

## **Productivity strategy in financial perspective of lq45 property company Indonesia stock exchange**

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### **Abstract**

One of the strategies to achieve Long Term Shareholder Value through the company's financial perspective is to use a productivity strategy, in addition to a growth strategy. This productivity strategy is reflected in efforts to improve the cost structure and efforts to increase the use of assets, through product price, product quality, asset availability, asset functionality, and asset selection. The purpose of this study is to find out how the productivity strategy is carried out in the financial perspective of the five companies listed on the LQ45 index on the Indonesia Stock Exchange for the period February to July 2021. This research is a descriptive and associative research, with secondary data analysis through documentation, observation and interviews to primary data. The results showed that the productivity strategy in improving the cost structure was seen in the company's declining revenue performance even though the company still maintained the quality of its products. Meanwhile, the productivity strategy by increasing asset utility shows high asset availability, cooperation for asset functionality, and asset selection through deletion and acquisition. The conclusion of the productivity strategy is that it determines the company's financial performance in relation to stakeholders as a long-term investment consideration.

**Key words:** Financial perspective; property company; productivity strategy

## INTRODUCTION

The Indonesia Stock Exchange (IDX) in January 2021 conducted a major evaluation to determine the list of shares and made adjustments to the weights of the shares to calculate the LQ45 index. The results of the evaluation determined that the LQ45 index shares for the February-July 2021 period were stated in the IDX announcement with the number, No. Peng-00893/BEI.OPP/11-2018 dated November 23, 2018 regarding Changes to the LQ45 and IDX30 Index Methodology, (Aziz, 2021) and five of the 45 issuers are property companies.

LQ45 is a type of alternative stock index other than the JCI (combined stock price index) to be an objective, reliable tool for financial analysis, investment managers and investors through monitoring stock price movements (Halim, 2018). LQ45 issued by the Indonesia Stock Exchange (IDX) as an issuer with high liquidity stock price performance of the 45 most liquid stocks with the largest market capitalization, good company fundamentals, listed as an issuer on the IDX for at least 3 months, with transaction activities in the regular market, namely the increasing value, volume and frequency of transactions, the number of trading days in the regular market and market capitalization in a certain period of time, and of course the company's financial performance and growth prospects are good. Data from the IDX states that there are 61 property and real estate companies listed as issuers from around 750 companies listed on the IDX, and five property and real estate companies are listed in LQ45. The percentage of total companies entering LQ45 is 6% or 45 companies and 11.11% are property and real-estate companies. This shows that property companies have high liquidity and all the characteristics of the LQ45 index that are seen in annual reports and financial reports as company performance for the interests of shareholders.

This annual report and financial report are short-term financial performance. Short-term financial performance such as annual income, return on assets, cost reduction is a company performance that includes economic value with a higher quality measurement of economic value and can be widely used to identify problems and develop strategies or plans to be implemented (Itnera, Larchera, et al. & Randalb, 2003)

One of the strategies to obtain quality financial performance is through a productivity strategy, namely by achieving a ratio of more output to input including increasing resources, so that more value is added to the product. The company's ability to earn profit as a business goal is determined by the ability to manage internal factors, namely resources and the ability to manage external environmental factors and this is where the company's performance will be read through the financial statements. Companies that go public provide financial statements to provide information for those who need information regarding considerations in economic decisions (Harnanto, 2004). While financial statement analysis is a process to consider and evaluate the financial position as a result of the company's current and past operations to make estimates and predictions that are possible to achieve through the company's performance in the future (Pohan, 2017).

Operations performed in the past will be recorded and reported and of course costs as inputs will be compared with revenues as outputs, all of which leads to fulfillment of customer demands. The BCS model adopted in this study shows that to achieve a productivity strategy, cost and revenue orientation must focus on the customer perspective, so efforts are made for efficiency through cost structure improvements and for effectiveness through increased asset utilization.

The company's ability to generate profits at the level of asset sales and certain share capital used as a ratio in financial analysis, namely Return on assets. One of the financial analysis with profitability ratios to measure the company's ability to generate net income based on certain asset levels (Hanafi & Halim, 2009).

The financial perspective of this profitability ratio is seen as more suitable for identifying productivity strategies because the profit generated from the use of costs is an illustration of how to improve the cost structure and the resulting revenue is obtained from the description of the increase in the use of company assets. In addition, this profitability analysis is used to describe the company's financial performance and emphasizes the importance of driving value for the future in a financial perspective as the company's value or reputation in the capital market (Bieker, 2001).

The problem in this study is how the factors related to improving the cost structure as an effort for efficiency and increasing the use of assets as an effort to effectiveness in this productivity strategy work

in LQ45 companies on the IDX according to the selected period.

## **Literature Review**

### **LQ 45 Index**

The Indonesian stock exchange is an institution that is a registered 'securities market' and is a 'place' where sellers and buyers of long-term securities meet for companies that make investments. The capital market has an economic function and a financial function, namely providing capital for companies (issuers) from investors as owners and providing opportunities to obtain returns, capital gains, and interest for investors on the chosen investment (Halim, 2018).

