

Received: 11 November 2022 Accepted: 28 March, 2023

DOI: <https://doi.org/10.33182/rr.v8i4.251>

## **THE EFFECT OF BUSINESS RISK AND FINANCIAL DISTRESS ON FIRM VALUE IN THE TECHNOLOGY SECTOR**

Tri Purwani<sup>1</sup>, Harto Listijo<sup>2</sup>

### ***Abstract***

*The ever-changing economic conditions greatly affect company performance, especially during the Covid 19 pandemic, thus presenting business risks and financial difficulties that can occur at any time. This study aims to determine the effects of business risks and financial difficulties on firm value. This research uses quantitative research methods while data collection techniques are carried out by literature study. The population in this study were technology sector companies listed on the Indonesia Stock Exchange (IDX) in 2020-2022, the sample was determined using non-probability sampling techniques. The data that has been collected is analysed using the Simultanenus Equation Model. The results showed that business risk and financial distress have a significant effect on firm value. These two factors can positively affect the financial performance and long-term prospects of a company, which in turn can have an impact on firm value.*

**Keywords:** *Business Risk, Financial Distress, Firm Value*

### **Introduction**

Changing economic conditions have an effect on a business's operations and profitability, both large and small businesses, particularly during the COVID 19 epidemic. With the advent of PSBB, businesses and the majority of sectors are forced to shut down for an extended length of time, resulting in financial losses (Hariwardoyo, 2020). However, global economic conditions will be an opportunity for strong companies but on the contrary will be a threat to weak companies (Idawati, 2020).

Running a business will certainly have risks or commonly called business risks. The biggest risk that a company can experience is the failure of a long decline and insufficient funds to pay debts. Conditions like this are called financial distress. If a firm executes a merger and displays negative operating profit, net profit, and book value of equity figures, that company is said to be in financial trouble (Krisyadi & Kelly 2021). Companies frequently have liquidity issues, which is seen by their declining capacity to meet their debt commitments. This is another sign of financial crisis. A three-dimensional process of corporate financial hardship is depicted, including time, financial distress,

---

<sup>1</sup> AK University email: [tpurwani2022@gmail.com](mailto:tpurwani2022@gmail.com)

<sup>2</sup> AK University email: [hartolistijo@gmail.com](mailto:hartolistijo@gmail.com)

and process stages.

Companies that have high profits will get high risks and responsibilities, the risk of experiencing uncertainty in the return on assets in the future, in companies whose company value has high business risk because the funding decisions they choose will decrease in the eyes of investors if a chance of bankruptcy exists. If the business gets a loss, the firm's value also affects public trust. The worth of the firm is a forecast of investor and public trust in the business, as seen by the high share price, which will increase the company's worth (Karimah & Azib, 2021).

Fuadi et al.'s earlier study from 2022 demonstrated that business risk has a positive and considerable impact on firm value. The company's impressive profits might be contrasted with the degree of business risk it experienced. The maxim of selecting assets that offer high risk but high returns is known as "high risk, high return." This encourages investors to put their money into businesses that offer high returns because those businesses will be worth more in the long run. In Makmur et al (2022) also shows that business risk has a significant positive effect on firm value. This suggests that a high level of business risk will make it more difficult for the company to get loans because it won't be able to handle the fixed cost of debt. Companies with a high business risk could affect the company's worth, causing investors to rethink their investment choices. Additionally, research demonstrates that a firm's worth is positively impacted by financial performance. An increased or high stock price can give an idea that the company has a high company value. Thus, financial performance is related to financial difficulties. Financial difficulties cause financial performance to decrease and vice versa, such that the value of the company increases with improved financial performance.

In contrast to other research, this study uses Simultaneous Equation Model analysis to determine the impact of business risk and financial challenges on firm value in the technology sector companies listed on the Indonesia Stock Exchange (IDX) in 2020–2022. This study is unique in that it uses Simultaneous Equation Model data analysis. Additionally, this study employs research variables that have not before been used in research, namely company risk and financial distress.

## **LITERATURE REVIEW**

### **Business Risk**

Risk is a part of human and corporate life. Risk is associated with uncertainty due to lack of or insufficient information about what will happen. Something that is uncertain can be beneficial or detrimental. The International Standard Organization (ISO 31000) states that risk is the effect of objective uncertainty. Where these effects can be positive, negative or deviations from what is expected. Generally speaking, the return gained will likewise be greater the bigger the risk taken.

