



## Determinants of Earnings Quality With the Company's Life Cycle, and Related Party Transactions and the Implications on Firm Value

Anita Kurnia<sup>1</sup>, Apollo Daito<sup>2</sup>

1) Mercu Buana University, Indonesia, [kurniankur@gmail.com](mailto:kurniankur@gmail.com)

2) Mercu Buana University, Indonesia, [apollo@mercubuana.ac.id](mailto:apollo@mercubuana.ac.id)

Corresponding Author: Anita Kurnia<sup>1</sup>

**Abstract:** This study aims to prove the empirical effect of the company's life cycle, and related party transactions on earnings quality and its implications toward firm value. This study uses a sample of the mining sector listed on the Indonesia Stock Exchange for the period 2015 – 2020. The sample in this study consisted of 12 companies. Sampling using purposive sampling method and is a quantitative research with panel data regression model. The results show that the company life cycle and related party transactions have a significant positive effect on earnings quality and a significant negative effect on firm value, earnings quality has a significant positive effect on firm value, earnings quality mediates between the firm's life cycle and firm value, and earnings quality does not mediate between related party transactions and firm value.

**Keywords:** Earnings Quality, Firm Value, Company Life Cycle, Related Party Transactions

### INTRODUCTION

Factors that can affect firm value and earnings quality may come from internal or external sources, this study will use company life cycle variables and related party transactions which are considered to have inherent potential for the industry. Mining sector is selected for this study, along with world developments in the economic sector, the mining sector is one of the pillars of a country's development, because of its role which is considered a provider of energy resources needed for a country's economic growth. Moreover, the mining sector has also begun to be chosen as one of the sectors of choice because it offers promising returns as long as the investment is carried out in accordance with the trend of stock movement. With the upward trend in energy commodity prices, it can stimulate the Indonesian economy in the future. Many Indonesian people will depend on working in the commodity sector.

**Table 1. Cases of the Mining Sector 2015-2020**

2015	PT Timah has been unwell for the past three years. If referring to the real conditions that occurred at PT Timah, Ali believes that the profit/loss report for the first semester of 2015 PT Timah (Persero) Tbk is fictitious.
2016	CKRA stumbled upon cases of embezzlement, profit manipulation and problems related to false disclosures directed by Boelio Muliadi, the President Director of this company.
2017	Losing \$3.7 billion in purchases of coal assets in Mozambique that were sold back in the next few years for \$50 million, Rio Tinto's former chief executive officer (CEO) and chief financial officer (CFO) were accused of trying to cover billions of dollars in losses in coal investments. in Africa.
2018	Firdaus Ilyas Secretariat of the Indonesian non-profit organization suspects that profit reporting has been manipulated in the mining sector.
2019	An investigative report by the international NGO Global Witness found indications that PT Adaro Energy has allegedly transferred some of its profits from its coal business to a network of overseas companies.
2020	Economists at the University of Indonesia say that in the last five years, when the mining sector has been dredged, the revenue for the state has fallen. This is due to revenue corruption in this sector

Mining sector has provided vast contribution and opportunities in supporting the economy, therefore good supervision is needed on the company's performance in generating profits in accordance with actual conditions so that investors have more confidence in the mining sector and improve the industry and the nation's economy. The assumption is that individuals act to maximize themselves, resulting in agents taking advantage of their information asymmetry to hide information and make profits not show the actual condition of the company, in this study it will be identified through the stages of the company's life cycle and related party transactions owned by the company.

According to research (Chen, 2016) on the company's life cycle, the results of the company's life cycle have a positive effect on earnings quality, while research by (Moshtagh et al., 2014) states that earnings quality is not influenced by the stages of the company's life cycle. Research on related party transactions by (Mohammed & Abibakar, 2018) shows an effect on earnings quality, while according to (Moataz El-Helaly, 2018) related party transactions have no effect on earnings quality. Research by (Dang, Nguyen, et al., 2020) shows that earnings quality has positive effect on firm value, while (Sarun, 2016) states that earnings quality has no effect on firm value.

