	20.0x	2.3x	12.1x
Median			11.8%	5.9%	4.3%	2.4%	-3.2%	15.7%	12.8%	1.57	18.1%	11.4%	5.4%	0.0%	20.0%	0.7x	-0.4x	16.6x	3.2x	8.3x
Tier 3 : Medium-Low Market Capitalization																				
WIFI	Rp 363,107	Rp 932,328	39.1%	51.9%	28.3%	13.0%	-4.8%	91.2%	259.6%	1.11	10.4%	8.5%	3.8%	0.7%	45.1%	2.7x	2.6x	3.9x	-1.7x	2.1x
TFAS	Rp 226,984	Rp 284,800	5.8%	1.7%	1.1%	-0.5%	-17.3%	14.1%	-1460.0%	0.86	2.5%	-1.4%	-1.0%	0.0%	24.2%	6.2x	5.9x	1.0x	1.0x	0.7x
ZYRX	Rp 181,333	Rp 271,641	29.9%	20.4%	19.9%	7.6%	-62.4%	-45.4%	-45.4%	0.63	14.2%	7.0%	4.1%	0.0%	25.1%	1.8x	1.5x	4.4x	3.1x	4.3x
UVCR	Rp 156,011	Rp 164,162	5.6%	0.3%	0.1%	0.0%	-34.6%	-64.9%	-75.8%	1.64	1.0%	0.3%	0.2%	0.4%	9.8%	4.4x	1.3x	5.5x	-6.2x	2.1x
DIVA	Rp 135,799	Rp 230,838	13.0%	11.3%	10.9%	11.4%	42.5%	758.0%	92.9%	0.95	49.4%	60.3%	46.7%	0.0%	14.1%	0.2x	0.1x	89.3x	86.6x	86.1x
CASH	Rp 118,783	Rp 133,843	8.4%	-14.8%	-17.3%	-14.7%	51.1%	-25534.6%	381.4%	0.40	-21.1%	-19.5%	-12.6%	0.0%	6.0%	-0.3x	0.0x	-11.9x	-13.1x	-14.0x
Mean			17.0%	11.8%	7.2%	2.8%	-14.8%	-4130.3%	255.5%	0.93	9.4%	9.2%	6.9%	0.6%	20.7%	2.5x	1.9x	15.4x	12.0x	13.6x
Median			10.7%	6.5%	6.0%	5.8%	-19.1%	-15.7%	96.9%	0.90	6.4%	3.6%	2.0%	0.2%	19.2%	2.2x	1.4x	4.2x	-0.3x	2.1x
Tier 4 : Low Market Capitalization																				
PGJO	Rp 67,343	Rp 66,807	15.2%	-28.0%	-57.2%	-57.7%	273.1%	-51.2%	-42.1%	0.27	-77.5%	-54.9%	-50.9%	0.0%	0.9%	0.0x	2.3x	-84.9x	-84.9x	-173.5x
WGSH	Rp 57,338	Rp 41,641	40.6%	22.7%	16.1%	13.3%	24.2%	11.1%	3.2%	0.69	18.5%	7.9%	7.6%	1.8%	0.9%	0.1x	-3.5x	0.0x	0.0x	0.0x
RUNS	Rp 55,079	Rp 62,317	79.4%	-14.3%	-21.4%	-16.7%	-11.4%	-165.2%	-251.5%	1.43	-9.6%	-7.0%	-5.1%	0.6%	23.2%	-4.8x	2.1x	-23.7x	-211.8x	-35.5x
LUCK	Rp 41,513	Rp 22,830	28.8%	13.8%	4.0%	2.7%	-21.8%	-20.3%	-7.4%	0.62	3.7%	2.2%	1.7%	0.0%	10.9%	1.1x	-1.3x	103.9x	73.5x	30.2x
HDIT	Rp 18,296	Rp 27,849	-0.5%	-2.0%	-2.5%	-2.5%	-47.7%	158.0%	92.9%	1.23	-14.4%	-14.7%	-12.1%	0.0%	1.7%	-0.1x	-0.1x	0.0x	0.0x	0.0x
NINE	Rp 12,942	Rp 12,905	26.1%	-26.6%	-33.3%	-27.7%	-25.6%	-205.5%	-314.9%	2.16	-13.9%	-9.4%	-8.6%	0.0%	4.1%	-0.4x	2.6x	-14.1x	-55.8x	-17.7x
Mean			31.6%	-5.7%	-15.7%	-14.8%	31.8%	-45.5%	-86.7%	1.07	-15.5%	-12.6%	-11.2%	0.4%	6.9%	-0.7x	0.3x	-3.1x	-46.5x	-32.7x
Median			27.4%	-8.1%	-11.9%	-9.6%	-16.6%	-35.8%	-24.8%	0.96	-11.7%	-8.2%	-6.8%	0.0%	2.9%	-0.1x	1.0x	-7.1x	-27.9x	-8.9x
Overall																				
Mean			25.2%	6.1%	-0.2%	-2.4%	9.6%	-1138.8%	51.6%	1.08	1.3%	1.2%	-0.3%	0.9%	17.2%	0.7x	2.5x	58.8x	-76.6x	38.1x
Median			18.3%	3.1%	1.3%	0.9%	-4.2%	8.2%	-2.1%	0.90	4.3%	3.1%	1.8%	0.0%	12.5%	0.4x	0.8x	4.1x	-0.8x	2.1x
High			79.4%	66.7%	52.2%	44.0%	273.1%	758.0%	2493.6%	2.63	49.4%	60.3%	46.7%	9.0%	48.9%	6.2x	31.6x	1241.2x	88.6x	1041.2x
Low			-0.5%	-28.0%	-57.2%	-57.7%	-62.4%	-25534.6%	-1460.0%	0.27	-77.5%	-54.9%	-50.9%	0.0%	0.1%	-4.8x	-3.5x	-107.0x	-1317.1x	-173.5x

3. Comparable Company Analysis with Trading Multiples

In the output of comparable companies' analysis, trading multiples of the sample companies are calculated and compared against each other. The valuation trading multiples used in this research are Enterprise Value-to-Sales, Enterprise Value-to-EBITDA. Enterprise Value-to-EBIT, Price-to-Earnings Per Share. Price-to-Book Value, Price-to-Free Cash Flows, and Free Cash Flows yield. The table below describes the value and comparison of the sample companies' trading multiples for the technology company who went public in IDX within the year 2018-2022:

Table 5. Trading Multiples

Ticker	Current Share Price	% of 52-wk. High	Equity Value	Enterprise Value	Enterprise Value /			Price /			LTM FCF Yield
					LTM Sales	LTM EBITDA	LTM EBIT	LTM EPS	LTM BV	LTM FCF	
Tier 1 : High Market Capitalization											
DCII	Rp 37,475	63%	Rp 89,330,878	Rp 90,107,080	67.0x	100.5x	128.4x	151.0x	38.0x	239.9x	0.4%
GOTO	Rp 70	48%	Rp 75,204,205	Rp 56,707,029	3.7x	-25.7x	-12.6x	-14.8x	2.1x	-6.4x	-15.5%
BELI	Rp 452	91%	Rp 55,691,144	Rp 55,828,129	3.8x	-20.1x	-17.4x	-16.3x	6.8x	-17.1x	-5.9%
BUKA	Rp 141	53%	Rp 14,537,095	Rp 2,833,373	0.6x	-5.9x	-5.1x	-24.7x	0.6x	-91.4x	-1.1%
EDGE	Rp 3,910	34%	Rp 7,899,178	Rp 9,861,795	10.1x	24.0x	28.6x	28.5x	5.1x	-13.6x	-7.3%
Mean					**17.0x**	**14.6x**	**24.4x**	**24.8x**	**10.5x**	**22.3x**	**-5.9%**
Median					**3.8x**	**-5.9x**	**-5.1x**	**-14.8x**	**5.1x**	**-13.6x**	**-5.9%**
Tier 2 : Medium Market Capitalization											
WIRG	Rp 95	57%	Rp 1,134,169	Rp 1,145,039	0.5x	7.5x	10.5x	14.7x	1.5x	-21.2x	-4.7%
AXIO	Rp 189	75%	Rp 1,103,784	Rp 1,225,357	0.9x	6.8x	7.8x	9.6x	2.0x	5.6x	17.8%
NFCX	Rp 1,230	17%	Rp 809,533	Rp 1,266,497	0.1x	12.0x	36.4x	26.9x	1.0x	19.6x	5.1%
DMMX	Rp 88	12%	Rp 638,830	Rp 564,932	0.3x	7.1x	20.0x	24.2x	1.0x	10.4x	9.6%
GLVA	Rp 300	27%	Rp 450,000	Rp 792,399	0.4x	6.5x	8.5x	9.2x	1.1x	0.4x	255.3%
Mean					**0.4x**	**8.0x**	**16.7x**	**16.9x**	**1.3x**	**3.0x**	**56.6%**
Median					**0.4x**	**7.1x**	**10.5x**	**14.7x**	**1.1x**	**5.6x**	**9.6%**
Tier 3 : Medium-Low Market Capitalization											
WIFI	Rp 161	58%	Rp 363,107	Rp 932,328	2.1x	4.1x	7.5x	6.4x	0.5x	-3.6x	-27.6%
TFAS	Rp 137	3%	Rp 226,984	Rp 284,800	0.5x	30.3x	47.2x	-87.0x	1.2x	8.3x	12.0%
ZYRX	Rp 136	39%	Rp 181,333	Rp 271,641	1.0x	5.0x	5.1x	9.0x	0.6x	2.0x	2.7%
UVCR	Rp 78	41%	Rp 156,011	Rp 164,162	0.2x	66.8x	172.9x	24.3x	1.6x	-22.2x	-4.5%
DIVA	Rp 97	15%	Rp 135,799	Rp 230,838	0.1x	0.5x	0.5x	0.3x	0.6x	-1.5x	-68.1%
CASH	Rp 83	52%	Rp 118,783	Rp 133,843	0.7x	-4.7x	-4.0x	-4.1x	0.8x	11.2x	9.4%
Mean					**0.8x**	**17.0x**	**38.2x**	**-8.5x**	**0.9x**	**-1.0x**	**-12.7%**
Median					**0.6x**	**4.6x**	**6.3x**	**3.3x**	**0.7x**	**0.3x**	**-0.9%**
Tier 4 : Low Market Capitalization											
PGJO	Rp 88	74%	Rp 67,343	Rp 66,807	6.7x	-23.9x	-11.7x	-11.7x	9.4x	10.7x	9.4%
WGSH	Rp 55	24%	Rp 57,338	Rp 41,641	1.3x	5.5x	7.8x	13.0x	1.0x	-6.6x	-15.2%
RUNS	Rp 56	39%	Rp 55,079	Rp 62,317	2.2x	-15.8x	-10.5x	-11.9x	0.8x	-2.0x	-50.3%
LUCK	Rp 58	48%	Rp 41,513	Rp 22,830	0.2x	1.5x	5.3x	14.1x	0.3x	4.9x	20.5%
HDIT	Rp 12	20%	Rp 18,296	Rp 27,849	0.0x	-0.8x	-0.7x	-0.4x	0.1x	2.8x	35.5%
NINE	Rp 6	18%	Rp 12,942	Rp 12,905	0.9x	-3.3x	-2.6x	-3.2x	0.3x	-1.4x	-5.9%
Mean					**1.9x**	**-6.1x**	**-2.1x**	**-0.02x**	**2.0x**	**1.4x**	**-1.0%**
Median					**1.1x**	**-2.1x**	**-1.6x**	**-1.8x**	**0.6x**	**0.7x**	**1.8%**
Overall											
Mean					**4.7x**	**8.1x**	**19.2x**	**7.1x**	**3.5x**	**5.9x**	**7.8%**
Median					**0.8x**	**4.6x**	**6.4x**	**7.7x**	**1.0x**	**-0.5x**	**-0.3%**
Max					**67.0x**	**100.5x**	**172.9x**	**151.0x**	**38.0x**	**239.9x**	**255.3%**
Min					**0.0x**	**-25.7x**	**-17.4x**	**-87.0x**	**0.1x**	**-91.4x**	**-68.1%**

4. Determining Valuation

Based on the statistics of trading multiples in the comparable companies analysis below, a valuation range for each companies is calculated. The table below describes the calculation result of each companies implied enterprise value through comparable companies' analysis:

Table 6. Implied Enterprise Value Calculation

No.	Ticker	LTM Valuation Metrics	LTM Valuation Metrics	Multiple Range	Implied Enterprise Value	
1	NFCX	EV/EBITDA	Rp 105,700	6.7x - 7.2x	Rp 709,948	- Rp 762,799
2	DIVA	EV/EBITDA	Rp 440,191	4.3x - 4.8x	Rp 1,892,969	- Rp 2,113,064
3	LUCK	EV/Sales	Rp 107,674	1.3x - 1.8x	Rp 137,929	- Rp 191,766
4	HDIT	EV/Sales	Rp 1,666,024	1.0x - 1.5x	Rp 1,657,065	- Rp 2,490,077
5	TFAS	EV/EBITDA	Rp 9,393	6.7x - 7.2x	Rp 63,333	- Rp 68,029
6	DMMX	EV/EBITDA	Rp 80,047	7.9x - 8.4x	Rp 636,192	- Rp 676,216
7	GLVA	EV/EBITDA	Rp 121,653	8.1x - 8.6x	Rp 983,407	- Rp 1,044,234
8	PGJO	EV/Sales	Rp 9,953	1.0x - 1.5x	Rp 9,900	- Rp 14,876
9	CASH	EV/Sales	Rp 194,879	0.3x - 0.8x	Rp 54,979	- Rp 152,418
10	WIFI	EV/EBITDA	Rp 228,055	6.3x - 6.8x	Rp 1,442,630	- Rp 1,556,658
11	DCII	EV/Sales	Rp 1,345,021	4.7x - 5.2x	Rp 6,340,206	- Rp 7,012,717
12	EDGE	EV/Sales	Rp 975,934	3.7x - 4.2x	Rp 3,582,124	- Rp 4,070,091
13	ZYRX	EV/EBITDA	Rp 54,193	5.5x - 6.0x	Rp 300,148	- Rp 327,244
14	UVCR	EV/EBITDA	Rp 2,457	9.7x - 10.2x	Rp 23,925	- Rp 25,154
15	BUKA	EV/Sales	Rp 4,601,018	5.3x - 5.8x	Rp 24,455,637	- Rp 26,756,146
16	RUNS	EV/Sales	Rp 27,716	0.7x - 1.2x	Rp 20,706	- Rp 34,564
17	WGSH	EV/Sales	Rp 33,147	0.8x - 1.3x	Rp 27,609	- Rp 44,182
18	WIRG	EV/EBITDA	Rp 152,031	7.8x - 8.3x	Rp 1,190,281	- Rp 1,266,297
19	GOTO	EV/Sales	Rp 15,532,288	4.8x - 5.3x	Rp 73,848,470	- Rp 81,614,614
20	AXIO	EV/EBITDA	Rp 181,165	8.0x - 8.5x	Rp 1,453,157	- Rp 1,543,739
21	BELI	EV/Sales	Rp 14,811,340	5.1x - 5.6x	Rp 75,761,505	- Rp 83,167,175
22	NINE	EV/Sales	Rp 14,775	1.1x - 1.6x	Rp 16,512	- Rp 23,899

(Rp in millions)

The valuation metrics used in this research to calculates enterprise values for the sample's companies are EV/Sales and EV/EBITDA. EV/Sales is used for valuating sample companies within the high market capitalization and low market capitalization group as they are a high growth companies and most of them still have a negative EBITDA. EV/EBITDA is used for valuating sample companies within the medium market capitalization and the medium-low market capitalization group as most of the companies within the groups have positive EBITDA. The valuation range for each sample companies are sourced from the average of several closest comparable companies' EV/Sales or EV/EBITDA within the same market capitalization group.

The implied enterprise value is then subtracted with the sample companies' non-controlling interest and net debt to find the implied equity value of each technology companies who went public in Indonesia Stock Exchange within the year 2018-2022. The table below describes the calculation of each companies implied equity value:

Table 7. Implied Equity Value Calculation

No.	Ticker	Implied Enterprise Value		Less: Non-controlling Interest	Less: Net Debt	Implied Equity Value	
1	NFCX	Rp 709,948	- Rp 762,799	Rp 517,804	Rp (126,678)	Rp 318,823	- Rp 371,673
2	DIVA	Rp 1,892,969	- Rp 2,113,064	Rp 63,347	Rp 31,692	Rp 1,797,930	- Rp 2,018,026
3	LUCK	Rp 137,929	- Rp 191,766	Rp -	Rp (16,658)	Rp 154,586	- Rp 208,424
4	HDIT	Rp 1,657,065	- Rp 2,490,077	Rp 4,595	Rp 4,957	Rp 1,647,512	- Rp 2,480,525
5	TFAS	Rp 63,333	- Rp 68,029	Rp 2,252	Rp 55,564	Rp 5,517	- Rp 10,213
6	DMMX	Rp 636,192	- Rp 676,216	Rp 8,106	Rp (82,004)	Rp 710,091	- Rp 750,115
7	GLVA	Rp 983,407	- Rp 1,044,234	Rp 47,186	Rp 295,213	Rp 641,008	- Rp 701,835
8	PGJO	Rp 9,900	- Rp 14,876	Rp 0	Rp (536)	Rp 10,435	- Rp 15,412
9	CASH	Rp 54,979	- Rp 152,418	Rp 21,929	Rp (6,869)	Rp 39,920	- Rp 137,359
10	WIFI	Rp 1,442,630	- Rp 1,556,658	Rp 2,084	Rp 567,137	Rp 873,409	- Rp 987,436
11	DCII	Rp 6,340,206	- Rp 7,012,717	Rp 107,533	Rp 668,669	Rp 5,564,004	- Rp 6,236,515
12	EDGE	Rp 3,582,124	- Rp 4,070,091	Rp 1,539,462	Rp 423,155	Rp 1,619,507	- Rp 2,107,474
13	ZYRX	Rp 300,148	- Rp 327,244	Rp -	Rp 90,308	Rp 209,840	- Rp 236,936
14	UVCR	Rp 23,925	- Rp 25,154	Rp -	Rp 8,151	Rp 15,775	- Rp 17,003
15	BUKA	Rp 24,455,637	- Rp 26,756,146	Rp 12,891	Rp (11,716,614)	Rp 36,159,359	- Rp 38,459,868
16	RUNS	Rp 20,706	- Rp 34,564	Rp -	Rp 7,237	Rp 13,469	- Rp 27,327
17	WGSH	Rp 27,609	- Rp 44,182	Rp -	Rp (15,696)	Rp 43,305	- Rp 59,879
18	WIRG	Rp 1,190,281	- Rp 1,266,297	Rp 57,676	Rp (46,806)	Rp 1,179,412	- Rp 1,255,427
19	GOTO	Rp 73,848,470	- Rp 81,614,614	Rp (2,320,033)	Rp (16,177,143)	Rp 92,345,646	- Rp 100,111,790
20	AXIO	Rp 1,453,157	- Rp 1,543,739	Rp 21,053	Rp 100,520	Rp 1,331,583	- Rp 1,422,166
21	BELI	Rp 75,761,505	- Rp 83,167,175	Rp 216,104	Rp (79,119)	Rp 75,624,520	- Rp 83,030,190
22	NINE	Rp 16,512	- Rp 23,899	Rp -	Rp (37)	Rp 16,549	- Rp 23,936

(Rp in millions)

The equity value is then divided with the companies fully dilutes shares outstanding to find the implied share price of each companies through comparable companies' analysis. The tables below describe the calculation of implied share price range of technology companies who went public in IDX within the year 2018-2022:

Table 8. Implied Share Price Calculation

(Rp in millions)

