

# Financial Distress: The Impact of the US-China Trade War on German Automotive Companies

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## ABSTRACT

One indicator of financial distress is a decline in corporate financial performance, which can threaten the continuity of business operations. This issue is particularly critical for the German automotive industry, especially under external pressures such as the trade war between the US and China, which has caused reduced export demand, disruptions in the supply chain, and increased production costs. These challenges necessitate that companies strengthen corporate governance and utilize their resources efficiently to preserve financial stability. By incorporating firm size as a moderating variable, this study investigates the effect of corporate governance which encompasses the Board of Commissioners, Board of Directors, and Audit Committee on financial distress among German automakers listed on the DAX Automobile Index during 2018-2023. A total of 10 automotive companies were chosen as the research sample through purposive sampling and analyzed using EViews 12. The findings reveal that the Board of Directors has a significant negative effect on financial distress, while the Audit Committee and Board of Commissioners show no significant impact. Firm Size moderates the effect of the Board of Directors on financial distress, but it does not moderate the influence of the Board of Commissioners or the Audit Committee. Overall, the results highlight that the role of the Board of Directors is a key factor in preventing financial distress, particularly for automotive companies operating amid the US-China trade war. The results of this study can also be considered by management and regulators in strengthening corporate governance mechanisms to maintain financial stability.

**Keywords:** Financial Distress, Board of Commissioners, Board of Directors, Audit Committee, Firm Size.

**JEL Code:** G33, G34, L25, F13

## I. Introduction

Germany is one of the countries with the highest Gross Domestic Product (GDP) in the world, which is projected to reach around \$4.74 trillion in 2025. According to International Monetary Fund projections, Germany ranks third among the 10 largest economies in the world, underscoring its status as a major economic power (Jain, 2025). This demonstrates Germany's pivotal position in the European economy, which is bolstered by the automobile sector. Due to the industry's success, Germany is today regarded as one of the biggest automakers in the world, making a substantial contribution to the worldwide automotive supply chain (Mutascu & Nicolescu, 2025). Germany leads car production in Europe, with around 4.07 million units, most of which are exported to markets outside Europe (GTAI, 2025). The large volume of production for the export market makes this industry vulnerable to external shocks, like the US and China ongoing trade conflict. In

order to lower the US trade imbalance, President Donald Trump's administration put significant import taxes on Chinese goods, leading to the outbreak of the trade conflict between the US and China (Maharani, 2025). In response, China imposed retaliatory taxes on goods made in the US, triggering a prolonged trade war between the world's two largest economies. The situation further deteriorated following the implementation of a 25% import tariff on automotive components by the US in April 2025 (Burkhart & Hammond, 2026). This condition triggered market uncertainty, supply chain disruptions, and economic slowdowns in both countries. The impact was felt not only by the US and China but also by other countries that have close trade ties with both, including Germany. Germany is highly dependent on the automotive sector, which is the backbone of its exports to the US and China. Therefore, it relies heavily on these two main export markets. The imposition of high import tariffs by both countries has led to a significant decline in export demand, resulting in a 13% decline in exports in 2019 (TOI, 2020).

According to the Center for Automotive Research, the trade war is expected to cause losses in global automotive industry sales of up to €700 billion by 2024, with German automotive manufacturers bearing most of the burden (Dudenhöffer, 2019). These losses demonstrate the magnitude of external pressures that can affect corporate financial condition and financial distress becomes increasingly possible. The real impact of the trade war can be seen in the decline in export demand and the rise in production costs, which put significant pressure on the profitability of automotive companies. One company, Volkswagen, has undergone restructuring through factory closures, reductions in production capacity, and mass layoffs (Schmidt et al., 2024). This condition is a clear indication of financial distress, a scenario where a business's financial performance declines and its activities are curtailed to the point that it is unable to meet its obligations, income, illiquid assets, and soaring fixed costs (Hanifa & Afifah, 2024). Based on Nurzahara & Pratomo (2021), financial distress is influenced by weak oversight of corporate financial health and suboptimal implementation of corporate governance. Therefore, implementing good governance can be a strategy to avoid financial distress (Rustyaningrum & Rohman, 2021). The company's resources are managed and controlled by the board of directors to achieve the desired outcomes, while the implementation of policies approved by the board of directors is supervised and ensured by the board of commissioners. Meanwhile, the supervision of the company's operational activities is performed by the audit committee as an extension of the board of commissioners' authority. In addition, a company's financial condition can also be affected by firm size as an important factor. Large companies tend to have more complex governance, but also have easier access to financial resources and capital markets.