The company's life cycle is one of the factors that affect earnings quality. Life cycle theory assumes that companies are like living things that are born, grow and die. Management as an agent must face the company's life cycle with good performance. Then the transaction relationship between parties who have a special relationship is a normal transaction. However, they recognize that a special relationship with a party can have an impact on the financial position and results of operations of the reporting enterprise. Related parties may enter into transactions that non-related parties would not.

## LITERATURE REVIEW

### *Agency Theory*

(Jensen & Meckling, 1976) explain agency relationship as –A contract under which one or more person (the principals) engage another person (the agent) to perform some service on their behalf which involves delegating some decision-making authority to the agent”.

Based on the proposed agency theory (Schroeder et al., 2013) it describes the purpose of the separation between ownership and control of the company, namely how the principal motivates agents to maximize costs as efficiently as possible in their management to obtain maximum profit. Agency theory assumes that each individual is motivated by his or her own

interests, causing a conflict of interest between the interests of the principal and the interests of the agent.

The relationship between agency theory and earnings quality lies in the agency relationship that exists between earnings and management. The company is seen as a set of contracts between company managers and shareholders. Managers as parties who are authorized over the activities of the company and are obliged to provide financial reports that lead to the interests of shareholders that can affect the magnitude of the value of a company.

### **Company Life Cycle**

(Miller et al., 1984) explains " The Company's life cycle model can be classified into five stages, namely birth, growth, maturity, revival and decline. They argue that there are different characteristics at each stage. However, each company does not go through each of these stages in the same order and pattern.¶

The company life cycle can be divided into four stages, namely start-up, growth, mature, and decline. There are different characteristics in the company's life cycle, namely at the start-up stage, the company is known for its minimal line of business. Companies often run aground because managers do not understand the demands of the market. At the *growth stage*, the company will fill the market demand and develop rapidly. In the *mature stage*, the company occupies a stage where managers begin to experience. Furthermore, in the *decline stage*, the stage where the company will experience a setback and will continue until the company stops operating.

### **Related Party Transactions**

According to Statement of Financial Accounting Standards (PSAK) 7 regarding related party transactions, RPT is a transfer of resources, services or obligations between the reporting entity and related parties, regardless of whether a price is charged (Indonesian Accounting Association, 2017).

The second theory suggests that related party transactions can give rise to agency issues, agency problems arise when managers with their opportunistic actions maximize their own income at the expense of shareholders (Jensen & Meckling, 1976) . These transactions include activities such as selling and buying assets, guaranteeing loans, and exchanging assets of different qualities.

### **Earnings Quality**

In (Schroeder, 2004) says — To counter the drawbacks of reported accounting earnings, and to help align a firm's accounting earnings with its economic earnings, financial statement users should assess the "quality" of a company earnings. Earning quality is defined as the degree of correlation between a company's accounting income and its economic income. several techniques may be used to assess earnings quality¶.

Based on (Utami et al., 2020) earnings quality is a profit that reflects the company's performance in accordance with economic reality, free from the discretionary influence of management.

In the financial statements, each business entity is given certain freedom with certain limitations to determine policy choices that are tailored to the company's goals in order to achieve maximum results. Earnings quality is basically a theoretical concept with reference to several dimensions, empirically usually measured only one or two dimensions in a particular study. The importance of earnings quality can be explained in three perspectives, which are investment perspective, information perspective of financial statement users, and accounting standard setting perspective.

### Firm Value

(Myers et al., 1998) of firm value explains that each stage of the firm's life cycle is associated with the magnitude of profits and cash flows.

The value of the company can describe the company in good or bad condition. A high company value will attract investors interest in investing in the company. Investor behavior is based on information on the value of a company, where information on company value able to provide positive or negative information. Therefore, good earnings quality can provide good profit information which will make investors interested in investing so as to increase market reaction and rate of return. The increasing market reaction has an impact on the value of the company because it can make the value of a company continue to increase.

### Theoretical Framework

Based on the previous explanation, the resulting figure 1 framework of thought as follows: The dotted line represents the mediation hypothesis in this study.

### RESEARCH METHODS

According to (Sekaran & Roger, 2017) this research is a quantitative study and includes a causal study that aims to obtain clarity on earnings quality and its implications for firm value in mining sector companies in 2015-2020.