The LQ45 Index itself is a type of Stock Price Index (IHS), which is an alternative stock index so that stock price movements on the IDX can be monitored on issuers that have the highest liquidity and other qualifications so that they can be used as an objective and reliable tool by financial analysts, investment managers, and investors. (Halim, 2018).

The company's ability to generate profits will affect stock price fluctuations. When the company earns high profits, the dividends as a result of purchasing investments received by investors are relatively high and this will affect the stock price on the stock exchange so that the demand for shares increases and causes capital gains for shareholders. So the company's ability to earn profits is at stake, therefore the company seeks to improve its financial performance and one of them based on the BSC concept is a productivity strategy.

### **Financial Perspective**

The Balanced Scorecard is a tool for organizations to be able to accommodate the wishes of stakeholders and manage them by translating strategy into action. A strategy that is relevant to all possible stakeholders be it shareholders, customers or employees. The strategy must be integrated into the company's core management actions, namely as a perspective seen from the "financial", "customer" or "learning" or "process" side as a value driver for future profits (Bieker, 2001).

The financial perspective with this productivity strategy is aimed at the customer value proposition through product attributes such as price, quality that can encourage efficiency efforts through improving cost structure and availability, selection and functionality as an effort to increase effectiveness through asset utilization. Market-based company management with the dimensions used can make it possible to achieve an internal process, service and product according to current and future market needs of customers and relevant market segments that contribute to financial goals (Kaplan, 2005).

One of the possible benefits that companies can realize when implementing the strategy is by emphasizing increased productivity and efficiency, so it is often referred to as an efficiency strategy. Efficiency strategies are related to sustainability because they have succeeded in helping reduce costs by achieving better energy and material efficiency, apart from on the other side. social, this kind of strategy can try to increase "social efficiency" (Bieker, 2001)

Finally, the financial perspective can be said to be a matter of firm value, risk exposure or reputation in the capital market. Reputation in general seems to be important as it can largely influence the rating of a company by financial investors and analysts resulting in the cost of capital. (Bieker, 2001)

### **Productivity Strategy**

Strategy is the orientation of the company's actions through an approach to the realization of the company's vision to face the competition (Neumann, 2008).

Productivity itself has the meaning that the company's activities are directed at long-term effects starting from planning (the value of the selected main productivity performance indicators), implementation to continuous evaluation of its development and control. It is important for companies to have high productivity to be able to excel in international competition, especially with high wages for human resources. Companies need to monitor productivity and influence it effectively by planning and implementing strategic approaches including strategic performance.

All processes in the company directly or indirectly affect the work productivity of the company so it is important to develop a productivity strategy (Weber, Jeske, Lennings, & Stowasser, 2018). Productivity is the ratio of results (either goods or services) divided by inputs/resources (such as workers, capital and management) (Heizer & Render, 2015). Productivity growth depends on all changes in the quantities of outputs and inputs and prices and their determinants, and thus on many characteristics and changes in the economic climate in which firms, sectors or economies operate.

Production strategy for the two types of flexibility investment, namely flexible technology and flexible capacity, which leads to demand fluctuations. Each strategy is supported by a series of operating decisions at the level of technology, amount of capacity, production quantity, and price (Yang, Ng, & Cheng, 2011).

Goods and services produced require changes in resources, the more efficient the changes made, the more productive they are and the more added value is produced in these goods or services. Productivity is the ratio of output (goods and services) divided by inputs (resources, such as labor and capital). The financial perspective has two dimensions, namely improve cost structure and increase asset utilization with five indicators in terms of productive strategy, namely price, quality, availability, selection, and functionality (Kaplan, 2005).

Price is one of the determinants of productivity in addition to the quantity of inputs (materials used) and output (sales that can be achieved) as well as other determinants such as changes in the economy or the climate of the related business sector (Paul, 1999).

Product quality or reliability can be maximized through cost minimization, because there is a cost and quality trade-off in consumer products such as property. The optimal strategy is achieved through cost savings by planning tariffs and adding premiums due to the company's external failures (Farooq, Kirchain, Novoa, & Araujo, 2017).

The level of availability is an opportunity to increase revenue by optimizing price through price elasticity and ignoring competitors' prices. In addition, it can sell supporting products, for example the sale of apartment rentals used for short-term rentals such as hotels which can definitely expand the opportunity to earn income from the available products (Cross & Higbie, 2009).

Selection to expand revenue opportunities for companies can be pursued through merging market segments so as to add more diverse purchasing decisions to various market shares which have implications for the company's finances for the long term (Bhatnagar, Maryott, & Bejou, 2007). Functionality to increase revenue can be done by the company by utilizing technology, especially information technology. Process improvement drives IT design decisions and minimizes risk through the development of detailed conceptual process designs prior to system implementation which is expected to improve financial and operational performance allowing for increased product benefits (Hoagland, Zar, & Nelson, 2007).