Boards of commissioners, boards of directors, and audit committees demonstrate mixed effects on financial distress according to various previous studies. Research by Orbaningsih et al. (2022) discovered that financial distress was not significantly influenced by boards of commissioners, boards of directors, and sales growth, while a significant positive impact was shown by audit committees and profitability. However, study by Desy et al. (2022) that financial distress is not significantly affected by managerial ownership, the proportion of independent board commissioners, institutional ownership, or audit committees, whereas a significant negative effect is exerted by the board of directors and a significant positive effect by the board of commissioners. The differences in results across the literature indicate a research gap, as previous studies were generally conducted only on Indonesian companies. Therefore, this study specifically selected a sample of German automotive company's included in the DAX Automobile index and used the moderating variable is firm size. In addition, this study was conducted during the US and China trade war, namely from 2018 to 2023, which could have affected the financial stability of the German automotive industry. This study partially examines the impact of the board of commissioners, board of directors, and audit committee on financial distress, considering the moderating variable of firm size. Ramifications for managing a company, investors, and regulators in the global automotive industry by provided by the study finding, as empirical evidence regarding the function of corporate governance mechanisms in mitigating the risk of financial distress. Improvements in the roles of the board of commissioners, board of directors, and audit committee, along with the formulation of supervisory policies and risk management methods that are more responsive to external demands, can be guided by these conclusions.

## II. Literature Review and Hypothesis Development

### 2.1. Resource Dependence Theory

Pfeffer and Salancik presented the theory of resource dependence in 1978. This theory states that companies cannot operate independently because they are highly dependent on external resources, ranging from raw materials and technology to capital and market access, which are beyond their control (Chiang & Chuang, 2024). This dependence creates risks and uncertainties. Therefore, companies need to build strategic relationships and strengthen corporate governance to ensure resources remain available and they can maintain their sustainability. Hilman et al. (2009) add that a company's ability to manage this dependence greatly determines its performance, stability, and resilience, especially in the face of external shocks. When business conditions change drastically, such as during economic crises, geopolitical uncertainty, or trade wars, the role of corporate governance becomes increasingly important. In these situations, limited access to resources can weaken operational performance, reduce profitability, and increase financial pressure, which ultimately has the potential to cause financial distress. Resource dependence theory explains that corporate governance helps companies obtain the resources they need (Mai Tran, 2025). A diverse board, independent directors, and capable board members are examples of good corporate governance that can assist businesses in gaining access to resources including knowledge, contacts, and expertise (John et al., 2024). Thus, the theory explains that corporate governance structures help companies manage resource dependence and maintain organisational sustainability in an uncertain environment.

### 2.2. Financial Distress

Financial distress is a condition in which a company has difficulty meeting its financial obligations (Suardi et al., 2026). This condition is defined by a drop in the business's market value, poor operational performance, and external factors (Fakhar et al., 2023). Financial distress usually arises from declining operational performance, an unhealthy funding structure, and unstable external economic conditions. Thus, performance, stability, and sustainability prospects relative to competitors can be evaluated by companies using financial distress as an important indicator (Hawach & Requejo, 2025). A number of indicators include large-scale layoffs, financial restructuring, dividend suspensions, and persistently negative operating income (Michalkova & Ponisciakova, 2025). Companies can manage financial distress by paying attention to key factors that can trigger it, namely its causes are further analysed (Muafiroh & Hidajat, 2023). A financial distress prediction model called Springate is used to evaluate the possible financial distress of a business. The Altman Z-Score and Grover are considered, but the Springate model is regarded as more accurate (Widyarsih et al., 2022). Springgate is formulated as follows (Martini et al., 2023):

$$S = 1.03X1 + 3.07X2 + 0.66X3 + 0.4X4$$

### 2.3. Board of Commissioners

Oversight and regulation of the board of directors' performance in carrying out its responsibilities as the organisation's engine are conducted by a company's board of commissioners (Samudra, 2021). The company's dependence on external resources is managed, and relationships with external parties important to its operations, such as access to networks, legitimacy, and market information are built by the board of commissioners, as explained by resource dependence theory. The formula is as follows (Adysta Pratiwi & Wibowo, 2025):

