

CORPORATE GOVERNANCE AND DISCRETIONARY ACCRUALS: EVIDENCE FROM INDONESIAN ISLAMIC BANKS

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Abstract

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The objective of this study is to investigate the effect of the corporate governance on the discretionary accruals. The study of the corporate governance structure in the banking sectors is an important component within the enhancement of banks' efficiency and performance. While prior studies employed corporate governance dimensions as variable proxies, this study uses a single proxy: corporate governance efficiency. The measurement of the corporate governance efficiency employed the Data Envelopment Analysis with the help of the EMS software. Using purposive sampling, the data were extracted from the financial statements and annual reports of the Islamic banks. The regression using panel data was employed to analyze the relationship between the efficiency and bank' discretionary accruals. The main findings show that the corporate governance efficiency significantly correlated to the Islamic bank' discretionary accruals, implying that good corporate governance can minimize earning management and therefore improve earning quality. The efficiency level of the corporate governance also improved significantly during the research period. Additional results indicated that the control variables of risk and gender board of director were not significant, but the percentage gender board and board size significantly influenced the discretionary accruals. The results of this study draw some implications that help academicians, banks and investors of the banking sector.

Keywords: Corporate Governance, Efficiency, Discretionary Accruals, Islamic Banks

1. INTRODUCTION

Islamic banking system is growing rapidly since its first model established in 1963 in Egypt. An Islamic banking refers to a banking system or activity that is in accordance with the basic principles of Islamic rules and values (El-gamal, 2000). The spread of Islamic banking not only has occurred in Islamic countries but it has also spread widely to the non-Muslim and developed countries such as Hong Kong, Luxembourg, UK and South Africa. Ahmed (2015) reported that Islamic banking institutions have operated in over 50 countries with the total assets stood at an estimated 1.8 trillion US dollars at the end of 2013. In Indonesia, the growth of Islamic banking has begun since 2007. The wide spread of Islamic banks is a result of many factors, but the important one is corporate governance.

Jensen and Meckling (1976) defined corporate governance as a principle directing and controlling the company in order to achieve a balance between the power and authority of the company in

providing accountability to the shareholders in particular, and stakeholders in general. It is designed to regulate the authority of the directors, managers, shareholders and other parties associated with the development of companies in a particular environment. With the implementation of good corporate governance, the enterprise resource management is expected to be efficient, effective, economical and productive with goal-oriented company and pay attention to stakeholders approach (Jenkinson and Mayer, 1992). At the national level, best practices of governance helps companies access and are successful on the market (Pietrasieński, 2014).

Whether corporate governance is a critical factor to lower discretionary accruals of Islamic banks from previous studies raise a question. A discretionary accrual can be defined as management' intentional actions to obtain preferred level of income but those actions are remaining within the constraints of generally accepted accounting principles. Empirical studies have showed mixed

results. A set of literatures has shown a significant relationship between corporate governance proxies and discretionary accrual. For example, Selahudin and Zakaria, (2014), Chao and Horng (2013), Hrazdil and Scott (2013), Gonzalez and Garcia-Meca (2014) and Uwuigbe et al. (2014) show that board size was a significant factor while Mouselli et al. (2013) and Shamimul et al. (2014) indicated it was insignificant. A probable explanation of these mixed results may lay on the different measurement of the corporate governance. Studies like Shamimul et al. (2014) and Wang (2012) employed such as institutional ownership while Gonzalez and Garcia-Meca (2014) and Uwuigbe et al. (2014) used the board independence and the concentration of power. Therefore, Crisan (2012) suggested an effort of studying models and practices of the governance. Larcker, Richardson, and Tuna (2007) further argue that the lack of consistent empirical results on the influence of corporate governance is due to the difficulty in adequately measuring the corporate governance.