No.	Ticker	Implied Equity Value			Fully Diluted Shares	Implied Share Price Range			Implied Share Price
1	NFCX	Rp 318,823	-	Rp 371,673	658	Rp 484	-	Rp 565	Rp 525
2	DIVA	Rp 1,797,930	-	Rp 2,018,026	1,400	Rp 1,284	-	Rp 1,441	Rp 1,363
3	LUCK	Rp 154,586	-	Rp 208,424	716	Rp 216	-	Rp 291	Rp 254
4	HDIT	Rp 1,647,512	-	Rp 2,480,525	1,525	Rp 1,081	-	Rp 1,627	Rp 1,354
5	TFAS	Rp 5,517	-	Rp 10,213	1,657	Rp 3	-	Rp 6	Rp 5
6	DMMX	Rp 710,091	-	Rp 750,115	7,259	Rp 98	-	Rp 103	Rp 101
7	GLVA	Rp 641,008	-	Rp 701,835	1,500	Rp 427	-	Rp 468	Rp 448
8	PGJO	Rp 10,435	-	Rp 15,412	765	Rp 14	-	Rp 20	Rp 17
9	CASH	Rp 39,920	-	Rp 137,359	1,431	Rp 28	-	Rp 96	Rp 62
10	WIFI	Rp 873,409	-	Rp 987,436	2,255	Rp 387	-	Rp 438	Rp 413
11	DCII	Rp 5,564,004	-	Rp 6,236,515	2,384	Rp 2,334	-	Rp 2,616	Rp 2,475
12	EDGE	Rp 1,619,507	-	Rp 2,107,474	2,020	Rp 802	-	Rp 1,043	Rp 922
13	ZYRX	Rp 209,840	-	Rp 236,936	1,333	Rp 157	-	Rp 178	Rp 168
14	UVCR	Rp 15,775	-	Rp 17,003	2,000	Rp 8	-	Rp 9	Rp 8
15	BUKA	Rp 36,159,359	-	Rp 38,459,868	103,100	Rp 351	-	Rp 373	Rp 362
16	RUNS	Rp 13,469	-	Rp 27,327	984	Rp 14	-	Rp 28	Rp 21
17	WGSH	Rp 43,305	-	Rp 59,879	1,043	Rp 42	-	Rp 57	Rp 49
18	WIRG	Rp 1,179,412	-	Rp 1,255,427	60,022	Rp 20	-	Rp 21	Rp 20
19	GOTO	Rp 92,345,646	-	Rp 100,111,790	1,074,346	Rp 86	-	Rp 93	Rp 90
20	AXIO	Rp 1,331,583	-	Rp 1,422,166	5,840	Rp 228	-	Rp 244	Rp 236
21	BELI	Rp 75,624,520	-	Rp 83,030,190	123,210	Rp 614	-	Rp 674	Rp 644
22	NINE	Rp 16,549	-	Rp 23,936	2,157	Rp 8	-	Rp 11	Rp 9

B. Absolute Valuation

In this research, absolute valuation will be calculated through discounted cash flows analysis to find the implied share price of technology companies who went public in Indonesia Stock Exchange within the year 2018-2022. Below are stages of discounted cash flow analysis and its findings:

1. Unlevered Free Cash Flow Projection

The calculation of unlevered free cash flow projection is done by first making a sales or revenue projection for all the sample companies. The revenue projection of each company is under the assumption of past revenue growth and its compounded annual growth rate (CAGR). The projected revenue is then deducted with the projected cost of goods sold (COGS) or cost of revenue. The projection of COGS is based on each sample companies' historical COGS excluding depreciation and amortization as a percentage of the revenues, projected through moving average. The projected gross profit from the deduction of COGS to the revenue is then reduced with the selling, general, and administrative (SGA) expenses excluding depreciation and amortization projected through moving average and historical percentage of SGA expenses of the total revenues to calculate the company EBITDA. The projected depreciation and amortization (D&A) expense through historical percentage of D&A expense of sales and moving average is then added to the EBITDA to calculate the projected EBIT of the sample companies. The projected EBIT is then deducted with projected taxation expense based on the Indonesian marginal corporate tax rate of 22% to calculate the earnings before interest after tax (EBIAT).

From the EBIAT, unlevered free cash flow is then calculated by adding back the D&A expenses to the EBIAT and reduce it with the projected capital expenditures (CAPEX) and the projected changes in net working capital (NWC). The projected CAPEX is under the assumption of the historical percentage of CAPEX to the company's revenue and moving average. The changes in NWC is also under the assumption of historical changes in the company working capital and projected through moving average. The table below describes the unlevered free cash flows for each of the projected years of the technology companies who went public in IDX during the year 2018-2022:

International Journal of Current Science Research and Review

ISSN: 2581-8341

Volume 07 Issue 08 August 2024

DOI: 10.47191/ijcsrr/V7-i8-35, Impact Factor: 7.943

IJCSRR @ 2024

www.ijcsrr.org

Table 9. Unlevered Free Cash Flow Projection

| No. | Ticker | | (Rp in millons, fiscal year ending December 31) Unlevered Free Cash Flow Projection | | | | | | | | |
			2024		2025		2026		2027		2028
1	NFCX	Rp	(29,980)	Rp	37,942	Rp	86,702	Rp	92,258	Rp	146,393
2	DIVA	Rp	94,588	Rp	5,502	Rp	(2,226)	Rp	36,797	Rp	23,106
3	LUCK	Rp	10,308	Rp	5,025	Rp	2,530	Rp	6,965	Rp	5,620
4	HDIT	Rp	3,277	Rp	(1,612)	Rp	4,743	Rp	3,734	Rp	5,877
5	TFAS	Rp	29,924	Rp	2,168	Rp	(2,849)	Rp	7,234	Rp	7,919
6	DMMX	Rp	(9,360)	Rp	(715)	Rp	46,419	Rp	25,124	Rp	38,064
7	GLVA	Rp	188,708	Rp	30,602	Rp	38,501	Rp	90,772	Rp	67,346
8	PGJO	Rp	(23,825)	Rp	11,525	Rp	(6,244)	Rp	(10,293)	Rp	791
9	CASH	Rp	(23,918)	Rp	2,101	Rp	2,542	Rp	(2,770)	Rp	4,172
10	WIFI	Rp	(78,477)	Rp	(55,300)	Rp	10,138	Rp	70,200	Rp	134,883
11	DCII	Rp	372,010	Rp	485,266	Rp	616,538	Rp	771,243	Rp	793,418
12	EDGE	Rp	(350,684)	Rp	(5,336)	Rp	168,821	Rp	243,746	Rp	278,234
13	ZYRX	Rp	171,006	Rp	23,456	Rp	20,257	Rp	96,562	Rp	52,806
14	UVCR	Rp	24,892	Rp	13,588	Rp	19,184	Rp	32,984	Rp	21,556
15	BUKA	Rp	(601,914)	Rp	(1,846,654)	Rp	507,100	Rp	2,095,718	Rp	1,248,640
16	RUNS	Rp	(9,535)	Rp	(4,069)	Rp	908	Rp	1,844	Rp	5,444
17	WGSH	Rp	1,307	Rp	(1,836)	Rp	(1,112)	Rp	2,714	Rp	3,764
18	WIRG	Rp	(117,164)	Rp	(83,386)	Rp	56,676	Rp	75,656	Rp	221,379
19	GOTO	Rp	(3,295,496)	Rp	(3,166,180)	Rp	447,108	Rp	6,004,520	Rp	9,054,927
20	AXIO	Rp	106,625	Rp	66,056	Rp	124,367	Rp	112,190	Rp	121,497
21	BELI	Rp	(2,857,270)	Rp	(2,307,788)	Rp	(1,278,106)	Rp	801,014	Rp	1,968,241
22	NINE	Rp	4,177	Rp	(4,116)	Rp	(3,573)	Rp	(735)	Rp	1,801

2. Weighted Average Cost of Capital Calculation

Weighted average cost of capital or WACC serves as a discount rate in discounted cash flows valuation as WACC represents the weighted average of the required return on the invested capital in the form of debt, equity, and preferred equity a company hold. WACC is calculated by first calculating each sample companies' capital structure then calculating the cost of debt and cost of equity to be multiplied with the capital structure.

