# Underpricing: The Influence Of Profitability, Retained Shares, And Industry Types During Covid-19 Pandemic

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Abstract: This research aims to examine the effect of profitability and the number of shares held controlled by industry types on the underpricing value. The research objects are companies that conducted an IPO on the IDX when Covid-19 pandemic hit Indonesia (2020) and experienced underpricing. Observations found that 96.07% of companies conducting an IPO experienced underpricing. Testing was carried out using Weighted Least Squares (WLS). The test results show that the percentage of shares held has a positive effect on underpricing, while profitability has no effect on underpricing. For the basic material and cyclical types of industries, which function as control variables, it is proven to reduce underpricing values.

Keywords: Underpricing, Profitability, Retained shares, IPO, Covid-19

#### I. INTRODUCTION

The aim of investors to invest in shares is to obtain returns in the form of capital gain and dividends. In getting the capital gains, one of the methods used by investors is to get shares when the company issues its shares on the primary market, then sell them on the Indonesia Stock Exchange (IDX) on the first day the shares are traded on the IDX.

Prospective share owners who will buy in the primary market will carry out an analysis of the company through the published company's prospectus. The prospectus contains the company's financial data before conducting the IPO as well as plans for using the funds obtained during the Initial Public Offering (IPO). Through data from the prospectus, investors can conclude that the IPO company is great and has better future prospects, so that if investors own these shares, they will get the return as they want (Boulton, T. J., Smart, S. B., & Zutter, C. J, 2017 and Albada, A., & Yong, O, 2020). If many investors think that the company's future prospects are good, then they will buy these shares.

The better the prospects, the more people will order these shares on the primary market. If more shares are ordered more than a company has offered, oversubscription occurs. If there is an oversubscription for fairness, the issuer will make an allotment for subscribers who will get the shares they buy.

Thus, not all potential investors get shares in the primary market. Those who do not get an allotment in the primary market try to get it on the IDX, so the closing price on the first day of transactions on the IDX rises. The closing price on the first day on the IDX which is higher than the price on the primary market causes underpricing in the primary market (Retnowati, E, 2013).

From the company side, there are many ways for companies to obtain funds from various funding sources. One source of long-term funds is from the capital market. Companies will issue bonds when economic condition worsen, whereas when the country's economic condition improve, it is recommended that companies issue new shares (Bringham and Dave, 2022 and Kavita, W., Reddy, V. N., Goyal, A., & Abdulkadir, M, 2016). The year of 2020 became the year when Indonesian economy considered the worst because economic growth reached negative 7%. So far, Indonesia's average economic growth has been in the range of 3% to 6%. When the economy worsened, there were 51 companies that carried out IPOs through shares. This incident was not in accordance with the opinion of Brigham and Dave (2022).

During 2020 (when Indonesia and the world were hit by Covid-19), the health, technology, transportation, and logistics industries developed rapidly. The development of these industrial companies was very good during the period, because

their products were really needed by people. Several industries that support health and fulfil people's needs when there are restrictions on relations between one another would naturally be an interest in people so that when the IPO occurred, they would experience underpricing.

Research on the influence of the industry type during the IPO is usually classified between manufacturing industry and non-manufacturing industry. The results of the previous research show that industry differences do not affect underpricing (Kristiantari & I Dewa Ayu, 2013). Meanwhile, other research with different industry classifications states that the type of industry influences underpricing (Irawati J and Rendi A, 2013).

Investors often analyse a company's profitability to predict the company's prospects (Ulfah, A., Prasetyo, T. J., & Saipuddin, U, 2019). The higher the profitability before the IPO is expected, (with additional funds obtained during the IPO) the more it will support the company's business so that the company is expected to generate higher profits and its profitability will also increase (Katti, S., & Phani, B. V, 2016). The higher the company's profitability, the more attractive it is to investors, so more investors will order shares at the IPO. Because more and more people order, many will not get it in the primary market and try to get it in the secondary market, so the underpricing value will be higher.