$$\text{Board of Commissioners} = \text{In Number of Board of Commissioners}$$

Based on research by Sari & Setiawan (2024), Hanifa & Affah (2024), and Desy et al. (2022), financial distress is typically increased by the boards of commissioners. These results suggest that large boards may perform worse in their oversight of business management, with financial distress risk being raised. However, Samudra (2021) found in a that reverse relationship, a company's risk of financial distress can be decreased by having a larger number of board members. A large and varied board with a range of backgrounds and specialities can offer a more comprehensive viewpoint and aid in the company's decision-making. Meanwhile, a study by Orbaningsih et al. (2022) demonstrates that financial distress and the board of commissioners do not influence one another. The hypothesis is formulated based on the differences in the results of previous studies, as presented below:

*H1: The board of commissioners has a positive influence on financial distress.*

#### 2.4. Board of Directors

In resource dependence theory, a role is played in managing and utilizing external resources and planning strategies that can help the company survive by the board of directors. The board in a company determines policies, short and long-term strategies, and oversees operational activities (Muafiroh & Hidajat, 2023). The formula is as follows (Justin & Hadiprajitno, 2019):

Board of Directors = In Number of Board of Directors

Studies on how the board of directors affects financial distress have been carried out by Susilo (2022), Jodjana et al. (2021), and Siahaan et al. (2021). Financial distress is positively associated with the board of directors, based on their research findings. This suggests that a bigger board raises the risk by creating issues with coordination and communication. As a result, decision-making may become slower as a result and management control performance may suffer, potentially leading to financial distress. Conversely, Krisyadi & Kelly (2021) found that financial distress risk decreases with a higher number of board members, according to the findings of a different study. The Company strategy will be enhanced, long-term performance improved, and the company's reputation strengthened by a large board. Meanwhile, research conducted by Muafiroh & Hidajat (2023) financial distress is unaffected by the board of directors. The hypothesis is formulated based on the differences in the results of previous studies, as presented below:

*H2: The board of directors has a positive influence on financial distress.*

#### 2.5. Audit Committee

The performance of the company's management is monitored and independently assessed by the audit committee (Indrati & Handayani, 2022). The audit committee is responsible for carrying out its functions, namely, strengthening internal controls to protect shareholders and other stakeholders, and improving the quality of the company's internal supervision (Telaumbanua & Budiantara, 2020). More than just a supervisory mechanism, the audit committee also functions as a provider of strategic resources, including expertise, experience, and external networks that enable organizations to identify, manage, and disclose risks optimally, in accordance with resource dependence theory. The formula for measuring the audit committee is as follows (Bilal et al., 2023):

Audit Committee = In Number of Audit Committees

Nurzahara & Pratomo (2021), Rachmawati & Rohman (2024), and Rinofah & Sari (2022) conducted research on the influence of audit committees on financial distress and discovered that audit committees may make financial distress more likely. This condition can occur because the increasing number of audit committee members can complicate coordination and decision-making, thereby failing to prevent financial

distress. However, research conducted by Sukawati & Wahidahwati (2020) shows that the audit committees play a key role in ensuring management behaviour aligns with the company's rules. This shows that companies with more audit committee members are better able to resolve conflicts. Meanwhile, research by Khalid et al. (2020) suggests that financial distress is unaffected by the audit committees. The hypothesis is formulated based on the differences in the results of previous studies, as presented below:

*H3: Audit committees have a positive influence on financial distress.*

2.6. The board of commissioners and financial distress are moderated by firm size

Better observation and oversight of management tend to occur in companies with a strong board of commissioners (Oktavia et al., 2025). This helps companies make the right decisions, minimising the risk of financial distress. In resource dependence theory, external resources that are important for companies to deal with environmental uncertainty are also secured by the board of commissioners. However, financial distress is influenced by the board of commissioners differently, depending on the size of the company. Larger companies may face different organisational governance complexities and access to resources than smaller companies (Hidayat et al., 2025). Financial distress is reduced as large companies are able to exercise better supervision. Conversely, small companies may have limited resources and networks, so the role of the board in preventing financial distress is more limited. Firm size can affect whether the board of commissioners' influence on financial distress is strengthened or weakened. The hypothesis is formulated based on the differences in the results of previous studies, as presented below:

*H4: Firm size moderates the relationship between the board of commissioners and financial distress.*

2.7. The board of directors and financial distress are moderated by firm size

Financial distress risk is believed to be minimised by the existence and quality of a good board of directors, as they can manage company resources effectively and respond to uncertainties in the business environment (Apriyanti & Rinofah, 2020). Based on resource dependence theory, companies with strong management are better able to control and utilise the external resources needed to survive in uncertain market conditions. Thus, financial distress becomes less likely when a company is supported by a good board of directors. However, the impact of the board of directors on financial distress may vary depending on the firm size, which may vary with firm size. Large companies usually have broader access to external resources and corporate funding (Ramadanty & Khomsiyah, 2022). Therefore, the board of directors can optimise resource use to reduce financial distress more effectively than small companies. Thus, the connection between financial distress and the board of directors can be strengthened or weakened by a company's size. The hypothesis is formulated based on the differences in the results of previous studies, as presented below:

*H5: Firm size moderates the relationship between the board of directors and financial distress.*

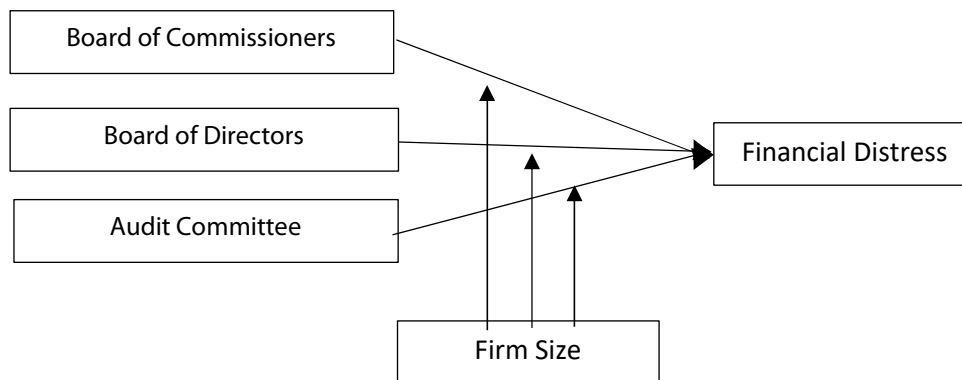
2.8. The audit committee and financial distress are moderated by firm size

In resource dependence theory, competent audit committees can strengthen oversight of the use of corporate resources and ensure that relevant financial information is available for management decision-making. Thus, financial distress risk can be minimised through improved corporate compliance with regulations driven by internal oversight from the audit committee (Komala & Asaari, 2022). The impact of audit committees on financial distress may vary by firm size. The bigger the company, the greater the task of exercising optimal oversight of the directors' board and ensuring that the board makes the right decisions to protect the company from potential financial distress (Agatha & Wijaya, 2022). Conversely, small companies tend to have a simpler management structure, so the audit committee's role in overseeing resource use can

be more easily carried out. The audit committee's impact on financial distress might therefore be strengthened or weakened by the size of a company. The hypothesis is formulated based on the differences in the results of previous studies, as presented below:

*H6: Firm size moderates the relationship between the audit committee and financial distress.*

### 2.9. Research Model



**Figure 1. Conceptual Framework**

### III. Research Method

A quantitative method with an associative approach is used in this study to analyse the relationships and effects among two or more variables within the observed phenomenon. According to Sugiyono (2016), finding the cause-and-effect link between independent and dependent variables is the goal of associative research. This approach can assess the significance of each variable in lowering the likelihood of financial distress in automakers, thereby offering a more precise empirical knowledge of the causes of financial distress. Secondary data from the yearly financial reports of companies included in the DAX Automobile index serves as the primary source for this study and the Frankfurt Stock Exchange ([www.boerse-frankfurt.de](http://www.boerse-frankfurt.de)), which is publicly available. The companies' financial reports were reviewed and processed to obtain information on the variables of focus in the research. Corporations that did not have complete data for the study period were not included in the sample. Supporting data were obtained from official, reliable platforms such as Statista, the International Monetary Fund (IMF), and the World Bank, as sources of macroeconomic information and other supporting indicators. Before performing the regression, a classical assumption test was conducted to ensure that the regression model was unbiased. All automotive companies listed on the DAX Automobile Index from 2018 to 2023 constitute the population of this study, yielding a sample of 10 companies and 60 data observations. The sampling criteria used in this study are as follows:

**Table 1. Purposive Sampling**

No	Criteria	Sample
1	Companies included in the DAX Automobile Index (2018-2023)	18
2	Annual reports were not consistently published, and data were incomplete for companies (2018–2023)	(8)
Total Sample		10
Research Period		6

Data were processed using EViews 12 and Microsoft Excel. The analysis began with descriptive statistics to summarize the characteristics of each research variable through the mean, median, maximum, minimum, and standard deviation. Next, classical assumption tests were conducted, including the multicollinearity test to examine correlations among independent variables, where a correlation value below

0.85 indicates no multicollinearity, and the heteroscedasticity test to assess residual variance, where residuals distributed within the range of 500 and -500 indicate the absence of heteroscedasticity. Panel regression model selection was then carried out through three stages: the Chow test to determine whether the Common Effect Model (CEM) or Fixed Effect Model (FEM) was more appropriate, the Hausman test to choose between the Fixed Effect Model (FEM) and Random Effect Model (REM), and the Lagrange Multiplier (LM) test to determine whether the Random Effect Model (REM) or Common Effect Model (CEM) best fitted the data. Panel data regression analysis was conducted in two models, where Model 1 examined the direct effect of the board of commissioners, board of directors, and audit committee on financial distress, while Model 2 included firm size as a moderating variable through interaction terms. Finally, hypothesis testing was performed using the partial test (t-test) to assess the individual effect of each independent variable at a significance level of 0.05, and the coefficient of determination ( $R^2$ ) to measure the extent to which the independent variables explained variations in the dependent variable.

## IV. Results and Discussion

### 4.1. Analysis Result

This study consists of a dependent variable, namely financial distress (FD), independent variables GCG (board of commissioners (BC), board of directors (BD), and audit committee (AC)), and a moderating variable, firm size (FS). The total sample based on the criteria was 10 companies with a research period of 2018-2023, namely 60 observations.

**Table 2. Descriptive Statistics**

	<b>FD</b>	<b>BC</b>	<b>BD</b>	<b>AC</b>	<b>FS</b>
Mean	0.755840	2.533079	1.592443	1.450213	12.81721
Median	0.723145	2.858514	1.791759	1.386294	12.99516
Maximum	1.328713	2.995732	2.197225	1.945910	15.77019
Minimum	0.339048	1.386294	0.693147	0.693147	9.422383
Std. Dev.	0.270635	0.571194	0.520299	0.270166	1.685993

The results of the descriptive statistical analysis of each research variable are as follows:

- a. Financial Distress  
 The financial distress variable has an average value of 0.755840. During the observation period, the highest financial distress value recorded was 1.328713, while the lowest value was 0.339048. The standard deviation of the financial distress variable is 0.270635.
- b. Board of Commissioners  
 The average value of the board of commissioners variable is 2.533079, according to the descriptive statistical analysis results. The highest reported board of commissioners value throughout the observation period was 2.995732, while the lowest was 1.386294. The financial distress variable has a standard deviation of 0.571194.
- c. Board of Directors  
 The average value of the board of directors variable is 1.592443, according to the findings of descriptive statistical analysis. The highest board of directors value reported throughout the observation period was 1.945910, while the lowest value was 0.693147. The financial distress variable has a standard deviation of 0.270166.

d. Audit Committee

The average value of the audit committee variable is 1.450213. The maximum audit committee value throughout the observation period was 1.945910, while the lowest was 0.693147. The financial distress variable has a standard deviation of 0.520299.

e. Firm Size

The average value of the firm size variable is 12.81721. The maximum firm size value throughout the observation period was 15.77019, while the lowest was 9.422383. The financial hardship variable has a standard deviation of 1.685993.