(Marginingsih, 2017). In the statistical approach, business risk is defined as the variability of operating profit or earnings before interest and taxes (Miswanto, 2013). Business risk describes a company failure that results in unexpected losses and the inability of management to ensure returns to the company. If business risk is high, financial performance will be low (Ramaiyanti, 2018). Business risks can be categorized into four types, namely financial risk, operational risk, strategic risk, and externality risk (Wajdi et al, 2013). The variables that are business risk factors are the risk of losing assets, the risk of losing income in the short term, the risk of losing income in the long term, the risk of losing the market, the risk of losing labor, the risk of losing the supply of raw materials and the risk of capital. Meanwhile, according to Hadi et al (2020) risk indicators are problems, policy and political changes, additional demand and additional business services. Consideration of these many things can pose a risk in the future.

### **Financial Distress**

Financial distress is a condition in which the business is threatened with bankruptcy. If the company experiences bankruptcy, there will be bankruptcy costs caused by the compulsion to sell assets below market prices, the cost of liquidating the company, the destruction of fixed assets eaten by time before being sold, and so on. These bankruptcy costs include the direct cost of financial distress. Indirect cost of financial distress refers to the time management spends avoiding bankruptcy rather than making wise business decisions, which is another cost associated with the danger of financial difficulty. In general, using debt raises the risk of financial distress, and the higher the cost of debt, the more likely it is that a reduction in income will result in financial trouble (Wibowo, 2005). Measuring the financial health of a company has become an important need and must be fulfilled immediately in almost all business sectors in order to avoid financial stress. A company's financial health can be described through a variety of different financial parameters (Rowland et al, 2021).

Financial Distress in companies can be influenced by internal company factors, namely profitability, liquidity, leverage, operating capacity and sales growth. Financial distress can also be seen in various ways, such as declining financial performance, the business's failure to fulfill its obligations, the cessation of dividend payments, cash flow problems faced by the company, liquidity difficulties, layoffs, and other conditions that indicate financial distress faced by the company (Sutra & Mais, 2019). Meanwhile, according to Sumani, (2017) states that corporate governance, liquidity ratio proxied by current ratio, profitability ratio proxied by return on assets, and activity ratio proxied by total asset turnover have a significant negative effect and can predict financial distress conditions.

### **Firm Value**

Company value is the asking price for a potential purchase if the business is sold (Dewi & Abundanti, 2019). Meanwhile, according to Sartono in (Romadhani et al, 2020) firm value is the

difference between the selling price and the liquidation value of a corporation as a running business. Firm value is an indicator of how successful a firm is perceived by investors and is frequently correlated with share price, therefore if share price is high, company value may also be high (Sutama & Lisa, 2018). One method that is often used to measure company value is by calculating price to book value (PBV). PBV is the ratio of the share price to the share book price, meaning that PBV explains how much the book value of a company's shares is worth in the market. The PBV ratio measures how successfully a firm is generating value for shareholders by comparing the amount of capital spent to the organization's ability to create value. The higher the PBV ratio, the better. A higher PBV ratio also correlates with a higher share price (Pasaribu et al, 2019). Company value is measured by the following formula  $PBV = \frac{\text{Market Value Per share}}{\text{Book Value per share}} \times 100\%$  (Ratag et al, 2021).

**RESEARCH METHODS**

This study makes use of quantitative research techniques, which, according to Sugiyono (2017), are based on the positivist philosophy and are used to conduct research on particular populations or samples, gathering information with research tools, and evaluate numerical or statistical information to test specified hypotheses.

The method of data collecting used a literature review. Non-probability sampling techniques are used to choose the sample, and the criteria are that the company has complete financial reports in 2020–2022, the company is not delisted during the study period, and the company is listed on the Indonesia Stock Exchange website (idx.co.id). The population of this study is a technology sector company listed on the Indonesia Stock Exchange (IDX) in 2020–2022. Eleven businesses were selected as a sample based on the stated criteria.

**Table 1.** Research Sample

No	Criteria	Description
1	Technology sector companies listed before 2020	15
2	Companies that have complete financial statements 2020-2022	11
3	Companies that are not delisted during the study period	11

The data that has been collected is analysed using the Simultanenus Equation Model. Simultaneous Equation Model (SEM) is a statistical analysis method used to model the cause-and-effect relationship between several variables that influence each other in a system. SEM is used to understand and analyse complex relationships between interrelated variables (Lee et al, 2022).