High profitability will also cause higher underpricing (Saputra, et al, 2023; Mutia Agustina & Imawati Yousida. 2022, Isnaeni, Najmudin, Intan Shaferi, 2020, Hartono, T., D. & Nurfauziah, 2019; Sharon, Septiati, P, 2017). In contrast to previous research, Lukman and Tri Kunawangsih (2023), Mulyani E & Rahmah, M. (2021), and Kristiantari & I Dewa Ayu (2013) found that the level of company profitability does not affect the underpricing of IPO companies in Indonesia. Ramadana, SW (2018) and Fadila, A & Kery Utami (2020) in their research concluded that profitability has a negative effect on underpricing. From the various research results above, it is proven that there is no consistency in the research results, so it needs to be re-examined.

To carry out an IPO, each company issues a different number of shares. If the company owner feels that his company provides great welfare for the owner, then usually only a few shares will be issued on the market. Company owners are reluctant to share prosperity with other prospective company owners. Besides, the owner's desire to still have power over the company means the number of shares issued will also be smaller. Therefore, the number of shares issued during the IPO can be a signal for potential investors (Badru, B. O., Ahmad-Zaluki, N. A., & Wan-Hussin, W. N, 2017). The fewer shares issued through an IPO gives a signal that it is likely that the company will provide greater welfare for its investors.

Some research is not in line with the above findings. Nilam, et al (2023) found that the percentage of shares issued through an IPO had no effect on the underpricing value of companies conducting an IPO. Herbanu Putro L dan Danies Priantinah (2017), Maya, R (2013) and Wendi, dkk. (2023) in their research, concluded that the number of shares issued during an IPO has a positive effect on underpricing. The more shares issued, the greater the underpricing value will be.

There are still many inconsistencies in the results of research on IPOs, so researchers are interested in re-examining the influence of industry type, profitability and the number of shares used for IPO on underpricing. This research is more specifically focused on when the Indonesian economy was deteriorating, specifically when Covid-19 pandemic spread and there were restrictions on population mobilization.

### II. LITERATURE REVIEW

#### A. FINANCING DECISION

To achieve company goals (maximizing company value), then management needs to adopt funding, investment, and dividend policies. Long-term funding policies are carried out by issuing bonds, ordinary shares and preferred shares on the Indonesian Stock Exchange. Short-term funding policies can be implemented through the money market, including banking industry. Companies will issue the shares if economic conditions improve, conversely, when economic conditions worsen, it is recommended that companies issue bonds. This is recommended because when the economy worsens, few companies expand. Thus, only a few companies need funds and borrow from banks. To attract debtors, banks will lower interest rates. Companies which issue bonds when market interest rates decrease can determine lower coupons comparing to when the market interest rates are high (Brigham and Dave, 2022).

Companies increasing funds through the issuance of new shares need to determine how many shares will be issued or allowed to be owned by the public (Ibrahim, F. N, 2024). Determining the number of shares that will be issued by the company through an IPO refers to Financial Services Authority (FSA) regulations about the minimum number of shares issued for IPO. The minimum number of shares issued for an IPO will determine the type of transaction board on the IDX. Companies on the main board have a minimum of 300 million shares intended for general investors (equivalent to 3 million lots). The minimum shares on the development board for the general public are 150 million shares and for the acceleration board, the minimum is 20% of the total shares in the company (FSA Regulation No.25/PJOK.04/2017). From these regulations, each IPO company can choose which type of board to IPO with as a consequence of the minimum limit of shares used for the IPO.

The funding policy determined by the company always takes into account the achievement of the company's objectives, namely maximizing the company value. The company value will be maximum when the weighted average cost of capital (WACC) is minimum. Therefore, when deciding to conduct an IPO, the management and investors consider the company's cost of capital. Additional funds obtained from shares issued will increase the cost of capital, however, this new capital cost is expected to be in the capital cost limits targeted by the company. Thus, if there is a forced increase in the cost of capital due to additional new capital, it will still increase the value of the company which is higher than the increase in the cost of the capital.

#### B. AGENCY THEORY

Agency theory emerged because of differences in interests between investors as business owners and management as agents (company managers). Investors have an interest in maximizing their welfare, so they employ management to work well to maximize their welfare (Eisenhardt, K. M, 1989). Meanwhile, managers also try to improve their own welfare through prerequisites (Jensen Michael C, & William H. Meckling, 1976).