Capital structure is the mixture of debt and equity a company use to finance their business operations and manage the company for growth. Capital structure is calculated by combining the total debt and total equity to find the total capitalization of a company. The total debt of the company is then divided with the total capitalization to calculate the percentage of debt in the capital structure. To calculate the percentage of equity in the capital structure, the company's total equity is divided by the total capitalization. The table below describes the calculation of the capital structure for each of the technology companies who went public in IDX within the year 2018-2022:

Table 10. Capital Structure Calculation

No.	Ticker	Total Debt		Total Equity		Total Capitalization		Capital Structure Debt	Equity
		(Rp in millions)							
1	NFCX	Rp	167,190	Rp	306,198	Rp	473,388	35.3%	64.7%
2	DIVA	Rp	107,485	Rp	655,990	Rp	763,475	14.1%	85.9%
3	LUCK	Rp	16,785	Rp	137,006	Rp	153,792	10.9%	89.1%
4	HDIT	Rp	5,000	Rp	282,470	Rp	287,470	1.7%	98.3%
5	TFAS	Rp	58,681	Rp	183,527	Rp	242,208	24.2%	75.8%
6	DMMX	Rp	24,741	Rp	629,822	Rp	654,564	3.8%	96.2%
7	GLVA	Rp	346,517	Rp	361,792	Rp	708,309	48.9%	51.1%
8	PGJO	Rp	62	Rp	7,182	Rp	7,244	0.9%	99.1%
9	CASH	Rp	8,495	Rp	132,970	Rp	141,465	6.0%	94.0%
10	WIFI	Rp	607,210	Rp	740,562	Rp	1,347,772	45.1%	54.9%
11	DCII	Rp 1,089,369		Rp	2,242,209	Rp	3,331,578	32.7%	67.3%
12	EDGE	Rp	577,674	Rp	1,534,099	Rp	2,111,773	27.4%	72.6%
13	ZYRX	Rp	95,436	Rp	285,470	Rp	380,906	25.1%	74.9%
14	UVCR	Rp	10,874	Rp	99,685	Rp	110,559	9.8%	90.2%
15	BUKA	Rp	35,877	Rp 25,260,009		Rp 25,295,886		0.1%	99.9%
16	RUNS	Rp	18,920	Rp	62,596	Rp	81,516	23.2%	76.8%
17	WGSH	Rp	488	Rp	55,741	Rp	56,229	0.9%	99.1%
18	WIRG	Rp	60,022	Rp	689,148	Rp	749,170	8.0%	92.0%
19	GOTO	Rp 4,133,975		Rp 37,485,374		Rp 41,619,349		9.9%	90.1%
20	AXIO	Rp	129,263	Rp	518,601	Rp	647,864	20.0%	80.0%
21	BELI	Rp 2,885,160		Rp	7,980,764	Rp 10,865,924		26.6%	73.4%
22	NINE	Rp	1,759	Rp	41,557	Rp	43,317	4.1%	95.9%

To calculate each company's weighted average cost of capital (WACC), the after-tax cost of debt is multiplied with the percentage of debt in the capital structure and the cost of equity is multiplied with the percentage of debt in the capital structure then add them together to find the number of costs of capital. The table below describes the calculation of WACC for technology companies who went public in IDX within the year 2018-2022 based on the capital structure calculated in the previous section:

Table 11. WACC Calculation

No.	Ticker	Capital Structure		Cost of Debt (After Tax)	Cost of Equity (CAPM)				WACC
		Debt	Equity		Risk-Free Rate	Market Risk Premium	Beta	Cost of Equity	
1	NFCX	35.3%	64.7%	9.5%	6.9%	5.5%	1.57	15.7%	**13.5%**
2	DIVA	14.1%	85.9%	9.2%	6.9%	5.5%	0.95	12.2%	**11.8%**
3	LUCK	10.9%	89.1%	7.8%	6.9%	5.5%	0.62	10.4%	**10.1%**
4	HDIT	1.7%	98.3%	9.1%	6.9%	5.5%	1.23	13.8%	**13.7%**
5	TFAS	24.2%	75.8%	9.2%	6.9%	5.5%	0.86	11.7%	**11.1%**
6	DMMX	3.8%	96.2%	9.2%	6.9%	5.5%	1.75	16.7%	**16.4%**
7	GLVA	48.9%	51.1%	7.0%	6.9%	5.5%	0.46	9.5%	**8.3%**
8	PGJO	0.9%	99.1%	9.2%	6.9%	5.5%	0.27	8.4%	**8.4%**
9	CASH	6.0%	94.0%	9.2%	6.9%	5.5%	0.40	9.1%	**9.1%**
10	WIFI	45.1%	54.9%	8.2%	6.9%	5.5%	1.11	13.1%	**10.9%**
11	DCII	32.7%	67.3%	8.3%	6.9%	5.5%	0.30	8.6%	**8.5%**
12	EDGE	27.4%	72.6%	7.5%	6.9%	5.5%	0.86	11.7%	**10.6%**
13	ZYRX	25.1%	74.9%	5.0%	6.9%	5.5%	0.63	10.4%	**9.1%**
14	UVCR	9.8%	90.2%	7.1%	6.9%	5.5%	1.64	16.0%	**15.1%**
15	BUKA	0.1%	99.9%	9.2%	6.9%	5.5%	1.53	15.4%	**15.4%**
16	RUNS	23.2%	76.8%	9.6%	6.9%	5.5%	1.43	14.9%	**13.6%**
17	WGSH	0.9%	99.1%	7.6%	6.9%	5.5%	0.69	10.8%	**10.8%**
18	WIRG	8.0%	92.0%	7.0%	6.9%	5.5%	2.63	21.5%	**20.3%**
19	GOTO	9.9%	90.1%	9.5%	6.9%	5.5%	1.70	16.4%	**15.7%**
20	AXIO	20.0%	80.0%	7.3%	6.9%	5.5%	0.52	9.8%	**9.3%**
21	BELI	26.6%	73.4%	9.2%	6.9%	5.5%	0.55	10.0%	**9.8%**
22	NINE	4.1%	95.9%	9.1%	6.9%	5.5%	2.16	18.9%	**18.5%**

The number of costs of debt for each sample companies are acquired through the WACC Function of each company on the Bloomberg Terminal. The number of risk-free rates and market risk premium are acquired from the Risk Premium page of each company on the Bloomberg Terminal. The numbers of Beta for each sample of technology companies who went public within the year 2018-2022 are each sample company adjusted beta against the Jakarta Composite Index (JCI) acquired through the Historical Beta page of each sample companies on the Bloomberg Terminal.