## RESULT AND DISCUSSION

### Result

#### Normality Test

A statistical technique called the residual normality test is used to determine if the residuals in the model have a normal distribution. Residuals are the discrepancy between the value that was observed and the value that the model anticipated (Feng et al, 2020).

**Table 2.** Normality Test

N	Asymp. Sig. (2-tailed)
11	0.082

Source: Data processed, 2023

The Asymp. Sig. (2-tailed) coefficient value of 0.082 is greater than 0.05 according to the SPSS test findings in Table 2. The residual data are therefore regularly distributed.

#### Multicollinearity Test

The multicollinearity test is used to see if the independent variables in the regression model are correlated or not. When a regression model's explanation variables, some or all of them, have a perfect linear relationship, this is referred to as multicollinearity (Supriyadi, 2017).

**Table 3.** Multicollinearity Test

Variable	Tolreance	VIF	Description
Business Risk	0.339	2,862	There is no multicollinearity
Financial Distress	0.339	2,862	There is no multicollinearity

Source: Data processed, 2023

Table 3's findings demonstrate that no independent variable has a tolerance coefficient less than 0.10 or a VIF larger than 10.

This means that there are no multicollinear symptoms.

#### Autocorrelation Test

The autocorrelation test is a statistical test used to test for the presence of correlation between residual values at different times in a statistical model, such as a linear regression or time series model (Beard et al, 2019).

**Table 4.** Autocorrelation Test

Variable	N	Durbin Watson	Description
Business Risk	11	1,932	$du < dw < 4 - du$
Financial Distress	11	1,932	$du < dw < 4 - du$

Source: Data processed, 2023

The Durbin-Watson value is 1.932 based on the analysis results in Table 4, and when compared to the table value using a significant value of 5%, for  $n = 11$ , and the number of independent variables is 2 ( $k = 2$ ), then  $dL = 1.564$  and  $dU = 1.671$ . It may be deduced that the regression model does not exhibit autocorrelation symptoms because the Durbin-Watson value of 1.932 is higher than ( $dU$ ) 1.671 and lower than  $4 - 1.671$  ( $4 - dU$ ).

**Path coefficient significance test**

Path coefficient significance test is a statistical test used to determine whether the path coefficient in the path analysis model is statistically significant or insignificant (Mittell, 2020).

**Table 5.** Path coefficient

Model	Unstandardized Coefficients		Standardized Coefficient Beta	Sig.	Description
	B	Std. Error			
(Constant)	-2.325	0.643		0.000	Significant
Business Risk	-3.684	1,273	0.543	0.000	Significant
Financial Distress	0.009	0.155	0.663	0.000	Significant
Adjusted R2:	0.821				
Sig:	0.000				

Source: Data processed, 2023

It is clear from the test findings that business risk has an impact on company value because it has

a positive regression coefficient of 0.543 and a significance level of 0.000 less than 5%. It may be said that financial difficulty has an impact on business value because it has a positive regression coefficient of 0.663 and a significance level of 0.000 smaller than 5%.

## **Discussion**

### **The Effect of Business Risk on Firm Value**

The results of the study show that business risk has a big impact on firm value. The results of this study support earlier investigation by Ginting et al. (2020), which discovered that business risk has a considerable impact on firm value. Similar research was also conducted by (Kolibu et al., 2020), which demonstrated that business risk has a significant impact on firm value. In his opinion, for businesses to increase their value, they must be aware of the risks associated with their operational activities and maximize profits. However, according to research (Rahmi & Swandari, 2020), business risk has little to no impact on a company's value. This is because management decisions regarding the use of debt are made based on a company's needs for expansion or restructuring rather than taking into account existing risks.

The value of a company is significantly influenced by business risk. A company's value may suffer when it is exposed to significant business risk. Various factors might contribute to business risk, such as changes in market conditions, intense competition, regulatory changes, technological changes, operational risk, financial risk, and so on. When business risk increases, investors and stakeholders will consider the risk in their assessment of firm value. High risk can make investors more hesitant to invest in the company or pay a higher risk premium to compensate for potential losses that may occur. In addition, high business risk can also affect the financial performance of the business, including its sales, profit, and cash flow. The company's value may decline if hazards are present that cannot be adequately managed.