To overcome these differences in interests, investors include other parties to monitor management performance, namely creditors. The company, which was previously funded with its own capital, then applied for a loan. Creditors will monitor the management's performance, because they have a concern in paying interest and the principal of the loans on time. Involvement of supervision by creditors causes agency costs to arise. Agency costs are equal to the interest rate and risks that arise due to debt.

Company owners can also increase monitoring of management performance through an IPO. With an IPO, some of the shares are owned by the public, known as outside investors (Ayusari, M., Fajri Adrianto, & Mohamad Fany Alfarisi, 2022). The greater the shares issued and owned by the public, the more the public will monitor management performance. If management performance is deemed good, then outside investors will respond by buying shares and it causes the stock market price to increase, which is in line to the increase of investor welfare. Likewise, if management's performance is deemed to be less, outside investors will sell their shares and cause share prices to decline. Therefore, outside investors monitor management performance as reflected in share price fluctuations. In this way, it is hoped that management can perform well, which is in accordance with the original goal of the company owner employing management to maximize the welfare of the company owner.

## C. SIGNALING THEORY

Signaling theory states that the information held by management and outside investors is different, this is often referred to as information asymmetry. The inequality in completeness of information is caused by internal parties having more complete information compared to external parties (Ross, S. A, 1977). The difference of this information can be caused by unpublished information, so that outside investors do not have unpublished information (Brigham and Dave, 2022).

The Indonesian Stock Exchange (IDX) requires all companies that go public on the IDX to report and publish all kinds of information, especially the information that can influence share prices (IDX Regulation No. I-E). This regulation contains the obligation to deliver information for issuers to the IDX regarding all regulations and decisions of management and directors and commissioners of companies that go public in Indonesia. All changes that occur in the company must be reported to the IDX. Beside the changes, meeting plans and the results of management and commissioner meeting decisions must also be reported to IDX.

From the results of this report, IDX will announce it on its website. This regulation was applied from February 1, 2021.

It is hoped that regulations on company disclosure to the public will further reduce information asymmetry between management and outside investors (Imen Ghadhab, 2023). All disclosure or information released by the company can be responded positively or negatively by outside investors. If the information is responded positively by investors, then investors will be interested in owning the shares so that they will buy on the stock exchange. This causes the share price to increase (Arora, N., & Singh, B, 2020). On the other hand, if the information is expected to cause the investor returns to decrease, then they will sell their shares and it causes the market share price to decrease. It means that the information contains negative information or is responded negatively by investors.

The number of shares issued by a company during an IPO can also be a signal for investors. The smaller the percentage of shares issued, the greater the percentage of shares retained, which can provide a positive signal for investors. If the shares issued for public ownership become smaller, this will give a positive signal. Outside investors think that the company founders are not willing to share the profits they have enjoyed so far. It was only because of the need for large additional funds that the company was forced to carry out an IPO. Therefore, the smaller the shares issued, the more attractive it will be for investors (Murtini, U, 2018). On the other hand, if the percentage of shares issued during the IPO gives a negative signal, it is mainly possible that the company will not provide high returns for the company's founders at this time.

# D. PREVIOUS RESEARCH AND HYPOTHESIS DEVELOPMENT

Research on IPOs has been conducted by many previous researchers, but research on companies that carry out IPOs when the economy worsens is still rare. Many factors influence underpricing during an IPO, including the company's past profits. Companies that have the ability to generate profits in the past, with additional funds obtained through an IPO, are expected to generate even greater profits in the future. If future profits are greater, then potential investors will be increasingly interested in buying these shares, with the result that it causes the underpricing value to become greater. This is supported by Sharon, Septiani, P (2017), Ramadana (2018), Hartono, T., D and Nurfauziah (2019), Isnaeni, Najmudin and Shaferi (2020), Mutia Agustina dan Imawati Yousida (2022), Lukman and Tri Kurnawangsih (2023) in their research which stated that profits obtained in the past influence the underpricing. Based on theory and previous research as well as the arguments above, a research hypothesis is concluded:

 $H_1$ : Company profitability before conducting an IPO has a positive effect on underpricing