The objective of this research is to examine the relationship between corporate governance and discretionary accruals of Islamic banks. However, this study is different from previous works at least in two ways. First, various scholars have conducted studies on the corporate governance. However, it is instructive to note that there is still ambiguity regarding the appropriate variables that might serve as a proxy for corporate governance. This study uses a single measurement of the corporate governance as suggested by Lehmann and Warning (2004). This study employs a single unique technique called Data Envelopment Analysis (DEA) to measure corporate governance. DEA is a non-parametric mathematical programming methodology that can be used to evaluate the efficiency of a variety of organizations using multiple inputs and outputs. Second, the examination of the previous studies reveals that there is no such empirical evidence on the corporate governance and its impact on the discretionary accruals in the case of Islamic banks. The current study is an attempt to fix the gaps and estimates the relationship between the efficiency of corporate governance structure and the discretionary accrual of the Islamic bank. Following Lehmann and Warning (2004), a two-step quantitative research design was employed to accomplish the purpose of the current study: Data Envelopment Analysis (DEA) and panel regression analysis. Efficient frontier approaches, such as the DEA model, seem to be superior compared to traditional measures (Bauer *et al.*, 1998). Next, the efficiency score generated from the DEA program were used as an independent variable in a panel regression model to explain the discretionary accrual of Islamic banks.

We structure the rest of this article as follows. We present literature reviews and formulate the hypotheses in the section 2. Section 3 provides the research population and sampling, the conceptual and mathematical models, and the variable measurements. Chapter 4 shows the data description of each variable. It is followed by testing hypothesis results and discussions. Finally, we summarize and recommend for future research in the section 5.

2. RELATED LITERATURE AND HYPOTHESIS FORMULATION

2.1. Corporate Governance

As stated in the previous section, corporate governance is a process and structure used to direct and manage activities of the company, and to raise the value of the stock in the long term but keep watching the various interests of other stakeholders (Jensen and Meckling, 1976). Application of the principles of good corporate governance becomes a necessity for financial institutions such as Islamic bank. This relates to the responsibility to the public on operational activities of banks that are expected to comply with Islamic banking regulations. Islamic banks are responsible to many parties or all stakeholders such as customers, depositors, shareholders, bondholders, correspondent banks, regulators, employees, suppliers, communities and the environment. Therefore, corporate governance implementation is a form of responsibility to the public that Islamic banks are well managed, professional, and work carefully to increase shareholder value without ignoring the interests of other stakeholders. The implementation of corporate governance should also apply five basic principles: transparency, accountability, responsibility, independency, and fairness (Botti *et al.*, 2014).

Previous studies have shown the impact of the good corporate governance. Bauer, Guenster, and Otten (2004) indicated that the efficient corporate governance lead to higher stock returns. Karathanassis and Drakos (2004) found that having an efficient corporate governance structure might minimize the agency costs. Krivogorsky (2006) found a strong positive relationship between external independent members of the board of directors and profitability. It can be concluded that corporate governance must be implemented efficiently for the benefits to all parties. More corporate governance efficiency is expected to bring a better performance of companies. These results also enhance Islamic banks to implement good corporate governance. The corporate governance is an integral part of the Islamic bank's spirit. This spirit is an essence of spirit of responsibility, liability, openness and fairness through devotion and worship to God. This spirit is also the basis for governance, business and code of ethics in Islamic banks, including in providing financing for Islamic businesses (Kusuma and Ayumardani, 2016).

2.2. Discretionary Accruals

Earning management can be defined as managerial acts in manipulating financial reporting information for their self-interest at the expense of the other parties (Selahudin, Zakaria and Sanusi, 2014). There are two kinds of earning management: the opportunistic and informative perspective. Under the opportunistic perspective, earning management refers to the manager's action seek to mislead external users of the firm (Beneish, 2001). While under the informational perspective, it can be a signal provided by managers about their expectation of firm's future cash flows and issued for external parties to make decisions or judgments (Schipper, 1989). Earning management can be measured by

using discretionary accruals (Jones, 1991). These accruals show the metric due to management choices of accounting techniques improving firm's performance (Keefe, 2015). Previous researches have widely used the discretionary accruals and related to other variables. Lenard; Yu; and York (2013) examined the relationship between discretionary accruals and financial statement frauds. Wang (2012) used this accrual to detect earning management.

According to agency theory (Jensen and Meckling, 1976b) principals and agents may have different goals. Managers of the firm as agents are obligated to work for fulfilling the company's goals, but they may tend to fulfill their own goals through such as earning management instead of maximizing shareholder's wealth (principals). This occurs because most of the earning management are tend to be based on the opportunistic rather than the informational perspective (Messod D Beneish, 2001). Therefore, the earning management is related to the unethical acts done by the management of the firm to mislead external parties and may result in the agency problem. This action also is forbidden in the Islamic banking system. Islamic values require that the presentation of financial reports must be fair.