### **The Effect of Financial Distress on Firm Value**

Additionally, this study's findings demonstrate that financial distress has a considerable impact on firm value. Previous studies have provided support for the findings of this study (Noviyanti & Ruslim, 2021) It demonstrates that if financial troubles become unsustainable, stock prices would fall, which can reflect a company's stock performance and serve as one of the benchmarks for investors when making investment decisions. If the capital structure arrangement is good, it will have a good impact on the firm's value. Other study was also conducted by (Sovita & Sari, 2022) which proved that financial distress affects firm value. This is also reinforced by research (Maulina, 2019) with the results of financial distress affecting firm value.

When a company experiences financial difficulties, this can have a negative impact on financial

performance and overall company value. Financial distress can include issues such as low liquidity, high debt, heavy interest expense, or even default risk. When a company faces financial distress, it can hamper the company's ability to fulfil financial obligations, such as debt repayment or employee salary payments. Serious financial distress can also affect the company's relationships with suppliers, customers, and investors.

The impact of financial distress on firm value can be significant. Investors and other stakeholders tend to have a negative perception of companies experiencing financial difficulties, as this indicates instability and high risk. As a result, the company's share price may fall, demand for the company's bonds or loans may decrease, and the general perception of the company's long-term prospects may deteriorate. In addition, financial distress can disrupt a company's operational activities, hampering its ability to make investments, expand, or conduct effective business activities. This can impede the company's growth and can have long-term consequences for the company's value.

## CONCLUSION

The goal of this study is to ascertain how business risk and financial hardships affect firm value in the technology sector listed on the Indonesia Stock Exchange (IDX) in 2020–2022. It may be inferred from the findings of the research and discussion that has been given that business risk and financial distress have an impact on firm value. These two elements may have a beneficial impact on a firm's long-term prospects and financial performance, both of which may affect the value of the company. Due to investors' reluctance to engage in a company with a high risk, the dangers that the firm faces and the business risk they face will determine how valuable the company will be. Financial troubles, however, are correlated with a firm's stock price, therefore the more serious the financial difficulties, the lower the share value of the company will be.

## References

- Afiqoh, L., & Laila, N. (2018). Pengaruh Kinerja Keuangan Terhadap Risiko Kebangkrutan Bank Umum Syariah Di Indonesia (Metode Altman Z-score Modifikasi). *Jurnal Ekonomi dan Bisnis Islam*. 4(2), 166-183.  
<https://doi.org/10.20473/jebis.v4i2.10757>
- Aprilia, N., & Wahjudi, E. (2021). Pengaruh Kinerja Keuangan Terhadap Nilai Perusahaan dengan Variabel Moderasi Corporate Governance. *Jurnal Riset Akuntansi Dan Keuangan*. 9(3), 525-534.  
<https://doi.org/10.17509/jrak.v9i3.32512>
- Beard, E., Marsden, J., Brown, J., Tombor, I., Stapleton, J., Michie, S., & West, R. (2019). Understanding and using time series analyses in addiction research. *Addiction*, 114(10), 1866-1884.  
<https://doi.org/10.1111/add.14643>
- Dewi, N. P. I. K., & Abundanti, N. (2019). *Pengaruh leverage dan ukuran perusahaan terhadap nilai perusahaan dengan profitabilitas sebagai variabel mediasi* (Doctoral dissertation, Udayana University).  
<https://doi.org/10.24843/EJMUNUD.2019.v08.i05.p16>
- Feng, C., Li, L., & Sadeghpour, A. (2020). A comparison of residual diagnosis tools for diagnosing regression models for count data. *BMC Medical Research Methodology*, 20(1), 1-21.