The Indonesian Stock Exchange classifies companies into several industries. The latest industry classification took effect from January 25, 2021. The industry classification is now into 11 sectors, namely: energy, raw goods, industry, primary

consumer goods, non-primary consumer goods, health, finance, property and real estate, technology, infrastructure and transportation & logistics. During the Covid-19 pandemic, industries that experienced rapid growth were health, technology and transportation & logistics. These three industries were really needed during the Covid-19 pandemic, and after the pandemic they were also expected to continue to grow rapidly. The type of industry can also be a consideration for potential investors in determining the placement of their funds. Investors will place funds into industries that they feel profitable in the future, which provide greater prospects than other industries as well. The differences of industry types influence underpricing for companies conducting an IPO (Lukman and Tri Kunawangsih, 2023). Based on this explanation, a hypothesis is formulated:

# $H_2$ : The type of industry influences on underpricing

Companies conduct IPO with the motivation to add funds needed for an expansion. The funds obtained are expected to increase the company's value. Companies that have provided great prosperity for their owners, but still need additional funds for expansion, will issue the minimum number of shares possible. The number of shares issued is only limited to the regulations required by the FSA to go public. The greater the welfare received by the company owner, the smaller the percentage of shares issued to go public. The influence of the percentage of shares retained or issued to go public on the underpricing value has been studied by Murtini, U (2018), Maya, R (2013) and Herbanu Putro L & Danies Priantinah (2017). Based on this explanation, a hypothesis is formulated:

 $H_3$ : The percentage of shares held has a positive effect on underpricing

# III. RESEARCH METHODS

# A. TYPE AND DATA SOURCE

The data type used is secondary data obtained from company prospectus report and IDX website (bei.co.id) and investing.co.id.

# B. POPULATION AND SAMPLE

The population of this research is all companies that conducted an IPO on the IDX in 2020. The sampling method used was purposive sampling, selecting companies that went public on the IDX in 2020 with the criterion that the company had underpricing. Of the 51 companies that conducted IPOs in 2020, 49 companies underwent underpricing and 2 companies underwent overpricing.

### C. OPERATIONAL DEFINITION AND MEASUREMENT

This research uses dependent and independent variables.

The dependent variable of this research is underpricing. Underpricing is the percentage difference between the price when traded on the primary market and the closing

price on the first day the shares are traded on the secondary market. Underpricing is calculated using the formula:

Closing Price on the first day in Secondary market – price in the primary market

Price in the primary market

- Independent variable. The independent variables consist of:
  - Profitability, the company's ability to generate profits (ROA) for the period before the IPO is calculated using the formula:

Profit after tax

Total assets

 Retained share, the difference from the total shares minus the number of shares outstanding (issued during the IPO), which is calculated:

100% - (percentage of shares used for IPO)

- Type of industry, the sorting of industry type is used in accordance with the industry type sorting regulations issued by the IDX as of January 25 2021. Companies that include:
  - The health industry is given a value of 1,
  - The technology industry is given a value of 2,
  - The transportation & logistics industry is given a value of 3
  - The other industries are given a value of 4.

### D. HYPOTHESIS TESTING TOOL

This research will test the influence of profitability, shares held and industry type, therefore, a multiple regression hypothesis testing tool using dummy variables is used. Dummy variables are used to differentiate industry types. The regression equation was used:

$$\begin{split} &UP_t = \alpha_t + \beta_t \, ROA_t + \beta_t \, SD_t + \beta_t \, Industri_t + \epsilon_t \\ &Note: \\ &UP = Underpricing \, value \\ &ROA = Profitability \end{split}$$

SD = Percentage of shares retained

Industry = type of industry

 $\varepsilon$  = Error term

#### IV. RESEARCH RESULT

#### A. RESULT OF THE RESEARCH

There were 51 companies that underwent an IPO in 2020, while there were 2 companies that did not experience undervaluation, so that 96.07% of IPO companies on the IDX in 2020 experienced underpricing. An overview of IPO company data and research variables can be seen in table 1

Variable	N	Minimum	Maximum	Mean
ROA	49	-15.9200	34.2400	3.202771
SD	49	51.4700	98.9400	78.010479
UP	49	.5102	80.8000	40.909000
Valid N (listwise)	49			

Table 1: The Overview of Research Data

In table 1, the amount of data processed was 49 companies. The total sample is 51 companies undergoing IPO in 2020, yet there were 2 companies undergoing overpricing. Therefore, 49 companies were processed.