Previous studies show that many methods can be used to measure discretionary accruals. Jones (1991) used the cross-sectional variation in financial variables for estimating discretionary accruals. Dechow, Sloan, and Sweeney (1995) further measured discretionary accruals by adding several variables from the Jones' model, then called it as modified Jones model. Hribar and Collins (2002) demonstrated that the accruals estimated using the income-statement approach yield more precise estimates than accruals computed with the balance-sheet approach. Kothari et al. (2005) examined the specification and power of tests based on performance-adjusted discretionary accruals and compared the results with those of tests using traditional discretionary accrual measures (e.g., Jones and modified Jones models). Then in 2012, Dechow and several other researchers discussed a research they had done before. This research used two models to measure the non-discretionary accruals: Jones model (1991) and Dechow and Dichev (2002) model.

2.3. Discretionary Accruals and Corporate Governance

Corporate governance is a processes or mechanism to ensure that managers act for fulfilling the stakeholders' interest (Jensen and Meckling, 1976). The efficiency is a measure of managers' performance in managing the firm's resources to provide best service to customers and other interested parties. Therefore, corporate governance efficiency measurement is very essential in developing countries because those countries are dealing with under developed and illiquid shares market, economic uncertainty, weak legal control and investor protection, as well as inconstant political changes (Bokpin, 2013). This measurement might help many decision makers such as investors, creditors, also customers that used financial statement to make their decision.

In this study, we will focus on the degree of efficiency to explain the bank discretionary accruals. Many scholars consider the board's structure as an indicator to evaluate the efficiency of corporate governance specifically through dimensions of size of directors, commissioners, and Shariah (Islamic law) Supervisory. The board of directors plays an important role in running bank operations. According to the agency theory, the directors act as the agent on behalf of the principles (Jensen and Meckling, 1976). The investors or owners are the principal with the goal to maximize profit. This condition may raise the agency problems because of the different interests and goal between the two parties. However, the firms with large board directors have the ability to push the firm management to track on their main duties (Poudel and Hovey, 2013). The directors also are more effective to monitor the daily operation of the company, hence lower the opportunity to play earning management. Tanna, Pasiouras, and Nnadi (2011) had conducted a research about the relationship between board size, composition of board, and bank efficiency. They stated that there were mixed results after reviewing empirical evidence on the impact of board size on performance. They found evidences that board size related to efficiency.

Another dimension of board's structure is the board of commissioners. They focus on the monitoring function of the director's policy implementation. Previous studies indicated that the bigger the board the bigger the agency problems are, and partly due to becoming less effective in monitoring the management (Eisenberg, Sundgren and Wells, 1998). Furthermore, a good board is likely small board, as it will establish good decision-making process for the enterprise (Leblanc and Gillies, 2003). Similarly, a company with a bigger size board has lower value than the other (Jensen, 1993). However, other studies argued that the board size is not significant on the performance of the board as well as in the company (Ramdani and Witteloostuijn, 2010).

The last dimension is Shariah (Islamic law) supervision board (SSB). This additional but mandatory board is to adhere to Islamic rulings relating to profit and loss sharing, equitable distribution and the prohibition of the interest. In addition, SSBs help ensure compliance with the principles of Islamic law. In addition, the responsibilities of SSBs normally include: advising the boards of directors; providing input to Islamic financial institutions on Islamic law matters that enable banks to comply with Islamic law principles; setting Islamic law related rules and principles and overseeing compliance to ensure that policies and procedures prepared by Islamic financial institutions are in conformity with Islamic law and issuing verdict to create confidence with respect to Islamic law compliance (Chapra and Ahmed, 2002). Advocates of Islamic banking argue that Islamic law supervision enables Islamic banks to contribute to social justice, including financial performance (Mokhtar, Abdullah and Alhabshi, 2008).