## **METHOD**

This type of research is categorized as associative research, namely research that aims to determine the relationship between two or more variables (Sugiyono, 2016). This study will understand the relationship between productivity strategies and financial performance in property companies listed on the Indonesia Stock Exchange (IDX). The research approach used is a quantitative approach. Research with this quantitative approach is a research method based on the philosophy of positivism and is used to examine certain populations or samples through statistical data analysis (Sugiyono, 2012). The unit of analysis used is property companies that have been listed on the Indonesia Stock Exchange and are included in the LQ45 Index for the period February-July 2021. The data analysis used is over a period of three years of company operations, namely 2018, 2019 and 2020, the performance of which can be used as a performance evaluation until the company gets the LQ45 index. These companies are PT Bumi Serpong Damai Tbk (BSDE), PT Ciputra Development Tbk (CTRA), PT PP (Persero) Tbk (PTPP), PT Pakuwon Jati Tbk (PWON), and PT Summarecon Agung Tbk (SMRA).

In determining the sample, this study uses one of the non-probability sampling techniques, namely purposive sampling. Purposive Sampling is a sampling technique based on certain criteria determined by someone who is experienced in a certain field to meet the sample requirements (Zikmund, 2010). The criteria used to determine the sample in this study are property companies that are included in the 2021 LQ45 list on the Indonesia Stock Exchange. Based on these criteria, there are 5 companies that meet the requirements to be sampled.

The data collection technique used in this research is a documentation study because the data to be used is secondary data, in addition to using limited observations and interviews. Secondary data is data collected by other parties other than researchers who are conducting research. The data to be collected and processed is data from reports published by companies that are used as research samples (Sekaran, 2009). Data analysis that will be used is secondary data analysis. Secondary data analysis is

data analysis that uses data collected and provided by government or private agencies (Martono, 2011). Secondary data analysis is also an analysis of data collected by other parties for other purposes (Johnston, 2014). Secondary data analyzed is data from reports or publications containing information about the variables of productivity strategy and financial performance. The productivity strategy variable with its dimensions will then be analyzed for its influence on the financial performance of the property companies that are sampled.

## RESULTS AND DISCUSSION

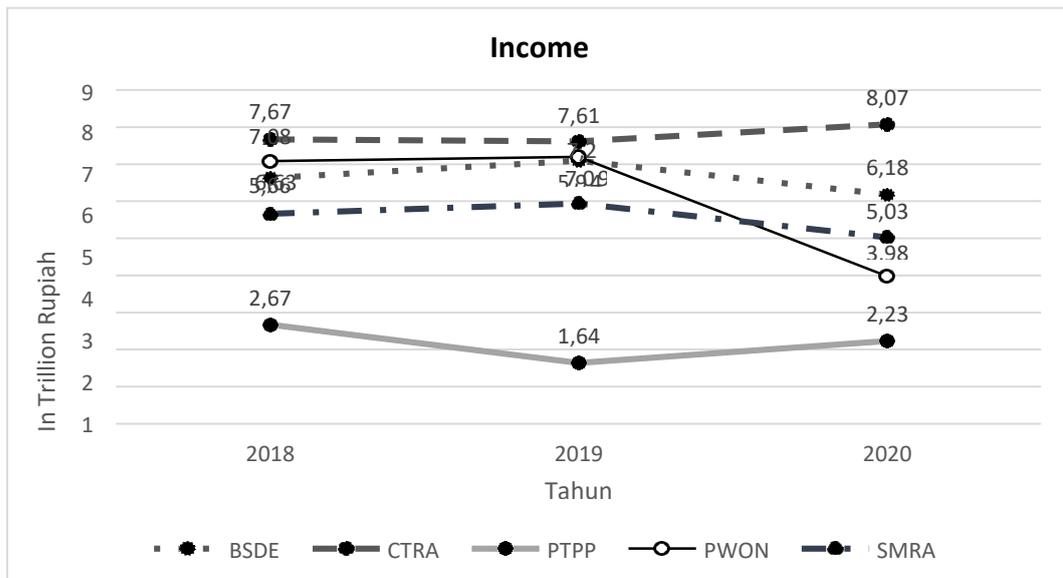
The spread of the COVID 19 virus in Indonesia since the beginning of 2020 has caused companies to increasingly face formidable challenges in achieving their business goals, including companies in the property business. The property sector is one of the business sectors that has been significantly affected by the COVID-19 outbreak. Based on data from Bank Indonesia, residential property sales fell 43% in the first quarter of 2020 compared to the same period in the previous year. Even Real-estate Indonesia (REI) stated that property sales fell drastically by 60% by the end of the year. Community activities are restricted, economic conditions are weakening, and people's purchasing power is declining are some of the impacts that directly affect the business performance of property companies. Companies must make efforts for efficiency and effectiveness with all the limitations that occur while still paying attention to the financial perspective so that long-term shareholder value can be maintained. Based on the adapted BSC concept, an analysis through a productivity strategy will be used to determine which property companies get the LQ45 index in the Indonesia Stock Exchange market.