3. Discounting Free Cash Flow

Using the WACC as the discount rate, the projected unlevered free cash flow calculated in the previous section is then discounted to calculate the present value of the sample companies' unlevered free cash flows. The table below describe the calculation results of discounting the projected unlevered free cash flows to find the present value for each of the projected year and the cumulative present value of free cash flows for each of the sample companies:

Table 12. Discounting Free Cash Flow Calculation

(Rp in millons, fiscal year ending December 31)													
No.	Ticker	WACC		Present Value of Free Cash Flows									Commulative PV of FCF
				2024		2025		2026		2027		2028	
1	NFCX	13.5%	Rp	(28,140)	Rp	31,378	Rp	63,174	Rp	59,227	Rp	82,802	Rp 208,441
2	DIVA	11.8%	Rp	82,977	Rp	1,408	Rp	907	Rp	30,252	Rp	14,805	Rp 130,348
3	LUCK	10.1%	Rp	9,448	Rp	4,035	Rp	2,027	Rp	4,394	Rp	3,105	Rp 23,009
4	HDIT	13.7%	Rp	3,073	Rp	(1,329)	Rp	3,441	Rp	2,382	Rp	3,298	Rp 10,865
5	TFAS	11.1%	Rp	27,056	Rp	2,943	Rp	(1,659)	Rp	5,772	Rp	6,331	Rp 40,443
6	DMMX	16.4%	Rp	(5,257)	Rp	(2,360)	Rp	28,942	Rp	9,930	Rp	21,214	Rp 52,469
7	GLVA	8.3%	Rp	177,590	Rp	23,505	Rp	32,150	Rp	69,988	Rp	47,947	Rp 351,179
8	PGJO	8.4%	Rp	(513)	Rp	(1,639)	Rp	(815)	Rp	(52)	Rp	818	Rp (2,201)
9	CASH	9.2%	Rp	(22,731)	Rp	2,158	Rp	2,527	Rp	(1,382)	Rp	4,552	Rp (14,876)
10	WIFI	10.9%	Rp	(78,477)	Rp	(55,300)	Rp	10,138	Rp	70,200	Rp	134,883	Rp 19,507
11	DCII	8.5%	Rp	566,736	Rp	600,058	Rp	716,637	Rp	805,187	Rp	810,954	Rp 3,499,572
12	EDGE	10.6%	Rp	(333,456)	Rp	(11,216)	Rp	129,334	Rp	170,388	Rp	240,640	Rp 195,690
13	ZYRX	9.1%	Rp	163,719	Rp	20,583	Rp	16,294	Rp	71,190	Rp	37,181	Rp 308,967
14	UVCR	15.1%	Rp	23,202	Rp	11,004	Rp	13,497	Rp	20,162	Rp	11,778	Rp 79,643
15	BUKA	15.4%	Rp	(560,314)	Rp	(1,489,624)	Rp	354,475	Rp	1,269,441	Rp	655,407	Rp 229,385
16	RUNS	13.6%	Rp	(8,946)	Rp	(3,361)	Rp	660	Rp	1,180	Rp	3,067	Rp (7,400)
17	WGSH	10.8%	Rp	1,241	Rp	(1,574)	Rp	(860)	Rp	1,896	Rp	2,372	Rp 3,075
18	WIRG	20.3%	Rp	(106,823)	Rp	(63,197)	Rp	35,705	Rp	39,620	Rp	96,370	Rp 1,676
19	GOTO	15.7%	Rp	(3,063,755)	Rp	(2,544,108)	Rp	310,512	Rp	3,604,222	Rp	4,697,695	Rp 3,004,566
20	AXIO	9.3%	Rp	101,988	Rp	57,808	Rp	99,576	Rp	82,183	Rp	81,428	Rp 422,983
21	BELI	9.8%	Rp	(2,726,780)	Rp	(2,005,822)	Rp	(1,011,721)	Rp	577,473	Rp	1,292,313	Rp (3,874,537)
22	NINE	18.5%	Rp	3,638	Rp	(3,047)	Rp	(1,407)	Rp	179	Rp	1,863	Rp 1,225

4. Determining Terminal Value

The perpetuity growth rate method is used in this research to calculate the terminal value of technology companies who went public in IDX within the year 2018-2023. The terminal growth rate for each of the sample company's is 5.0% in accordance with the World Bank's gross domestic product (GDP) projected future average growth rate of 5.0% for Indonesia. The terminal value of each sample company is then discounted with the discount factor based on each sample companies weighted average cost of capital to calculate the present value of the terminal value. The table below describes the calculation of terminal value and present value of terminal value for technology company who went public in IDX within the year 2018-2022:

Table 13. Terminal Value Calculation

(Rp in millons, fiscal year ending December 31)										
	Ticker	PV of FCF		Terminal Growth Rate	Year 5 FCF (1 + g)		Terminal Value		Discount Factor	PV of Terminal Value
1	NFCX	Rp	208,441	5.0%	Rp	153,713	Rp	1,808,388	0.53	Rp 960,091
2	DIVA	Rp	45,057	5.0%	Rp	25,680	Rp	377,649	0.57	Rp 216,212
3	LUCK	Rp	23,009	5.0%	Rp	5,027	Rp	98,566	0.62	Rp 60,924
4	HDIT	Rp	10,865	5.0%	Rp	6,171	Rp	70,935	0.53	Rp 37,330
5	TFAS	Rp	40,443	5.0%	Rp	10,676	Rp	175,013	0.59	Rp 103,395
6	DMMX	Rp	52,469	5.0%	Rp	44,116	Rp	386,986	0.47	Rp 181,105
7	GLVA	Rp	351,179	5.0%	Rp	72,074	Rp	2,184,047	0.67	Rp 1,465,952
8	PGJO	Rp	(2,201)	5.0%	Rp	1,234	Rp	36,308	0.67	Rp 24,258
9	CASH	Rp	(14,876)	5.0%	Rp	7,102	Rp	169,100	0.64	Rp 108,901
10	WIFI	Rp	19,507	5.0%	Rp	141,627	Rp	2,400,458	0.60	Rp 1,430,989
11	DCII	Rp	3,499,572	5.0%	Rp	1,229,191	Rp	35,119,734	0.67	Rp 23,356,218
12	EDGE	Rp	195,690	5.0%	Rp	397,608	Rp	7,100,148	0.60	Rp 4,290,341
13	ZYRX	Rp	308,967	5.0%	Rp	57,773	Rp	1,409,101	0.65	Rp 911,630
14	UVCR	Rp	79,643	5.0%	Rp	23,286	Rp	230,555	0.50	Rp 114,130
15	BUKA	Rp	229,385	5.0%	Rp	1,311,072	Rp	12,606,465	0.49	Rp 6,159,767
16	RUNS	Rp	(7,400)	5.0%	Rp	5,716	Rp	66,470	0.53	Rp 35,135
17	WGSH	Rp	3,075	5.0%	Rp	3,952	Rp	68,137	0.60	Rp 40,802
18	WIRG	Rp	1,676	4.5%	Rp	231,341	Rp	1,464,186	0.40	Rp 581,123
19	GOTO	Rp	3,004,566	5.0%	Rp	9,507,673	Rp	88,856,757	0.48	Rp 42,857,187
20	AXIO	Rp	422,983	5.0%	Rp	127,572	Rp	2,966,792	0.64	Rp 1,901,894
21	BELI	Rp	(3,874,537)	5.0%	Rp	2,066,653	Rp	43,055,262	0.63	Rp 26,978,297
22	NINE	Rp	1,225	5.0%	Rp	4,198	Rp	31,097	0.43	Rp 13,308