The average level of profitability of the sample companies can be seen from the average ROA of 3.20%. This shows that the companies examined on average have the ability to generate profits of 3.20% when the company conducts an IPO. However, there are also companies that still experience losses during their IPO. The minimum amount of loss is 15.92% (seen from the minimum value). Companies that are still experiencing losses based on capital market regulations and FSA are currently permitted to carry out an IPO. Companies that are still making losses but are carrying out an IPO can do so on the acceleration board.

The average number of shares retained during the IPO was 78.01%. This shows that the average share issued for the IPO is owned by the public at 21.99%. The minimum shares retained are 51.47%, it means those used for the IPO are 48.53%. The minimum number of shares outstanding or issued by the company for an IPO is 1.16%. This is possible if the number of shares owned by the company is very large.

The average underpricing value is 40.9%. This means that the average investors who get shares during the IPO and sell them on the first day the shares are traded on the IDX get a profit of 40.9%. The minimum profit obtained by investors is 0.51% and the maximum profit obtained by investors is 80.8%. The reason regarding the large underpricing encourages investors to buy shares when the company IPO. If the shares obtained are found to be underpriced, then investors only need to hold these shares in the short term but they can gain quite large profits.

#### B. HYPOTHESIS TESTING

The research hypothesis was examined using Weighted Least Squares (WLS) multiple regression. This test was conducted because tests using regression usually cause autocorrelation. Hence, to overcome the autocorrelation problem, WLS regression was used with the error term as a weight.

Testing of the independent variable on the dependent variable was carried out two times. The first test examines the effect of profitability and the percentage of shares held on underpricing. The results of the first test are presented in table

VAR	IABEL	В	t	Sig
	(Constant)	97.987	3.624***)	.001
	SD	.735	2.134**)	.038
	ROA	.077	.187	.853

Note: \*\*\*) significant within 1% \*\*) significant within 5%

Table 2: WLS Regression Results

In table 2, SD (percentage of shares held) has a positive effect on underpricing. This shows that the higher the shares retained by the issuer, the higher the underpricing value will be. Companies holding more shares or less shares circulating in the public provide a signal to investors that the company is

performing well (Anbukarasi, M., & Kanmani, M., 2024). In the long term, the company will provide greater returns, therefore the founding father or old owner of the company is less willing to share prosperity with the community (new shareholders). Thus, investors are increasingly scrambling to get shares in IPO companies with an increasingly small percentage of shares in circulation (Syahwildan & Aminudin M, 2021 and Sandhu, H., & Guhathakurta, K, 2020). If there are more and more people interested in buying during the IPO, there will be oversubscription (Rong Qi & Xianming Zhou, 2023). Many IPO share buyers do not get these shares, so they try to get them on the secondary market when the first time the shares are traded on the secondary market. In this way, the closing price in the secondary market will rise high and quite high underpricing will occur (Jaffe, J. F., Jindra, J., Pedersen, D. J., & Voetmann, T, 2020). From table 1, the average number of shares retained is 78.01%, or 21.09% issued to the public, supporting the results of this influence test. The number of shares in circulation is relatively small compared to those held, so 96.07% of companies that IPO during Covid (2020) were oversubscribed which ultimately caused the shares to be undervalued.

In table 2, it indicates that profitability has no effect on underpricing. This means that when investors want to order IPO shares, they do not pay attention to whether the company (issuer) conducting the IPO has made a profit or is still making a loss in the production process (Carolina. D, 2020). Not all the companies that conducted IPO in 2020 have made a profit. Some still bear production costs that are greater than their sales, so they still suffer losses. On average, companies that go public on the acceleration board still make losses, besides, there are also those that have only been operating for 2 years. The rules of going public on the acceleration board and developer board allowed that the company would still bear losses. The operating time for development boards is more than 1 year and acceleration boards may operate for less than 1 year during IPO.

The number of companies based on IPO board type in 2020 is shown in Figure 1.