4.2. Classical Assumption Test

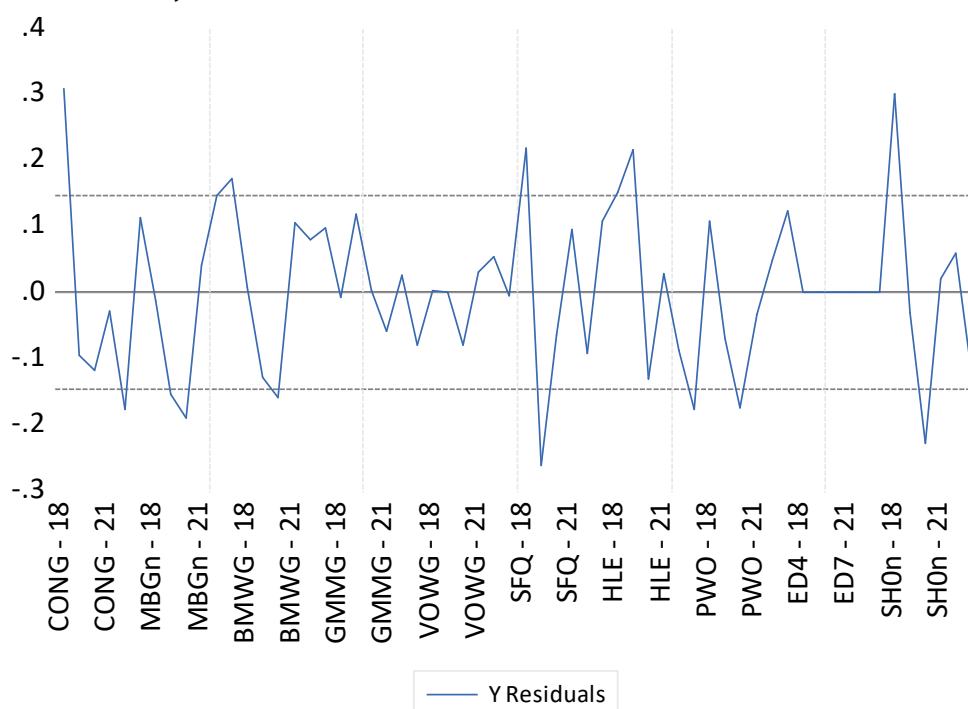
a. Multicollinearity

**Table 3. Multicollinearity Test Result**

	BC	BD	AC	FS
BC	1.000000	0.813142	0.780001	-0.395644
BD	0.813142	1.000000	0.582247	-0.454543
AC	0.780001	0.582247	1.000000	0.557017
FS	-0.3956449	-0.454543	-0.557017	1.000000

The multicollinearity test's findings, the correlation coefficients between the variables, namely the board of commissioners, board of directors, audit committee, and firm size, are all below 0.85. Therefore, it can be concluded that the regression model is free from multicollinearity issues.

b. Heterocedasticity



**Figure 2. Heterocedasticity Test Result**

The regression model's heteroscedasticity, as reflected in the variance and residuals, can be determined using a heteroscedasticity test. The scatter plot from the heteroscedasticity test shows that the residuals do not exceed the limits (500 and -500), indicating that there are no signs of heteroscedasticity and that the test for heteroscedasticity has been passed.

#### 4.3. Panel Regression Model Selection

Testing must be performed on panel data to determine the best model, namely the Fixed Effect Model, Random Effect Model, or Common Effect Model.

**Table 4. Model Data Panel**

Test Name	Probability	Result
Chow Test	0.000 < 0.05	FEM
Hausman Test	0.000 < 0.05	FEM
Lagrange Multiplier Test	0.2315 > 0.05	CEM

The model selected based on testing is the Fixed-Effects Model, after conducting Chow, Hausman, and LM tests. Using this model, the classical assumptions that need to be tested are multicollinearity and heteroscedasticity.

#### 4.4. Regression Results

##### a. Model Without Moderation

**Table 5. Regression Model Without Moderation**

Variable	Coefficient	Std.Error	t-Statistic	Prob
C	-0.865578	3.452672	-0.250698	0.8033
BC	1.018965	0.530788	1.919720	0.0619
BD	-0.324979	0.141073	-2.303621	0.0264
AC	0.228510	0.189282	1.207244	0.2343
FS	-0.060354	0.240038	-0.251437	0.8027

##### b. Model With Moderation

**Table 6. Regression Model With Moderation**

Variable	Coefficient	Std.Error	t-Statistic	Prob
C	1.594894	3.108084	0.513144	0.6106
FS	-0.237859	0.250626	-0.949062	0.3481
BC*FS	0.073724	0.039011	1.889841	0.0659
BD*FS	-0.025957	0.010679	-2.430649	0.0195
AC*FS	0.019809	0.013993	1.415698	0.1644

#### 4.5. Hypothesis Testing

##### a. Partial Test (t-Test)

- 1) The alternative hypothesis (H1) is rejected. The t-test results show that the board of commissioners variable has a t-value of 1.919720 and a significance value of 0.0619 with a positive coefficient, indicating that the board of commissioners does not have a significant effect on financial distress.
- 2) The alternative hypothesis (H2) is rejected. Based on the t-test results for the board of directors variable, a t-value of -2.303621 and a significance value of 0.0264 with a negative coefficient were obtained. Therefore, it can be concluded that the board of directors has a negative effect on financial distress.