Good corporate governance will enhance the firm's efficiency and reduce the risk of informational asymmetry between managers to shareholders or customers and other interested

parties. According to Hamdi and Zarai (2012), Islamic banks commonly use earning management to avoid disclosure of losses. The banks further used the efficient perspective of earning management rather than the opportunistic perspective. It means that the managers or agents in Islamic banks employed earning management to communicate internally, not to opportunistically manipulate their earning and purposively mislead the investors or principals. Mouselli et al. (2013) claimed that corporate governance mechanism especially audit provision negatively significant influenced accruals quality. Tangjitprom (2013) proved that managerial opportunism in firms with high corporate governance score was lower than that in firms with lower corporate governance score. Uwuigbe et al. (2014) also concluded that corporate governance measured by using the board size and board independency had significant negative influence on the earning management that was measured using discretionary accruals.

Based on the explanation above, the research hypothesis is formulated as follows: *the efficiency of the corporate governance is negatively related to the discretionary accruals of Indonesian Islamic banks.*

3. RESEARCH METHOD

The target populations in this study were all Islamic banks listed in Bank Indonesia. The data used was secondary data extracted from the Islamic banks' financial reports from 2011-2015 and obtained directly from the official Indonesian Bank website (www.bi.go.id). The availability of the data to measure variables and their proxies was the main criteria to include a bank into the sample.

Previous studies like Shamimul et al. (2014), Wang (2012) Gonzalez and Garcia-Meca (2014

employed dimensions such as institutional ownership, board independence and concentration of power to proxy the corporate governance. Larcker, Richardson, and Tuna (2007) argue that the lack of consistent empirical results on the influence of corporate governance is due to the difficulty in adequately measuring the corporate governance. This study uses a single measurement of the corporate governance and overcomes a limitation of previous studies that used many indicators or proxies of the corporate governance (Lehmann and Warning, 2004). Therefore, to test the hypothesis, first we calculated the efficiency of the corporate governance by using formula 1.

$$CGEff = \frac{\sum_{i=1}^m uy}{\sum_{j=1}^n vx} \quad (1)$$

Where, CGEff is the efficiency of corporate governance in Islamic banks, u is the output and y is the number of output i in banks, v is the input and x is the number of input j. The input variables were the corporate governance variables consisting of board size of directors, commissioners and Shariah (Islamic) supervisory boards while the output variables were return on Asset, equity, revenue and asset. We used the help of the EMS (Efficiency Measurement Systems) software to calculate the quarterly efficiency of each bank in the sample.

The last step was to run the regression equation 2. It was expected that the coefficient of CGEff_t (β_1) was negative and significant. This research modified Mouselli et al. (2013) model in examining the effect of corporate governance on the accruals quality by replacing the corporate governance with corporate governance efficiency based on Dechow et al., (2012).

$$AQ_t = \beta_0 + \beta_1 CGEff_t + \beta_2 Lev_t + \beta_3 Size_t + \beta_4 Risk_t + \beta_5 GB_t + \beta_6 \%GBD_t + \beta_7 BDS_t + \varepsilon_t \quad (2)$$

Where:

AQ_t = discretionary accruals measured by using Jones (1991) Model and DD or Dechow and Dichev (2002) model

$CGEff_t$ = Bank i Corporate Governance Efficiency

Lev_t = leverage ratio measured as debt to equity

$Size_t$ = log assets

$Risk_t$ = interest coverage ratio

GB_t = dummy gender (if there is female member of the board Director, GB is equal to 1, otherwise it is 0)

$\%GBD_t$ = percentage number of female on the board director

BDS_t = total number of the board director members

4. DATA ANALYSIS AND DISCUSSION

This section contains the research findings and discusses them. The paper starts with the description of each variable in the model. It is followed by testing hypothesis.

4.1. Data Description

The data used in this research were quantitative data and obtained from official governmental websites of www.ojk.go.id and www.bi.go.id. Table 1 presents the quarterly descriptive data from 11 Islamic banks for the period 2011 - 2014. The descriptive data comprises minimum, maximum, mean and standard deviation values.