5. Valuation Calculation

The output of the discounted cash flows valuation using implied perpetuity growth rate in this research will be in the form of enterprise value. To calculate the enterprise value for each sample companies, the present value of free cash flow is combined with the present value of terminal value calculated in the previous section. To find the implied share price of the sample companies, the enterprise value calculated are then deducted with the company's total debt and non-controlling interest then added with the sample companies' cash and cash equivalents to first calculate the equity value of each sample companies. The equity value is then divided by the sample company's fully diluted shares outstanding to find the implied share price of the companies. The table below describe the equity value calculation and the implied share price of technology companies who went public in Indonesia Stock Exchange within the year 2018-2022:

Table 14. Implied Share Price Calculation

No,	Ticker	Enterprise Value	Total Debt (-)	Non-controlling Interest (-)	Cash & Cash Equivalents (+)	Equity Value	Fully Diluted Shares Outstanding	Implied Share Price
(Rp in millons, fiscal year ending December 31)								
1	NFCX	Rp 1,168,531	Rp (167,190)	Rp (517,804)	Rp 228,030	Rp 711,568	658	Rp 1,081
2	DIVA	Rp 261,269	Rp (107,485)	Rp (63,347)	Rp 75,793	Rp 273,715	1,400	Rp 196
3	LUCK	Rp 83,933	Rp (16,785)		Rp 35,469	Rp 102,617	716	Rp 143
4	HDIT	Rp 48,195	Rp (5,000)	Rp (4,595)	Rp 43	Rp 38,642	1,525	Rp 25
5	TFAS	Rp 143,838	Rp (58,681)	Rp (2,252)	Rp 3,117	Rp 86,022	3,323	Rp 26
6	DMMX	Rp 233,574	Rp (24,741)	Rp (8,106)	Rp 106,745	Rp 307,473	7,259	Rp 42
7	GLVA	Rp 1,817,132	Rp (346,517)	Rp (47,186)	Rp 51,304	Rp 1,474,733	1,500	Rp 983
8	PGJO	Rp 22,057	Rp (62)	Rp (0)	Rp 598	Rp 22,593	765	Rp 30
9	CASH	Rp 94,025	Rp (8,495)	Rp (21,929)	Rp 15,364	Rp 78,966	1,431	Rp 55
10	WIFI	Rp 1,450,496	Rp (607,210)	Rp (2,084)	Rp 40,073	Rp 881,275	2,255	Rp 391
11	DCII	Rp 26,855,790	Rp (1,089,369)	Rp (107,533)	Rp 420,700	Rp 26,079,588	2,384	Rp 10,941
12	EDGE	Rp 4,486,031	Rp (577,674)	Rp (1,539,462)	Rp 154,519	Rp 2,523,414	2,020	Rp 1,249
13	ZYRX	Rp 1,220,597	Rp (95,436)		Rp 5,128	Rp 1,130,289	1,333	Rp 848
14	UVCR	Rp 193,772	Rp (10,874)		Rp 2,724	Rp 185,622	2,000	Rp 93
15	BUKA	Rp 6,389,152	Rp (35,877)	Rp (12,891)	Rp 11,752,490	Rp 18,092,874	103,100	Rp 175
16	RUNS	Rp 27,735	Rp (18,920)		Rp 11,683	Rp 20,498	984	Rp 21
17	WGSH	Rp 43,877	Rp (488)		Rp 16,184	Rp 59,574	1,043	Rp 57
18	WIRG	Rp 582,799	Rp (60,022)	Rp (57,676)	Rp 106,828	Rp 571,929	11,939	Rp 48
19	GOTO	Rp 45,861,753	Rp (4,133,975)	Rp (2,320,033)	Rp 20,311,118	Rp 59,718,863	1,074,346	Rp 56
20	AXIO	Rp 2,324,877	Rp (129,263)	Rp (21,053)	Rp 28,743	Rp 2,203,304	5,840	Rp 377
21	BELI	Rp 23,103,760	Rp (2,885,160)	Rp (216,104)	Rp 2,964,279	Rp 22,966,775	123,210	Rp 186
22	NINE	Rp 14,534	Rp (8)		Rp 1,796	Rp 16,322	2,157	Rp 8

6. Sensitivity Analysis

Sensitivity analysis is used in discounted cash flows analysis to understand the potential range of a company's share price as the implied share price is prone to changes when there are also changes in WACC and the terminal growth Rate. The table below summarizes the sensitivity analysis result on implied share price range of technology company who went public in Indonesia Stock Exchange (IDX) within the year 2018-2022:

International Journal of Current Science Research and Review

ISSN: 2581-8341

Volume 07 Issue 08 August 2024

DOI: 10.47191/ijcsrr/V7-i8-35, Impact Factor: 7.943

IJCSRR @ 2024

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Table 15. Sensitivity Analysis

No.	Ticker	WACC Range			Growth Rate Range			Share Price Range			
1	NFCX	13.3%	-	13.8%	4.8%	-	5.3%	Rp	979	- Rp	1,196
2	DIVA	11.6%	-	12.1%	4.8%	-	5.3%	Rp	167	- Rp	195
3	LUCK	9.9%	-	10.4%	4.8%	-	5.3%	Rp	135	- Rp	154
4	HDIT	13.5%	-	14.0%	4.8%	-	5.3%	Rp	24	- Rp	27
5	TFAS	10.9%	-	11.4%	4.8%	-	5.3%	Rp	23	- Rp	29
6	DMMX	16.2%	-	16.7%	4.8%	-	5.3%	Rp	41	- Rp	44
7	GLVA	8.1%	-	8.6%	4.8%	-	5.3%	Rp	842	- Rp	1,175
8	PGJO	7.9%	-	8.7%	4.8%	-	5.3%	Rp	25	- Rp	36
9	CASH	9.0%	-	9.5%	4.8%	-	5.3%	Rp	46	- Rp	67
10	WIFI	10.7%	-	11.2%	4.8%	-	5.3%	Rp	333	- Rp	460
11	DCII	8.3%	-	8.8%	4.8%	-	5.3%	Rp	9,588	- Rp	12,743
12	EDGE	10.4%	-	10.9%	4.8%	-	5.3%	Rp	1,046	- Rp	1,491
13	ZYRX	8.9%	-	9.4%	4.8%	-	5.3%	Rp	764	- Rp	955
14	UVCR	14.9%	-	15.4%	4.8%	-	5.3%	Rp	89	- Rp	97
15	BUKA	15.2%	-	15.7%	4.8%	-	5.3%	Rp	172	- Rp	179
16	RUNS	13.4%	-	13.9%	4.8%	-	5.3%	Rp	18	- Rp	24
17	WGSH	10.6%	-	11.1%	4.8%	-	5.3%	Rp	54	- Rp	61
18	WIRG	20.1%	-	20.6%	4.3%	-	4.8%	Rp	46	- Rp	50
19	GOTO	15.5%	-	16.0%	4.8%	-	5.3%	Rp	53	- Rp	58
20	AXIO	9.1%	-	9.6%	4.8%	-	5.3%	Rp	339	- Rp	426
21	BELI	9.6%	-	10.1%	4.8%	-	5.3%	Rp	163	- Rp	215
22	NINE	18.3%	-	18.8%	4.8%	-	5.3%	Rp	7	- Rp	8