- 3) The alternative hypothesis (H3) is rejected. Based on the t-test results for the audit committee variable, a t-value of 1.207244 and a significance value of 0.2343 with a positive coefficient were obtained. Therefore, it can be concluded that the audit committee has no effect on financial distress.
- 4) The alternative hypothesis (H4) is rejected. Based on the t-test results for the interaction variable between the board of commissioners and firm size, a t-value of 1.889841 and a significance value of 0.0659 with a positive coefficient were obtained. Therefore, it can be concluded that firm size does not moderate the influence of the board of commissioners on financial distress.
- 5) The alternative hypothesis (H5) is accepted. Based on the t-test results for the interaction variable between the board of directors and firm size, a t-value of -2.430649 and a significance value of 0.0195 with a negative coefficient were obtained. Therefore, it can be concluded that firm size moderates the influence of the board of directors on financial distress.
- 6) The alternative hypothesis (H6) is rejected. Based on the t-test results for the interaction variable between the audit committee and firm size, a t-value of 1.415698 and a significance value of 0.1644 with a positive coefficient were obtained. Therefore, it can be concluded that firm size does not moderate the influence of the audit committee on financial distress.

b. Coefficient of Determination Test ( $R^2$ )

**Table 5. Determination Test Result**

<b>R Square</b>	<b>Adjusted R Square</b>
0.794890	0.704842

The variables of the board of commissioners, board of directors, audit committee, and firm size account for 70% of the financial hardship variable, according to the table's Adjusted R Square ( $R^2$ ) value of 0.704. Meanwhile, additional factors not included in this study explain the remaining 30%.

4.6. Discussion

a. The Effect of the Board of Commissioners and Financial Distress

This study shows that the board of commissioners has no effect on financial distress in the automotive companies studied. This finding does not support the theory that the board of commissioners should function as a supervisory mechanism, a provider of strategic advice, and a conduit to external resources (Orbaningsih et al., 2022). This aligns with the research by Orbaningsih et al. (2022), which states that the board of commissioners does not influence financial distress, meaning that a board of commissioners that is too large in a company will result in more diverse backgrounds and abilities among board members. This can trigger differences in opinion and hinder coordination, while too small a number can result in suboptimal oversight and limit access to external resources. The existence of the board of commissioners is considered merely a formality to comply with regulations, resulting in the board of commissioners not performing optimally in fulfilling its obligation to supervise the board of directors (Rustyaningrum & Rohman, 2021).

b. The Effect of the Board of Directors and Financial Distress

This study supports the theory, showing that the presence of a board of directors can reduce reliance on external resources (Febrianti et al., 2024). The results show that the board of directors has a significant negative effect on financial distress, meaning that the greater the number and presence of board members in a company, the lower the risk of financial distress. This can be explained by the fact that an adequate board of directors enables companies to build an extensive network with external parties,

making it easier for them to access the resources they need and ensure their sustainable availability. This finding is in line with research conducted by Krisyadi & Kelly (2021), which explains that the board of directors has a negative influence on financial distress, indicating that the strategic role of the board of directors is not only in internal decision-making but also in establishing relationships that support the company's financial stability.

c. The Effect of Audit Committees and Financial Distress

This study shows that audit committees have no effect on financial distress. This finding is not in line with the theory that audit committees serve as providers of important resources for companies, including through the education, expertise, and experience of their members, which can improve the quality of financial reporting and help companies better identify and manage financial distress risks. This is in line with research conducted by Khalid et al. (2020), which explains that audit committees have no effect on financial distress. Regardless of the size of the audit committee, whether large or small, the data from this study shows that the existence of an audit committee cannot directly prove its impact on financial distress, so the role of the audit committee appears to be more formal or administrative in nature rather than providing a real strategic contribution to mitigating the company's financial risks.