Table 1. Descriptive Data

	Minimum	Maximum	Mean	Std. Deviation
AQ-Jones	.00	.12	.0260	.02469
AQ-DD	.00	.20	.0513	.04633
CGEFF	.63	1.00	.8987	.12089
LEV	.68	19.30	7.8323	4.45568
SIZE	11.57	13.82	12.7382	.57968
RISK	-1106.50	7206.08	0.02984	820.45937
GBD	.00	1.00	.5494	.49910
%GBD	.00	.67	.2060	.22666
BDS	3.00	7.00	4.1605	.98380

Table 1 shows that average values of discretionary accruals as measured by using Jones model and DD model were 0.026 and 0.513 respectively, while their standard deviations were 0.025 and 0.043. The corporate governance efficiency also had values of 0.899 with and its standard deviation was 0.12. The average of the leverage and its standard deviation was 7.8 and 4.46 while the average size of the firm 12.74 with the standard deviation of 0.58. In addition, risk measured by the interest coverage ratio had average values of 298.4 and its standard deviation was 820.46. Furthermore, the proportion of females in the Board Directors were 0.55 and its standard deviation was 0.499. Meanwhile, the percentage of female board director member was 0.2 with standard deviation value of 0.23. Finally, the board of the auditor size had average values 4 members with the standard deviation of 1 member.

The focus of this study is on the relationship between the corporate governance and discretionary accruals of the Indonesian Islamic banks. This study measures the corporate governance in terms of its quarterly efficiency. Table 2 shows corporate government efficiency for each period of the study. The quarterly efficiency of the corporate governance from 2011 to 2012 declined. It had a value of 91.64% in 2011 and became 88.5% in 2012. However, it steadily increased for subsequent years (2012-2014). The efficiency values were of 88.50%, 89.73% and 90.09% respectively. These results, on the average, indicate that the quarterly efficiency of the corporate governance of the Indonesian Islamic banks tends better for the last two years of the study.

Table 2. Corporate Government Efficiency

Year	Minimum	Maximum	Mean	Std. Deviation
2011	0.63	1.00	.9164	.11832
2012	0.65	1.00	.8850	.12865
2013	0.69	1.00	.8973	.11522
2014	0.70	1.00	.9009	.11820

Table 3. Paired Samples Test

Pair Periods	Mean	Standard Deviation	T	P-value
2012-2011	-0.03086	0.09885	-2.071	0.044
2013-2012	0.01293	0.02740	3.131	0.003
2014-2013	0.02348	0.14764	0.914	0.368

This study also employed a paired sample of t-test to examine the significant changes of the quarterly efficiency. Table 3 shows that the average quarterly efficiency of the corporate governance from 2011 to 2012 declined significantly. The average decreasing efficiency was 3.09% and significant at 5% level. However, it increased by 2.29% for the year of 2012 and significant at 1% level. In addition, although it was not significant, the quarterly efficiency increase by 2.35% for the year of 2013 compared to its value in 2012. Therefore, this result indicates that the quarterly efficiency of the corporate governance tended to improve significantly.

The improvement of corporate governance of the Islamic bank efficiency may follow the learning curve theory. In the context of corporate governance efficiency, the economic learning of efficiency generally follows the same kinds of experience curves. Efficiency improvement can be considered as

whole bank learning processes. The general pattern is of first speeding up and then slowing down, as the practically achievable level of methodology improvement is reached. The effect of reducing efforts and resources used by learning improved methods on the efficiency. In other words the efficiency of corporate governance incurs if Islamic banks improve, compared to their previous year's performance (Kusuma and Ayumardani, 2016).

4.2. Regression Analysis

To investigate whether the efficiency of the corporate governance explains bank's discretionary accruals, we employed equation 2. Table 4 shows the amount of adjusted R squares. When discretionary accruals measured by using Jones and DD models the value of adjusted R² were 38.16% and 17.22% respectively. This amount indicates the variation of discretionary accruals that the independent variables can explain in the model. It seems that Jones' model explained better than DD model. Table 4 also shows the estimated coefficients of controlling variables. Surprisingly, the leverage (LEV) and firm size (SIZE) were significant for Jones model of discretionary accruals while these variables might be ignored for DD model. While control variables of risk (RISK) and gender board of director (GBD) were not significant for both models, percentage gender board (PERGBD) and board size (BDSIZE) significantly influenced the discretionary accruals.