C. Share price Evaluation

Based on the relative valuation through comparable company analysis and absolute valuation through discounted cash flows analysis, below are the conclusion on whether the share price of technology companies who went public in Indonesia Stock Exchange are undervalued, fair-valued, or overvalued:

Table 16. Share Price Evaluation

No.	Company Name	Ticker	Current Share Price (27/05/24)		Relative Valuation			Absolute Valuation		
					Implied Share Price	Conclusion		Implied Share Price	Conclusion	
1	NFC Indonesia Tbk	NFCX	Rp	1,230	Rp	525	Overvalued	Rp	1,081	Overvalued
2	Distribusi Voucher Nusantara Tbk	DIVA	Rp	97	Rp	1,363	Undervalued	Rp	180	Undervalued
3	Sentral Mitra Informatika Tbk	LUCK	Rp	58	Rp	254	Undervalued	Rp	143	Undervalued
4	Hensel Davest Indonesia Tbk	HDIT	Rp	12	Rp	1,354	Undervalued	Rp	25	Undervalued
5	Telefast Indonesia Tbk	TFAS	Rp	137	Rp	5	Undervalued	Rp	26	Overvalued
6	Digital Mediatama Maxima Tbk	DMMX	Rp	88	Rp	101	Undervalued	Rp	42	Overvalued
7	Galva Technologies Tbk	GLVA	Rp	300	Rp	448	Undervalued	Rp	983	Undervalued
8	Tourindo Guide Indonesia Tbk	PGJO	Rp	88	Rp	17	Overvalued	Rp	30	Overvalued
9	Cashlez Worldwide Indonesia Tbk	CASH	Rp	83	Rp	62	Overvalued	Rp	55	Overvalued
10	Solusi Sinergi Digital Tbk	WIFI	Rp	161	Rp	413	Undervalued	Rp	391	Undervalued
11	DCI Indonesia Tbk	DCII	Rp	37,475	Rp	2,475	Overvalued	Rp	10,941	Overvalued
12	Indointernet Tbk	EDGE	Rp	3,910	Rp	922	Overvalued	Rp	1,249	Overvalued
13	Zyrexindo Mandiri Buana	ZYRX	Rp	136	Rp	168	Undervalued	Rp	848	Undervalued
14	Trimegah Karya Pratama	UVCR	Rp	78	Rp	8	Overvalued	Rp	93	Undervalued
15	Bukalapak.com Tbk	BUKA	Rp	141	Rp	362	Undervalued	Rp	175	Undervalued
16	Global Sukses Solusi Tbk	RUNS	Rp	56	Rp	21	Overvalued	Rp	21	Overvalued
17	Wira Global Solusi Tbk	WGSH	Rp	55	Rp	49	Overvalued	Rp	57	Fair-valued
18	WIR ASIA Tbk	WIRG	Rp	95	Rp	20	Overvalued	Rp	48	Overvalued
19	GoTo Gojek Tokopedia Tbk	GOTO	Rp	70	Rp	90	Undervalued	Rp	56	Undervalued
20	Tera Data Indonesia Tbk	AXIO	Rp	189	Rp	236	Undervalued	Rp	377	Undervalued
21	Global Digital Niaga Tbk	BELI	Rp	452	Rp	644	Undervalued	Rp	186	Overvalued
22	Techno9 Indonesia Tbk	NINE	Rp	6	Rp	9	Undervalued	Rp	8	Undervalued

CONCLUSION

Based on the result of the relative valuation through comparable company analysis conducted in this research, the share current price of NFC Indonesia Tbk (NFCX), Tourindo Guide Indonesia (PGJO), Cashlez Worldwide Indonesia (CASH), DCI Indonesia Tbk (DCII), Indointernet Tbk (EDGE), Trimegah Karya Pratama Tbk (UVCR), Global Sukses Solusi Tbk (RUNS), Wira Global Solusi Tbk (WGSH), and WIR ASIA Tbk (WIRG) are overvalued in the market. On the other hand, the current share price of Distribusi Voucher Nusantara (DIVA), Sentral Mitra Informatika (LUCK), Hansel Davest Indonesia (HDIT), Telefast Indonesia Tbk (TFAS), Digital Mediatama Maxima Tbk (DMMX), Galva Technologies Tbk (GLVA), Solusi Sinergi Digital Tbk (WIFI), Zyrexindo Mandiri Buana Tbk (ZYRX), Bukalapak.com Tbk (BUKA), GoTo Gojek Tokopedia (GOTO), Tera Data Indonesia (AXIO), Global Digital Niaga (BELI), and Techno9 Indonesia Tbk (NINE) are undervalued in the market.

Based on the result of absolute valuation through discounted cash flows analysis conducted in this research, the current share price of of NFC Indonesia Tbk (NFCX), Telefast Indonesia Tbk (TFAS), Digital Mediatama Maxima Tbk (DMMX), Tourindo Guide Indonesia (PGJO), Cashlez Worldwide Indonesia (CASH), DCI Indonesia Tbk (DCII), Indointernet Tbk (EDGE), Global Sukses Solusi Tbk (RUNS), WIR ASIA Tbk (WIRG), and Global Digital Niaga (BELI) are overvalued in the market and Wira Global Solusi Tbk (WGSH) is fair-valued in the market. On the other hand, the current share price of Distribusi Voucher Nusantara (DIVA), Sentral Mitra Informatika (LUCK), Hansel Davest Indonesia (HDIT),Galva Technologies Tbk (GLVA), Solusi Sinergi Digital Tbk (WIFI), Zyrexindo Mandiri Buana Tbk (ZYRX), Trimegah Karya Pratama Tbk (UVCR), Bukalapak.com Tbk (BUKA), GoTo Gojek Tokopedia (GOTO), Tera Data Indonesia (AXIO), and Techno9 Indonesia Tbk (NINE) are undervalued in the market.

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Cite this Article: Queen Umbaran, Ana Noveria, Sylviana Maya Damayanti (2024). Stock Valuation Analysis of Technology Sector Companies Listed in Indonesia Stock Exchange in the Year 2018-2022. International Journal of Current Science Research and Review, 7(8), 6227-6241

6241 *Corresponding Author: Queen Umbaran

Volume 07 Issue 08 August 2024

Available at: www.ijcsrr.org

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