The productivity strategy carried out by the company is seen from efficiency and effectiveness efforts, which are based on efforts to improve cost structure and increase asset utilization for a period of three years (2018, 2019 and 2020) prior to the achievement of the blue-chips index.

### Improve Cost Structure

In general, the condition of the property market in Indonesia in 2020 experienced a slowdown in growth. In the first quarter of 2020, the residential property price index slowed by 1.68% compared to the previous year. Despite the improvement in the following quarters, the development of residential property sales at the end of the quarter contracted from the previous quarter's gains. The effect of price is felt in improving this cost structure so that it also affects the income derived from contracted sales.

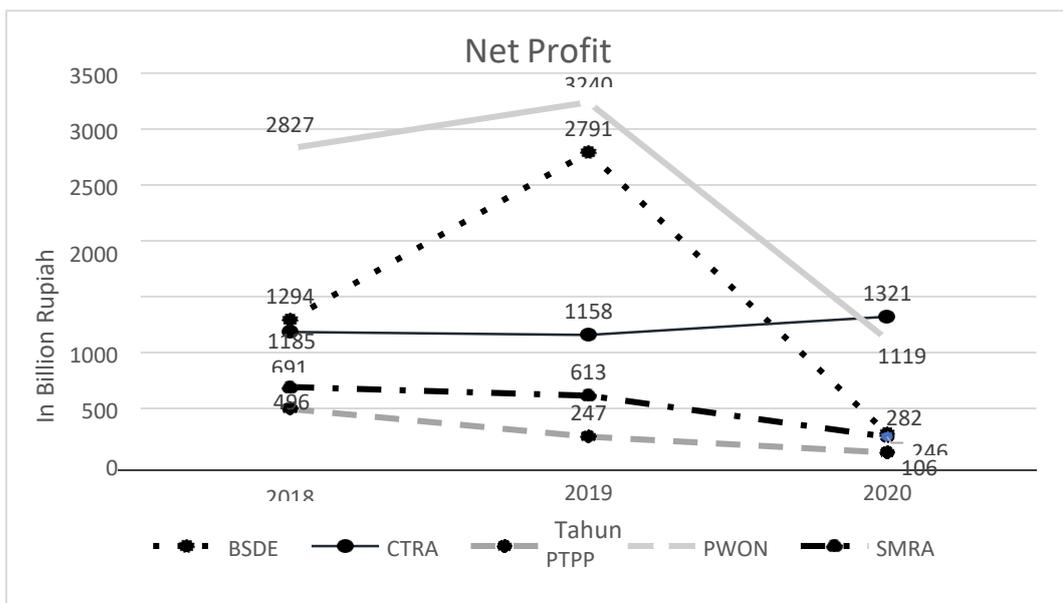
Increasing income from price indicators up to 2020 is shown by CTRA and PTPP. CTRA which is dominated by property products with prices below 2 billion rupiah, and PTPP is supported by the strengthening of apartment products which increased to 82%. The declining revenue from property company LQ45 until 2020 was shown by three other companies, namely PWON, BSDE, and SMRA. Although in general these three companies have achieved their pre-sales targets in the range of 90%, the profit ratio is only in the range below 30%, and the products that are in demand are products with a price of 1 – 2 billion rupiah. This explanation is in Figure 1. Productivity will grow depending on changes in the number of outputs and inputs, prices and their determinants, and this is a characteristic of changes in the economic climate that occur in company operations or economic sectors. The price as a determinant of income for property companies LQ45 is the price of premium property products which are worth around 1-2 billion per unit so that income growth is relatively up or down significantly (Paul, 1999).



**Figure 1.**  
 Income Condition of Property Company LQ45(Source: Data processed, 2021)

Quality indicators on the overall improve structure cost are applied by all companies, especially related to the use of digital technology, especially in operational, marketing and financial services as well as the use of green building technology for building construction services and property management. In the newnormal era, companies must be able to adapt quickly so that their business can survive and continue to grow. Adjustments must be made to keep operations running and targets to be achieved. But the adjustments made should not reduce the quality of the products offered.