Figure 1: IPO Companies Based On Board

From Figure 1, Among the 51 companies that conducted an IPO on the main board, there are 9 companies or 17.65%. Meanwhile, the remaining 42 companies or 83.35% conduct an IPO on the acceleration board and development board, where the terms of the IPO on both boards were that the company was still allowed to make loss during the IPO, as long as the projection for the second to sixth year was a profit. The requirements on the development board are that the IPO company can still make a loss but by the sixth year it is projected to have made a profit.

The second regression test is conducted by including the variables industry type, profitability and percentage of shares held. The industry type variable is used as a dummy variable. If the company belongs to the appropriate industry type, it is given a value of 1, while others are given a value of 0. The test results are shown in table 3.

VARIABLE	В	t	Sig
(Constant)	136.593	5.980***)	.000
SD	.801	2.791**)	.019
ROA	.277	.310	.763
ENERGY	-8.786	-1.345	.208
BASICMATERIAL	-22.880	-3.457***)	.006
NONSYCLICALS	-12.331	-1.303	.222
CYCLICALS	-39.766	-3.760***)	.004
HEALTHCARE	-4.419	502	.627
FINANCIAL	-5.391	519	.615
TECHNOLOGY	-44.190	-1.576	.146
INFRASTRUCTURE	406	054	.958
TRANSLOGISTICS	-14.277	-1.663	.127

Table 3: Regression Results Using WLS

From table 3, the results of the influence of the number of shares held and ROA on underpricing are consistent with the results of the first regression, namely the number of shares held has a positive effect on underpricing, while profitability measured using ROA has no effect on underpricing(Wendi, dkk, 2023 and Fadila, A & Kery Utami (2020).

Table 3 indicates that the influenced industries are the basic materials industry and consumer cyclicals where both industries have a negative influence. This means that if the IPO company is in the basic materials and consumer cyclicals industry, then the underpricing value will be smaller.

Companies that are included in the basic materials industry are companies that operate in the fields of chemicals, construction materials, containers and packaging, metals and minerals as well as forensics and paper. Meanwhile, companies that are included in the consumer cyclicals industry are: auto components, automobiles, household goods, consumer electronics, sports equipment & hobbies goods, apparel & luxury goods, tourism & recreation, education & support services, media, entertainment & film production, consumer distributors, internet & home shop retail, department stores and specialty retail (Imen Ghadhab, 2023). In this research, which shows a negative influence, it presents the fact that although these two industries become interest to potential investors, the level of investor interest is relatively lower than other industries. Other industries have no effect on underpricing, indicating that investors do not consider the type of company industry going public, except for the basic materials and consumer cyclicals industries which are "slightly avoided" by investors.

# V. CONCLUSION AND SUGGESTION

# A. CONCLUSION

From the results of the analysis in chapter 4, it can be concluded that, during the Covid pandemic (2020), there were 51 companies that conducted an IPO. Based on the companies conducting an IPO, 96.7% experienced underpricing and only 2 companies experienced overpricing.

Investors consider the number of shares retained in determining the share purchase transactions during the IPO. The more shares retained, the more attractive it is to investors; thus, it causes higher underpricing. Signaling theory is proven here as well. Companies issuing smaller shares signal that the company is likely to generate high profits so that the old owners of the company are less willing to share with outside investors.

Investors do not pay attention to the issuer's ability to generate profits when deciding to buy shares during an IPO. Investors expect companies undergoing IPO to have better performance in the future. The types of industry considered are only basic materials and consumer cyclicals which are "slightly avoided" by investors.

### B. SUGGESTION

Based on signaling theory, it is recommended for issuers to issue the number of shares in accordance with the minimum IPO regulations. However, there are weaknesses if they only issue shares according to the minimum limits because they do not get corporate tax relief.

If an issuer issues a small percentage of outstanding shares, it is best to determine the IPO price even higher so the additional funds obtained through the IPO can be fulfilled.

For investors, it is best to hold shares obtained from an IPO for the short term because the company's performance is not necessarily good. In this way, investors will get quite high returns on the first or second day after the shares are traded on the secondary market.

For the next research, it is necessary to conduct research on investor behavior in buying IPO shares. This behavioral research will complement the results of quantitative research that has been carried out to date.

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