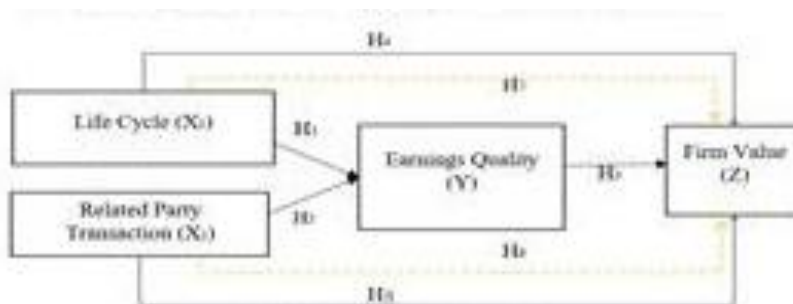


Figure 1. Theoretical Framework

Table 2. Operationalization of Variables

Variable	Dimension	Indicator
Earnings Quality • (Nugraha & Setiany, 2020)	Closer profit to operating cash shows more qualified earnings.	$EQ = \text{Operating Cash Flow} / \text{Net Income}$
Company Life Cycle • (Chen, 2016)	The stages of the company cycle affect the value relevance of accounting information.	$Life\ Cycle = \text{retained earnings} / \text{total equity}$ Numbers less than 0.5 for the value 0 and numbers more than 0.5 for the value 1
Related Party Transactions • (Hasnan et al., 2016)	Transactions carried out by parties who are related to the company. The relative share of RPT to book value of equity	$RPTSE = (\text{RPT Sales} + \text{RPT Expenses}) / \text{Equity}$
The value of the company • (Dang et al., 2020)	Firm value with PBV reflects net assets owned by shareholders.	$PBV = \text{Market Price per share} / \text{Book Value per share}$

The sample in this study after deducting the criteria is 12 companies. The research observation period used is from 2015 to 2020 so that the amount of data used is 72 data . The data used are secondary data obtained from financial reports and annual reports of Mining Sector companies in the 2015-2020 period published on the official websites of each company or through the official website of the Indonesia Stock Exchange ([www.idx.co.id](http://www.idx.co.id)) or ([www.sahamoke.com](http://www.sahamoke.com))

The analysis technique of this research uses multiple regression with panel data, this study uses the *Econometric Views* (Eviews) application program version 12.

## FINDING AND DISCUSSION

### Descriptive statistics

Research variables are interpreted in terms of mean, median, maximum, minimum and standard deviation values. The number of observations in the study is 72 data which is a combination of 12 data from mining sector companies listed on the Indonesia Stock Exchange for the 2015-2020 period.

**Table 3. Descriptive statistics**

	LC	RPT	EQ	FV
mean	0.72	0.58	1.67	1.68
median	1.00	0.42	1.35	1.38
Maximum	1.00	3.83	15.66	4.46
Minimum	0.00	0.01	-15.85	0.11
Std. Dev.	0.45	0.77	3.94	1.06
Observations	72	72	72	72

Source: Data processed with Eviews 12, 2022

Table 2 shows the maximum value for LC owned by companies in the mining sector at the mature stage and the minimum value for companies in the early stages. The maximum value on RPT is owned by PT DSSA 2015 and the minimum value by PT CITA 2015. The maximum value on EQ is owned by PT ANTM 2016 and the minimum value by PT TINS 2020. The maximum value on FV is owned by PT GEMS 2016 and the minimum value by PT PTRO 2015 Based on the results of descriptive statistics, it shows that the LC and FV variables have a good data distribution, while the RPT and EQ variables have a fluctuating data distribution.