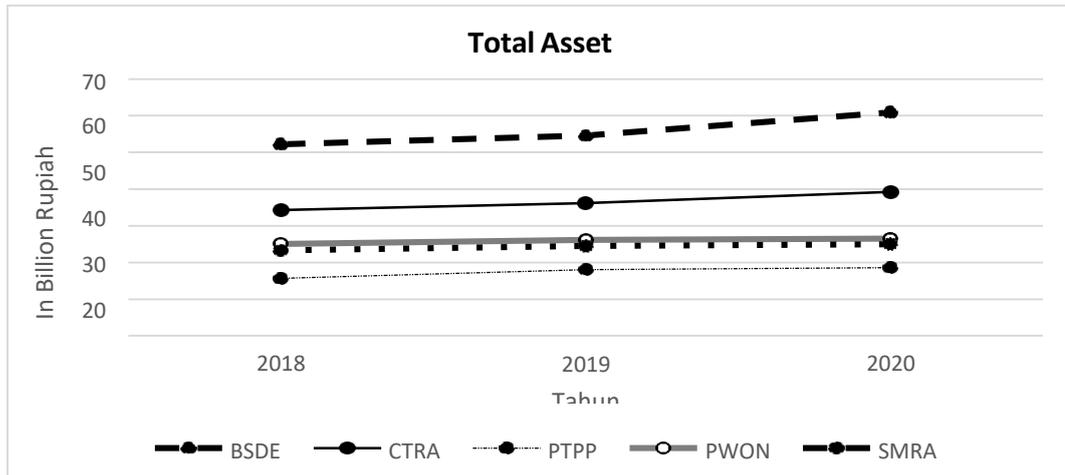
The property sector, which has been heavily affected by the pandemic and climate change issues, must implement new strategies, including optimizing the use of digital technology and implementing the green building concept. This effort is to print the company's net profit, the situation is presented in Figure 2. The condition of quality indicators including product reliability can minimize costs, so there are cost savings through tariff planning and additional company premiums (Farooq, Kirchain, Novoa, & Araujo, 2017).



**Figure 2.**  
 Condition of Property Company Net Profit LQ45(Source: Data processed, 2021)

### Increase Asset Utilization

Asset availability as an indicator of increasing asset utilization is generally sluggish. During the last three years until 2020, there were only two companies that showed significant asset growth of around 8% to 12%, namely CTRA and BSDE. Other companies, such as PTPP, PWON, and SMRA, grew only up to 5%, which came from an increase in the inventory of properties ready for sale due to declining sales and delays in the completion schedule of new projects. The overall asset availability indicator of the five companies experienced an increase in total assets as shown in Figure 3.

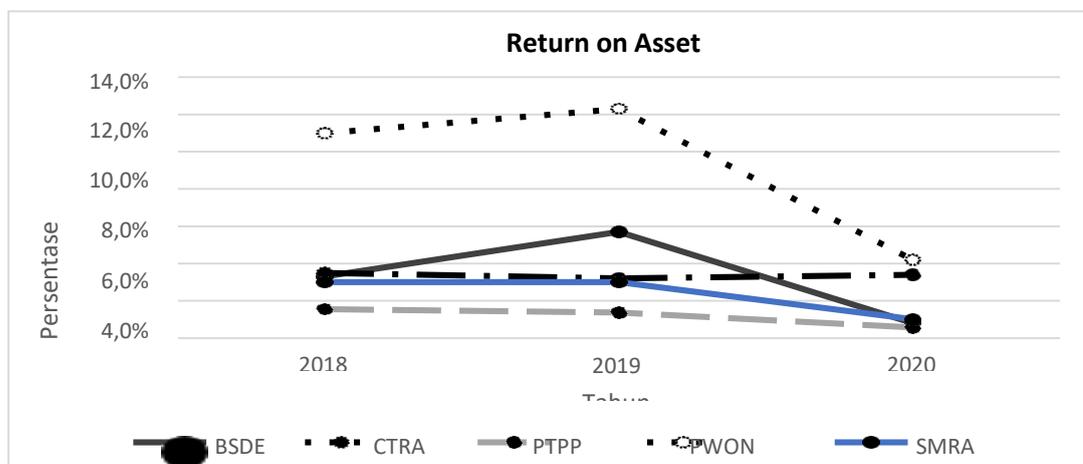


**Figure 3.**

Growth Condition of Total Assets of Property Companies LQ45 (Source: Data processed, 2021)

Despite experiencing growth in total assets, in general these companies experienced a decrease in Return on Assets (ROA) due to a decrease in income which affected the decrease in net income. ROA that can be noted from the explanation of available assets is that only CTRA experienced an insignificant growth of 0.2%. Meanwhile, other companies experienced a decline. The decrease in ROA which was considered insignificant in the range of 4.9% - 8.1% occurred in PWON and BSDE, while in PTPP and SMRA the decline in ROA was below 3%. Improvements to the cost structure are also carried out by functionalizing the assets owned by the company through efforts to maximize the value of these assets. This condition can be seen in Figure 4.

Companies must be able to allocate/select assets that have potential so that the level of availability has the opportunity to increase revenue and or eliminate fixed assets that do not have the potential to maximize asset value so as to expand opportunities to earn income from available products (Cross & Higbie, 2009).