- <https://doi.org/10.1186/s12874-020-01055-2>  
Fuadi, A., Yulianti, V., Noor, A., & Putri, T. (2022). Pengaruh Risiko Bisnis, Pertumbuhan Penjualan dan Umur Perusahaan Terhadap Nilai Perusahaan. *Asset: Jurnal Ilmiah Bidang Manajemen dan Bisnis*. 5(2), 114-123.
- <https://doi.org/10.24269/asset.v5i2.6154>  
Ginting, F. G., Saerang, I. S., & Maramis, J. B. (2020). Pengaruh Risiko Bisnis, Risiko Finansial Dan Risiko Pasar Terhadap Nilai Perusahaan Pada Bank Bumh Periode Tahun 2011-2018. *Jurnal Emba: Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, 8(1).
- <https://doi.org/10.35794/emba.v8i1.27508>  
Hadi, J., Febrianti, M., Yudhistira, G., & Qurtubi. (2020). Identifikasi Risiko Rantai Pasok dengan Metode House of Risk (HOR). *Performa: Media Ilmiah Teknik Industri*. 19(2), 85-94.
- <https://doi.org/10.20961/performa.19.2.46388>  
Idawati, W. (2020). Analisis Financial Distress : Operating Capacity, Leverage, Dan Profitabilitas. *Jurnal Akuntansi Bisnis*. 13(1), 1-10. <http://dx.doi.org/10.30813/jab.v13i1.1914>
- Karimah, G., & Azib. (2021). Pengaruh Profitabilitas dan Risiko Bisnis terhadap Nilai Perusahaan. *Prosiding Manajemen*. 7(2), 515-519.  
<http://dx.doi.org/10.29313/v0i0.31503>
- Kolibu, N. N., Saerang, I. S., & Maramis, J. B. (2020). Analisis investment opportunity set, corporate governance, risiko bisnis, dan profitabilitas terhadap nilai perusahaan consumer goods dengan high leverage di bursa efek Indonesia. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, 8(1). <https://doi.org/10.35794/emba.v8i1.27503>
- Krisyadi, R., & Kelly. (2021). Analisis Pengaruh Tata Kelola Perusahaan Terhadap Kesulitan Keuangan Pada Perusahaan Yang Terdaftar Di Bursa Efek Indonesia Periode 2016-2020. *FINANCIAL: Jurnal Akuntansi*. 7(2), 163-183. <https://doi.org/10.37403/financial.v7i2.279>
- Lee, C. F., Lee, A. C., & Yeh, W. C. (2022). Simultaneous equation models for financial planning and forecasting. Springer Books, 2341-2367. [https://doi.org/10.1007/978-3-030-91231-4\\_102](https://doi.org/10.1007/978-3-030-91231-4_102)
- Makmur, M., Amali, L., & Hamin, D. (2022). Pengaruh Pertumbuhan Aset Dan Resiko Bisnis Terhadap Nilai Perusahaan Pada Perusahaan Manufaktur Sub Sektor Makanan Dan Minuman Yang Terdaftar Di Bursa Efek Indonesia Periode 2016-2020. *Jurnal Ilmiah Manajemen Dan Bisnis*. 5(1), 140-147.  
<https://doi.org/10.37479/jimb.v5i1.14262>
- Marginingsih, R. (2017). Tata Kelola Manajemen Risiko Pada PT Unilever Indonesia, Tbk. *Cakrawala*. 17(2), 156-164.  
<https://doi.org/10.31294/jc.v17i2.2496>
- Maulina, R. (2019). Pengaruh Profitabilitas Terhadap Financial Distress Dan Dampaknya Terhadap Nilai Perusahaan Pada Perusahaan Sub Sektor Infrastruktur, Utilitas, Transportasi Yang Terdaftar Di Bursa Efek Indonesia. *Akbis: Media Riset Akuntansi dan Bisnis*, 3(2).  
<https://doi.org/10.35308/akbis.v3i2.1386>
- Miswanto. (2013). Pengukuran Risiko Bisnis Dan Risiko Pendanaan Dalam Perusahaan. *Jurnal Economia*. 9(1), 102-115.  
<https://doi.org/10.21831/economia.v9i1.1380>
- Mitchell, R. J. (2020). Path analysis: pollination. In *Design and analysis of ecological experiments* (pp. 211-231). Chapman and Hall/CRC.
- Noviyanti, D., & Ruslim, H. (2021). Pengaruh Struktur Modal, Profitabilitas, Rasio Aktivitas Terhadap Nilai Perusahaan. *Jurnal Manajerial Dan Kewirausahaan*, 3(1), 34-41.  
<https://doi.org/10.24912/jmk.v3i1.11285>
- Pasaribu, U., Nuryartono, N., & Andati, T. (2019). Pengaruh faktor internal dan eksternal perusahaan terhadap nilai perusahaan. *Jurnal Aplikasi Bisnis Dan Manajemen (JABM)*, 5(3), 441-441.  
<https://doi.org/10.17358/jabm.5.3.441>
- Rahmi, M. H., & Swandari, F. (2021). Pengaruh Risiko Bisnis dan Ukuran Perusahaan Terhadap Struktur