### Panel Data Regression Model Selection

After performing the Chow test, Hausman test and Lagrange multiplier test, the results in this study for each equation are as follows:

**Table 4 Results of Panel Data Model Selection**

Model	Prob. <i>random cross section</i>	Alpha level ( $\alpha = 5\%$ )	Hypothesis	Final decision
Equation 1	0.00	$0.00 < 0.05$	H <sub>a</sub> accepted	Fixed Effect
Equation 2	0.00	$0.00 < 0.05$	H <sub>a</sub> accepted	Random Effect

Source: Data processed with Eviews 12, 2022

### Classical Assumption Test (Heteroscedasticity & Multicollinearity)

Prob. each independent variable of the company's life cycle (LC) and related party transactions (RPT) as well as the intervening variable of earnings quality (EQ) has a value  $>$  alpha 0.05, so that the regression model in equations 1 and 2 concludes that there is no heteroscedasticity problem. Then for the multicollinearity test the correlation coefficient

between the independent variables of the company life cycle (LC) and related party transactions (RPT) and the intervening variable earnings quality (EQ) is smaller (<) 0.80, so that the conclusion of the regression model in this study does not occur multicollinearity problems.

**Hypothesis Testing (Coefficient of Determination, F Test, and t Test)**

The results will show that this study has a simultaneous effect if the Prob F value < 0.05 and the hypothesis is accepted if the Prob value < 0.05

**Table 8. Hypothesis Results of Equation I**

Variable	Coefficient	Std. Error	t-Statistic	Prob.	Hypothesis
C	-7.47	1.84	-4.05	0.00	
LC	11.26	2.40	4.69	0.00	H1 Accepted
RPT	1.72	0.84	2.04	0.04	H2 Accepted
Adjusted R-Squared 0.38					
Prob(F-statistic) 0.00					

Source: Data processed with Eviews 12, 2022

**Table 9. Hypothesis Results of Equation II**

Variable	Coefficient	Std. Error	t-Statistic	Prob.	Hypothesis
C	2.97	0.38	7.95	0.00	
LC	-1.62	0.37	-4.40	0.00	H3 Accepted
RPT	-0.31	0.13	-2.38	0.01	H4 Accepted
EQ	0.04	0.02	2.15	0.03	H5 Accepted
Adjusted R-Squared 0.21					
Prob(F-statistic) 0.00					

Source: Data processed with Eviews 12, 2022

**Sobel Test (Path Analysis)**

**Direct influence**

- LC ——— EQ= 11.26
- RPT ——— EQ= 1.72
- EQ ——— FV= 0.04
- LC ——— FV= -1.62
- RPT ——— FV= -0.31

**Indirect influence**

Determining the *Standard Error of Indirect Effect* of LC with the formula:

$$\begin{aligned}
 S_{b1} &= \sqrt{b^2Sa^2 + a^2Sb^2 + Sa^2Sb^2} \\
 &= \sqrt{(0.043)^2(2.401)^2 + (11.265)^2(0.019)^2 + (2.401)^2(0.019)^2} \\
 &= \sqrt{0.0018 \times 5.7648 + 126.9002 \times 0.0004 + 5.7648 \times 0.0004} \\
 &= \sqrt{0.011 + 0.046 + 0.002} \\
 &= \sqrt{0.058} = 0.240
 \end{aligned}$$

Calculating Value t-count

$$\begin{aligned}
 t &= \frac{b1b5}{S_{ab1}} \\
 t &= \frac{(11.265) \times (0.043)}{0.240} \\
 t &= \frac{0.484}{0.240} \\
 t &= 2,018
 \end{aligned}$$

The t value of the company life cycle variable (LC) > the t table value ( $\alpha = 5\%$ ) is

2,018 > 1,993, this shows earnings quality (EQ) can mediate the relationship between company life cycle (LC) and company value (NP), for that hypothesis 6 is accepted.

Determining *the Standard Error of Indirect Effect of RPT* with the formula:

$$\begin{aligned} S_{b2} &= \sqrt{b^2Sa^2 + a^2Sb^2 + Sa^2Sb^2} \\ &= \sqrt{(0.043)^2(0.844)^2 + (1.722)^2(0.019)^2 + (0.844)^2(0.019)^2} \\ &= \sqrt{0.0018 \times 0.7123 + 2.9653 \times 0.0004 + 0.7123 \times 0.0004} \\ &= \sqrt{0.001 + 0.001 + 0.0003} \\ &= \sqrt{0.003} = 0.054 \end{aligned}$$

Calculating Value t-count

$$\begin{aligned} t &= \frac{b2b5}{Sab2} \\ t &= \frac{(1.722) \times (0.043)}{0.054} \\ t &= \frac{0.074}{0.054} \\ t &= 1.371 \end{aligned}$$

The t value of the related party transaction variable (RPT) < t table value ( $\alpha = 5\%$ ) is 1.371 < 1.993, this shows that the quality of earnings (EQ) is not able to mediate the relationship between related party transactions (RPT) and firm value (FV), for that hypothesis 7 is rejected.