Table 4. Regression Results

Variables	Jones Model Coefficient (Std. Error)	DD Model Coefficient (Std. Error)
CGEFF	-0.04313 (0.0208)**	-0.11893 (0.04516)*
LEV	0.00225 (0.0005)*	0.00123 (0.00126)
SIZE	-0.04028 (0.0047)*	-0.00716 (0.01028)
RISK	0.0000 (0.0000)	0.00000 (0.00000)
GBD	0.00150 (0.0062)	0.00524 (0.02963)
PERGBD	-0.08026 (0.0137)*	-0.10157 (0.02963)*
BDSIZE	-0.00785 (0.0021)*	-0.02593 (0.00468)*
Adj-R ²	0.38163	0.17222

* Significant at 1% level

** Significant at 5% level

After meeting the classical assumption of the regression panel, table 4 indicates the results of the hypothesis test, the main variable. Table 4 indicates that the regression coefficient of CGEff (corporate governance efficiency) variable had a negative value and significant at the 5% level for the two model of discretionary accruals. This result suggests that the corporate governance efficiency (CGEff) negatively affected on the bank discretionary accruals. More exactly, the higher efficiency of the corporate governance, the lower bank's discretionary accruals.

The significant relationship between corporate governance and discretionary accruals supports the agency theory. According to this theory, there is informational asymmetry between the principal and agent and therefore results in an agency problem. Enhancing the good corporate governance can reduce the informational asymmetry. In addition, the more efficient corporate governance, the lower

amount of discretionary accruals and thus the better quality of firm' earnings. Although the corporate governance measurement was differently used in this research, several previous studies such as Chao and Horng (2013); (Chao and Horng, 2013) and Uwuigbe et al. (2014) show that better corporate governance resulted in lower discretionary accruals or better accruals quality.

The result of this study may have some implications. Academically and empirically, the efficiency of the corporate governance can be used as a single measure of the corporate governance. This measure overcomes a limitation of previous studies that used many indicators or proxies of the corporate governance (Lehmann and Warning, 2004). This efficiency model also may be an effort of studying models and practices of the governance as suggested by Crisan (2012). Furthermore, this efficient frontier approaches seems to be superior compared to traditional measures (Bauer *et al.*, 1998).

Practically, creditors and potential creditors can also be beneficial from the results of the current study. The result of this study can help them to justify their decisions whether to funding particular banks or not. In addition, the rationale behind studying the relationship between corporate governance structure and banks' discretionary accruals may be a determinant that helps investors to invest in the banks. If the efficiency of the corporate governance affects the earning quality of bank, then the Shariah (Islamic) supervision board and the board of commissioners need to monitor the management to reduce the effect of the conflict of interests among shareholders resulting from the use of bank's earnings.

5. CONCLUSIONS AND RECOMMENDATIONS

The efficiency of the corporate governance is critical to the proper functioning of the banking sector and the economy as a whole. However, research on the relationship between corporate governance and discretionary accruals for the Islamic banks is scare. In addition, review literature reveals that there is no such empirical evidence on that relationship in the case of Islamic banks. This study is also different from previous studies in term of the corporate governance measurement. While prior authors employ each of corporate governance dimensions as variable proxies, this study uses a single proxy: corporate governance efficiency.

The main interesting result of the study supports hypothesis expectations; the better corporate governance the lower discretionary accruals. This suggests that good corporate governance can minimize earning management and therefore improve earning quality. The efficiency level of corporate governance of Indonesian Islamic banks also improved significantly during the period of research, implying the Islamic banks realize the important and existence of corporate governance. Additional results indicated that the control variables of risk and gender board of director were not important to lower discretionary accruals. However, the proportion of gender on the board and board size significantly influenced the discretionary accruals. Finally, it seems that Jones' model to explain the relationship between the corporate governance and discretionary accruals was better

than DD model. Jones model explain about 38.16% variation of discretionary accruals.

This study may be subject to limitations. The present study emphasized on the relationship between the efficiency of corporate governance and the bank discretionary accruals. Future research can be extended into the Shariah (Islamic rule) risk, the ownership type and motivational factors of the corporate governance that enhance efficiency in relation to bank' earning management. In addition, the current study was conducted for only Islamic banks in Indonesia. It is suggested for future research to encompass a comparison between corporate governance structures of Islamic banks in Indonesia and those banks in Gulf Cooperation Council (GCC) countries. Furthermore, small numbers of observations, despite its significant proportion to population, could also be a serious issue. Future research can extend the period of the study and employ a more rigorous statistical approach in examining the corporate governance efficiency. Another future works is investigating the efficiency of corporate governance structures for the entire banks in Indonesia. Employing the whole population may provide more reliable and adequate information.

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