**Figure 4.**

Condition of Return on Assets of Property Companies LQ45 (Source: Data processed, 2021)

The asset selection indicator can be done by acquiring assets that have the potential for future growth and selling assets to reduce assets that are no longer productive. In 2020, CTRA experienced a decline in terms of purchases of land, fixed assets, and investment properties. PTPP has acquired many fixed assets in the form of land and buildings in various locations. PWON acquired quite impressive assets, namely by making purchases so that the company obtained the proceeds from the sale of fixed assets and investment properties. SMRA did not acquire too many assets, and for the sale of fixed assets, the company recorded a revenue of Rp 4.7 billion, up more than 200% compared to 2019. BSDE until 2020 focuses on maintaining market share and has a solid funding structure so that its assets are productive. Increasing revenue through selection to expand income opportunities is pursued through market segments so that purchasing decisions vary so that it has implications for the company's finances for the long term (Bhatnagar, Maryott, & Bejou, 2007)

Functionality indicators that need to be measured as technical and tools to support business success, apart from measuring finance, this functionality is an indicator of consumer value based on the customer's perspective to obtain a productivity strategy through increasing the utilization of asset functions (Lindholm, Gibler, & Levaänen, 2006). Increasing the cooperation scheme of operations through land development or use is carried out to increase income by all companies with strategic partners.

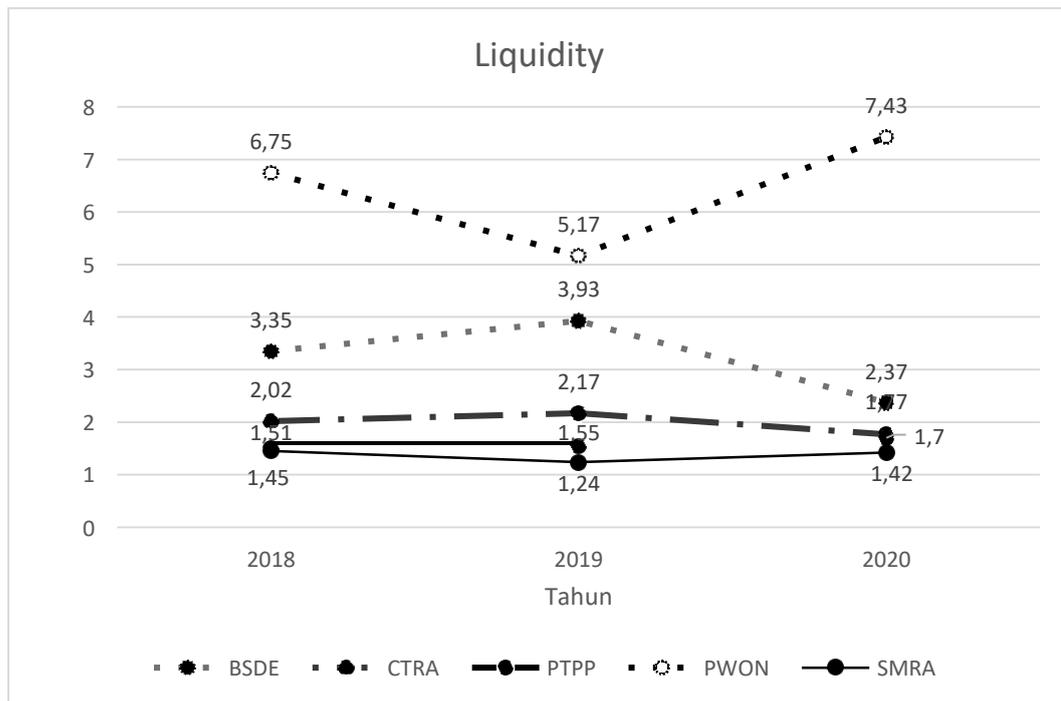
Other collaborations include the development of property product and service projects in various locations and various operations, forming joint ventures, and cooperation through the Build Operate Transfer (BOT) scheme. BSDE through its subsidiaries has several cooperations in product development projects and property services in various locations and hotel operations, and cooperation in forming business joint ventures. CTRA has collaborated for property development and commercial property management with hotel and serviced apartment management groups. PTPP conducts several collaborations through subsidiaries, with private companies (national and international) as well as with State-Owned Enterprises (BUMN). PWON has cooperation in property development and property management. Meanwhile, SMRA did not make too many asset acquisitions.

Functionality also increases revenue by utilizing technology, especially information technology such as the use of digitalization for security, payments via e-banking, marketing using online-tours. Improvements are expected to improve financial and operational performance to allow for increased product benefits (Hoagland, Zar, & Nelson, 2007). Some productivity strategies in property companies include, among others, the use of property technology (proptech) with artificial intelligence technology (artificial intelligence) that must be able to adapt quickly and be sensitive to what is desired or become the needs of people who are increasingly technology literate, people development, productivity systems and technology. is an integrated thing in one development method related to productivity. Understanding of the digital world and technology is a mandatory requirement for companies that use high technology, including property companies (Heizer & Render, 2015).