## CONCLUSION AND RECOMMENDATION

Overall the results in this study for H1 of the company's life cycle have a positive and significant effect on earnings quality, this shows starting from the early stages, namely the introduction and growth stages to the final stages, namely mature and decline, of course, cannot be separated from the agency problems that arise. shows the influence of the importance of a company's profit, this result is in line with research (Nagar & Radhakrishnan, 2017) . H2 related party transactions have a positive and significant effect on earnings quality, this indicates that the higher cash flows will increase the controlling shareholder alignment effect which has an impact on the lower motivation of controlling shareholders to conduct related party transactions, especially related party transactions which are opportunistic and maintain earnings quality, these results are in line with research (Mohammed & Abibakar, 2018). H3 the company's life cycle has a negative and significant effect on the value of the company, this shows the company needs to adjust its funding decisions according to changes in the phase of the company's life. Companies that can maintain good relationships with customers or other parties, provide results that will make future performance improvements and increase company value, these results are in line with research (Yoo et al., 2019). H4 related party transactions has a negative and significant effect on firm value, indicating that it results in a negative response to the company's stock price, so that the value of the company will decrease, this study is in line with (Eliakim Tambunan et al., 2017) . H5 earnings quality has a significant positive effect on firm value, the earnings report presented in the company's financial statements must be presented properly, because the earnings report has an effect on firm value, this result is in line with research (Jonathan & Machdar, 2018) . H6 earnings quality is proven as an intervening variable between the company's life cycle and the value of the company, in the concept (Myers et al., 1998), from the value of the company explains that each stage of the company's life cycle is related to the amount of profit and cash flow. The proportions of the two are different between stages of the life cycle so that companies at different stages can be assessed differently depending on the relative proportions of the two components which will have an impact on the difference in the effect and relevance of the value of financial

statements at each stage and the information presented will affect the value of the company. While H7 the quality of earnings is proven to be unable to become an intervening variable between related party transactions and firm value, there is no significant relationship between the quality of earnings between related party transactions and the quality of a profit or not because there are regulations that already regulate related parties and mandatory related party transactions. fully disclosed.

This research is expected to be used as a reference for further research by expanding the research sample not only in the mining sector on the Indonesia Stock Exchange to obtain broader results. For companies, especially in the mining sector, companies should adjust their funding decisions according to the changing phases of the company's life. By paying attention to each phase in the company's life cycle, the company can maximize the company's goals at each phase. Investors are expected to be able to use information about related party transactions in considering their investment decisions by looking at the value of the company's shares or disclosure of related party transactions in the company's financial statements as well as the phase of the company because the conditions in each phase of the company will be different.