d. The Effect of Firm Size as a Moderator of the Board of Commissioners and Financial Distress

The interaction variable between firm size and the board of commissioners does not demonstrate the ability to moderate financial distress. This indicates that firm size does not influence the role of the board of commissioners in performing its duties. In carrying out its functions, the board of commissioners is responsible for supervising and securing access to external resources for the company, particularly in situations of environmental uncertainty. Generally, large companies tend to possess greater resources. However, in practice this does not automatically enhance the supervisory performance of the board of commissioners if it does not perform its functions optimally (Ramadhani et al., 2025). In other words, the role of the board of commissioners remains relatively consistent in both large and small companies, indicating that firm size is not a significant factor in strengthening or weakening the influence of the board of commissioners on financial distress.

e. The Effect of Firm Size as a Moderator of the Board of Directors and Financial Distress

The interaction variable between firm size and the board of directors has been proven to moderate financial distress. This shows that the board of directors' role in reducing the risk of financial distress is influenced by the firm's size. Although large companies usually have broader access to external resources and funding, this does not necessarily improve board performance. Larger companies tend to have more complex operations and governance, so the board of directors may be less directly involved in day-to-day operations and in optimising the use of company resources. This condition can ultimately reduce the board of directors' ability to make important strategic decisions when the company faces financial distress risks (Ramadanty & Khomsiyah, 2022).

f. The Effect of Firm Size as a Moderator of Audit Committees and Financial Distress

The interaction variable between firm size and audit committees does not show a moderating effect on financial distress. The audit committee's role in controlling financial distress risk is not influenced by the size of the company. Although internal oversight by audit committees is believed to improve corporate compliance with regulations, thereby minimising the risk of financial distress (Komala & Asaari, 2022). Firm size does not significantly affect audit committees' ability to perform their functions. This aligns with the research by Fawwaz & Nurcahyono (2024), which found that firm size does not moderate audit committees. The study states that in larger companies, the broader scope of governance responsibilities and increased reporting complexity can hinder the audit committee's ability to perform its oversight function optimally. Meanwhile, small companies have lower complexity but limited

resources. Thus, this condition shows that the audit committee's role in mitigating financial distress remains relatively unchanged regardless of firm size.

## V. Conclusion

The study looks at the impact of financial distress, audit committee, board of directors, board of commissioners, and firm size on German automakers during the US-China trade war. The results of the study demonstrate that the board of directors significantly and negatively affects financial distress, meaning that the chance of financial hardship decreases with the size of the board. The presence of a board of directors with an appropriate composition enables companies to build a broader network of external parties, including investors, creditors, and strategic partners. This network can increase access to resources and funding, thereby strengthening the company's resilience and ensuring operational sustainability amid external pressures. On the other hand, the board of commissioners and the audit committee have no effect on financial distress, indicating that these variables cannot be used as indicators of financial distress. Meanwhile, firm size, which acts as a moderator, shows that it weakens the board of directors' influence on financial distress. Large companies generally have broader access to funding sources and external networks, so financial distress is not entirely dependent on the board of directors' performance. This makes the board of directors' role in mitigating the risk of financial distress relatively weaker as the company's size increases.

Firm size does not moderate the role of the board of commissioners and audit committee, as large and small companies show that their roles are not significantly different. In addition, during the observation period, companies were affected not only by the trade war but also by COVID-19, which put significant pressure on their operational performance and financial condition, leading to substantial differences in the predicted value of financial distress. This research, which looks at firm size as a moderating element and excellent corporate governance as a variable, is restricted to automakers who were listed on the DAX Automobile Index between 2018 and 2023. Therefore, the results of the study may differ if examined in other sectors and over a longer period. Future studies are expected to include financial ratio variables directly related to financial distress and to expand to other industries in Germany. The findings theoretically add to the body of knowledge on the factors that lead to financial distress, especially in the German car sector. In practice, financial distress can be prevented by optimising the performance of the board of directors in managing resources and building external networks, as suggested by the results for company management. These findings can also be used by regulators and companies as a reference in making policies and identifying early indicators of financial distress. The research described here gives scholars a better knowledge of the connections between board of commissioners, board of directors, audit committee, and firm size during financial distress. Additionally, this program improves academic writing and financial analytical abilities.

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