### **Financial Perspective**

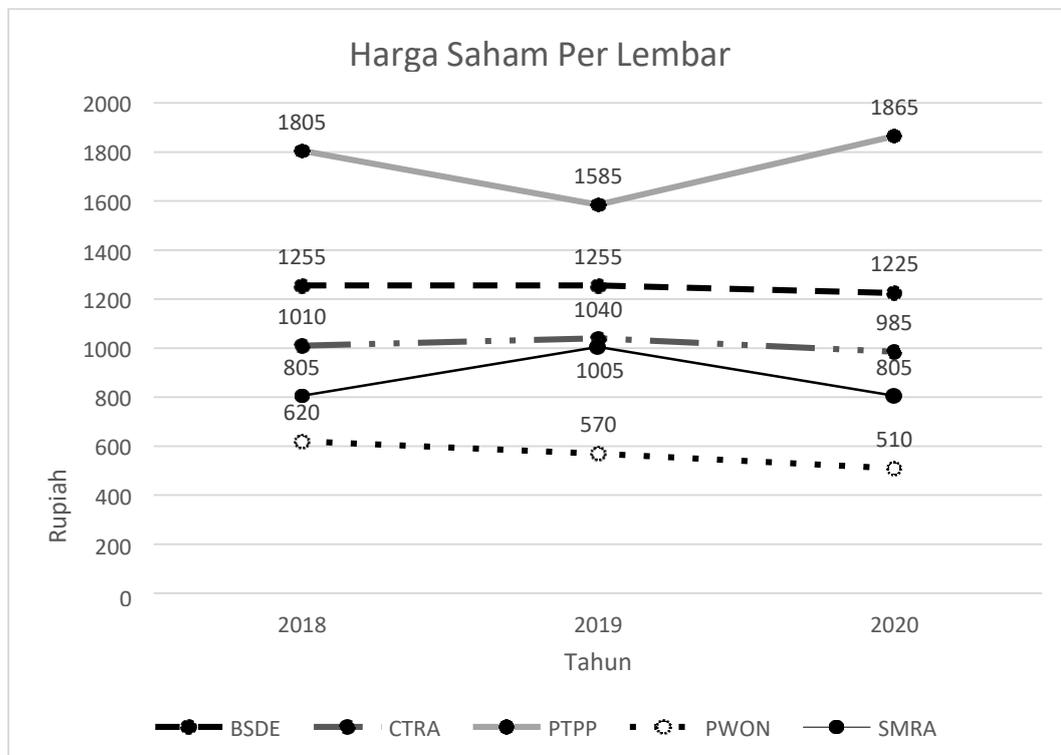
The financial perspective of property companies LQ45 from the overall productivity strategy indicators will provide an overview of what conditions are the companies with the highest liquidity with their share prices in Figures 5 and 6. The liquidity ratio discusses the relationship between cash and current assets of the company and this liquidity refers to the company's ability to meet obligations short-term. So how the company conducts its operations by improving the cost structure is reflected in the cash and assets lost to meet short-term needs. Meanwhile, the increase in asset utilization will increase cash even though there are companies that sell assets that are less useful.

Liquidity and stock prices according to a study (Sitorus, Pardede, & Ardi, 2019) show that liquidity has an insignificant negative effect on stock prices, meaning that when liquidity increases, stock prices fall because there is a mediating effect of hedging on the effects of liquidity and profitability. on stock prices is stronger than the direct effect of liquidity but not on profitability. PTPP, PWON, and SMRA are three companies whose liquidity has increased in three years, while CTRA has decreased but not significantly and BSDE has decreased, while for stock prices that have increased in the same time period only PTPP has tended to decline, although not significantly.



**Figure 5.**  
 Liquidity Condition of Property Company LQ45(Source: Data processed, 2021)

Hedging is a strategy carried out to limit possible losses due to exchange rate risk (Harjito, 2014), this explanation is reinforced by the statement that there is a significant and negative relationship with company liquidity with the decision to hedge/hedging (Zachary, 2011)



**Figure 6.**  
 Conditions of LQ45 Properti Property Company Share Prices(Source: Data processed, 2021)

## CONCLUSIONS

Based on the results and discussion in this study, it can be concluded:

The productivity strategy with the dimensions of cost structure improvement is carried out by property company LQ45 through price and quality so that it can achieve a financial perspective with good performance. This is indicated by the financial performance at the level of income and profit level which is assessed by the analysis of the results are quite moderate in proportion to the cost improvement efforts made by each company.

The productivity strategy with the dimensions of increased asset utilization by property companies LQ45 is carried out through the availability, selection and functional assets to achieve good performance. This is indicated by the financial performance of growing total assets and also the rate of return on assets with results in accordance with the efforts made by the company on each indicator.

Financial performance related to the level of liquidity and stock prices shows that there is no direct relationship between liquidity and stock prices.

The managerial implications that can be given are good for all companies to observe the strategies carried out by LQ45 companies, and for companies that enter LQ45 studies like this can be used as evaluation material to maintain or increase investors.