## BIBLIOGRAPHY

- Chen, T. (2016). Internal Control, Life Cycle and Earnings Quality —An Empirical Analysis from Chinese Market. *Open Journal of Business and Management*, 04(02), 301–311.
- Dang, H. N., Pham, C. D., Nguyen, T. X., & Nguyen, H. T. T. (2020). Effects of corporate governance and earning quality on listed vietnamese firm value. *Journal of Asian Finance, Economics and Business*, 7(4), 71–80. <https://doi.org/10.13106/JAFEB.2020.VOL7.NO4.71>
- Eliakim Tambunan, M., Siregar, H., Haymans Manurung, A., & Priyarsono, D. S. (2017). Related Party Transactions and Firm Value in the Business Groups in the Indonesia Stock Exchange. *Journal of Applied Finance & Banking*, 7(3), 1792–6599.
- Hasnan, S., Daie, M. S., & Hussain, A. R. M. (2016). Related party transactions and earnings quality: Does Corporate Governance Matter. *International Journal of Economics and Management*, 10(2), 189–219.
- Ikatan Akuntan Indonesia. 2017. PSAK 7 Pengungkapan Pihak-pihak Berelasi. Retrieved Juni 29, 2022, from <http://iaiglobal.or.id/v03/st-andar-akuntansi-keuangan/pernyataan-sak-12-psak-7-pengungkapan-pihak-pihak-berelasi>.
- Jensen, M. C. (1976). Reflections on the State of Accounting Research and the Regulation of Accounting. *SSRN Electronic Journal*. <https://doi.org/10.2139/SSRN.321522>
- Jonathan, J., & Machdar, N. M. (2018). Pengaruh Kualitas Laba Terhadap Nilai Perusahaan Dengan Reaksi Pasar Sebagai Variabel Intervening. *Jurnal Riset Manajemen Dan Bisnis (JRMB) Fakultas Ekonomi UNIAT*, 3(1), 67–76. <https://doi.org/10.36226/jrmb.v3i1.87>
- Miller, D., Friesen, P. H., & Mintzberg, H. (1984). *Organizations: a quantum view*. 320.
- Moataz El-Helaly. (2018). Related-party transactions: a review of the regulation, governance and auditing literature. *Managerial Auditing Journal*, 33 Lit rev(8/9), 779–806.
- Mohammed, L. I., & Abibakar, N. (2020). Related Party Transactions, Off Balance Sheet Items and Earnings Quality of Listed Deposit Money Banks in Nigeria. *Malaysian Management Journal*. <https://doi.org/10.32890/MMJ.22.2018.9669>
- Moshtagh, F., Reza, M., & Vadiiei, M. H. (2014). An Investigation of the Effect of Firm's Life Cycle Stages on Earning Quality: Evidence from Iran. *Asian Journal of Research in Banking and Finance*, 4(8), 109–122. <http://www.ijcrb.com/archives.htm>
- Myers, P. G., Haines, K., & Rohling, E. J. (1998). Modeling the paleocirculation of the Mediterranean: The last glacial maximum and the Holocene with emphasis on the



- formation of sapropel S1. *Paleoceanography*, 13(6), 586–606. <https://doi.org/10.1029/98PA02736>
- Nagar, N., & Radhakrishnan, S. (2017). Firm Life Cycle and Real-Activity Based Earnings Management. *SSRN Electronic Journal*. <https://doi.org/10.2139/SSRN.2701680>
- Nugraha, F. A., & Setiany, E. (2020). Influence of Manager Ownership, Manager Quality and Conservatism on Earnings Quality: Evidence from Indonesian Banking Sector. *Scholars Bulletin*, 06(03), 76–82. <https://doi.org/10.36348/sb.2020.v06i03.004>
- Sarun, A. (2016). Corporate Governance , Earnings Quality and Firm Value: Evidence from Malaysia. ... *of Financial Accounting* .... [http://far.ui.ac.ir/article\\_20606.html?lang=en](http://far.ui.ac.ir/article_20606.html?lang=en)
- Schroeder, R. G. (2004). *Operations management: contemporary concepts and cases*. 520.
- Schroeder, R. G. (2013). *Financial accounting theory and analysis: text and cases. 11th edition / Richard G. Schroeder; Myrtle W. Clark; Jack M. Cathey*. John Wiley & Sons, Inc.
- Sekaran, U., & Roger, B. (2017). *Metode Penelitian untuk Bisnis: Pendekatan Pengembangan-Keahlian, Edisi 6 Buku 1* (6th ed.). Salemba Empat.
- Utami, W., Surjandari, D., & Akbar, T. (2020). *Corporate Governance and Earnings Quality: Students Perception in Indonesia*. <https://doi.org/10.4108/eai.26-3-2019.2290923>
- Yoo, J., Lee, S., & Park, S. (2019). The effect of firm life cycle on the relationship between R & D expenditures and future performance, earnings uncertainty, and sustainable growth. *Sustainability (Switzerland)*, 11(8), 1–19. <https://doi.org/10.3390/su11082371>