- Modal dan Nilai Perusahaan. *Jurnal Riset Inspirasi Manajemen dan Kewirausahaan*, 5(1), 67-76.  
<https://doi.org/10.35130/jrimk.v5i1.151>
- Ramaiyanti, S., Nur, E., & Basri, Y. (2018). Pengaruh Risiko Bisnis, Kebijakan Dividen Dan Ukuran Perusahaan Terhadap Kinerja Keuangan Dengan Struktur Modal Sebagai Variabel Intervening (Studi Kasus Pada Perusahaan Manufaktur Yang Terdaftar Pada Bursa Efek Indonesia Tahun 2013 – 2015). *Jurnal Ekonomi*. 26(2), 65-81. <http://dx.doi.org/10.31258/je.26.2.p.65-82>
- Ratag, A. J., Van Rate, P., & Tulung, J. E. (2021). Pengaruh Profitabilitas, Growth opportunity Dan Kebijakan Dividen Terhadap Nilai Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia Periode 2014-2018. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, 9(4), 712-721. <https://doi.org/10.35794/emba.v9i4.36526>
- Romadhani, A., Saifi, M., & Nuzula, N. F. (2020). Pengaruh profitabilitas, ukuran perusahaan dan kebijakan dividen terhadap nilai perusahaan. *Profit: Jurnal Administrasi Bisnis*, 14(2), 71-81. <https://doi.org/10.21776/ub.profit.2020.014.02.9>
- Rowland, Setawan, T., & Fitrianingrum, A. (2021). Analisis Kesulitan Keuangan Perbankan Indonesia: Rasio Keuangan Dan Umur Bank (Studi Pada Perbankan Yang Terdaftar di BEI 2016-2019). *Jurnal Bisnis dan Akuntansi Unswara*. 6(2), 82-93. <https://doi.org/10.35968/jbau.v6i2.700>
- Sovita, I., & Sari, N. (2022). Pengaruh Perencanaan Pajak, Ukuran Perusahaan dan Financial Distress Terhadap Nilai Perusahaan. *Jurnal Ekonomi dan Bisnis Dharma Andalas*, 24(2), 342-361.
- Sumani. (2017). Prediksi Financial Distress: Rasio Keuangan Dan Sensitivitas Makroekonomi Perusahaan Sektor Primer. *Ekuitas: Jurnal Ekonomi dan Keuangan*. 3(3), 285-305.  
DOI: 10.24034/j25485024.y2019.v3.i2.4153
- Supriyadi, E. (2017). Perbandingan Metode Partial Least Square (Pls) Dan Principal Component Regression (Pcr) Untuk Mengatasi Multikolinearitas Pada Model Regresi Linear Berganda. *Unnes Journal of Mathematics*, 6(2), 117-128.  
<https://journal.unnes.ac.id/sju/index.php/ujm/article/view/11819>
- Sutama, D., & Lisa, E. (2018). Pengaruh leverage dan profitabilitas terhadap nilai perusahaan. *JSMA (Jurnal Sains Manajemen Dan Akuntansi)*, 10(1), 21-39. <http://ojs.stan-im.ac.id/index.php/JSMA/article/view/26>
- Sutra, F., & Mais, R. (2019). Faktor-faktor Yang Mempengaruhi Financial Distress Dengan Pendekatan Altman Z-score Pada Perusahaan Pertambangan Yang Terdaftar Di Bursa Efek Indonesia Tahun 2015-2017. *Jurnal Akuntansi dan Manajemen*. 16(1), 35-72.  
DOI: <https://doi.org/10.36406/jam.v16i01.267>
- Wajdi, M., Setyawan, A., Syamsudin, & Isa, M. (2013). Manajemen Risiko Bisnis Umkm Di Kota Surakarta. *BENEFIT Jurnal Manajemen dan Bisnis*. 16(2), 116-126.  
DOI: [10.23917/benefit.v16i2.1359](https://doi.org/10.23917/benefit.v16i2.1359)