The suggestions that can be given for further development and research are that it is necessary to study qualitative research methods using program applications and develop in companies outside the property.

## REFERENCES

- Aziz, A. (2021, Februari 1). *market-and-corporate/ssstt-ada-wajah-baru-dalam- indeks-saham-lq45*. Diambil kembali dari <https://investor.id>.
- Bhatnagar, N., Maryott, K., & Bejou, D. (2007). Customer Selection and Prioritization: The Optimal Resource Allocation Approach to Maximizing Customer Value. *Journal of Relationship Marketing*.
- Bieker, T. (2001). *Sustainability management with the Balanced Scorecard*. International Summer Academy in Technology Studies - Corporate Sustainability.
- Cross, R. G., & Higbie, J. A. (2009). A Rebirth of the Art and Science of Profitable Revenue Generation. *Revenue Management's Renaissance*.
- Farooq, M. A., Kirchain, R., Novoa, H., & Araujo, A. (2017). Cost of Quality: Evaluating Cost-Quality Trade-Offs for Inspection Strategies of Manufacturing Process. *Intern. Journal of Production Economics*.
- Halim, A. (2018). *Analisis Investasi dan Aplikasinya dalam Aset Keuangan dan Aset Riil*. Jakarta : Salemba Empat.
- Hanafi, M., & Halim, A. (2009). *Analisis Laporan Keuangan*. Yogyakarta: STIE YKPN.
- Harjito, A. M. (2014). *Manajemen Keuangan, Edisi Kedua*. Depok : Ekonisia.
- Harnanto. (2004). *Analisa Laporan Keuangan*. Yogyakarta: UPD AMP YKPN.
- Heizer, J., & Render, B. (2015). *Manajemen Operasi: Manajemen Keberlangsungan dan Rantai Pasokan. Edisi 11*. Jakarta : Penerbit Salemba Empat.
- Hoagland, C., Zar, N., & Nelson, H. (2007). Leveraging technology to drive revenue cycle results: how can you make the most of revenue cycle technology? Know the five keys to success in leveraging technology to boost your bottom line. *Healthcare Financial Management*.
- Ittnera, C. D., Larckera, D. F., & Randallb, T. (2003). Performance implications of strategic performance measurement in financial services firms. *Accounting, Organizations and Society* 28, 715–741.
- Johnston, M. P. (2014). Secondary Data Analysis: A Method of which the Time Has Come. . *Qualitative and Quantitative Methods in Libraries (QQML)* 3, 619 - 626.
- Kaplan. (2005). How The Balanced Scorecard Complements The Mckinsey 7-S Model. *Strategy and Leadership, Vol. 33 No. 3*, 41 - 46.
- Lindholm, A.-L., Gibler, K. M., & Levaˆinen, K. I. (2006). Modeling the Value-Adding Attributes of a Real Estate to the Wealth Maximization of the Firm. 445 - 475.
- Martono, N. (2011). *Metode Penelitian Kuantitatif: Analisis Isi dan Analisis Data Sekunder*. Jakarta: RajaGrafindo Persada.
- Neumann, A. (2008). Integrative Management systeme. *Physica*.

- Paul, C. J. (1999). *cost structure and the measurement of economic performance*. New York: Springer Science+BusinessMedia New York.
- Pohan, S. (2017). analisis laporan keuangan untuk mengukur kinerja keuangan pada perusahaan yang go public di bursa efek indonesia. *Jurnal Manajemen dan Informatika Komputer Pelita Nusantara Vol 1, No 1, Juli 2017*, 1-11.
- Sekaran, U. R. (2009). *Research Methods for Business – A Skill Building Approach*. United Kingdom: John Wiley & Sonds Ltd.
- Sitorus, T., Pardede, R., & Ardi. (2019). The influence of liquidity and profitability toward share price: mediated effect of hedging (evidences from shares of lq-45 listed in Indonesian stock exchange for period of 2011 to 2015). *Humanities and Social Sciences Reviews Vol 7, No 5*, 150 - 160.
- Sugiyono. (2012). *Metode Penelitian Administrasi*. Bandung: PT. Alfabeta.
- Sugiyono. (2016). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Bandung: PT Alfabet.
- Weber, M.-A., Jeske, T., Lennings, F., & Stowasser, S. (2018). Framework for the Systematical Design of Productivity Strategies. *Advances in Ergonomics of Manufacturing: Managing the Enterprise of the Future,,*, 141 - 152.
- Yang, L., Ng, C. T., & Cheng, T. C. (2011). Optimal production strategy under demand fluctuations: Technology versus capacity. *European Journal of Operational Research*, 214(2), 393 - 402.
- Zachary, M. (2011). *Determinants of exchange rate hedging: An empirical analysis of U. S. small-cap industrial firms.* . Orlando : University of Central Florida.
- Zikmund, W. G. (2010). *Business Research Methods, Eighth Edition.* . United States of America: South-western: Learning.