**The effect of inflation and political stability on the Rupiah exchange rate in the foreign exchange market**

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**Abstract**

This study aims to analyze the effect of inflation and political stability on the rupiah exchange rate in the foreign exchange market. Using a quantitative approach with secondary time-series data from 2008-2022, sourced from the International Monetary Fund, Bank for International Settlements, and World Bank, the research investigates how these variables influence the rupiah exchange rate. The results of simultaneous parameter testing indicate that inflation and political stability together have a significant effect on the rupiah exchange rate. However, partial parameter testing shows that the current account variable has a negative and insignificant effect on the rupiah exchange rate. The inflation variable is positive but also has an insignificant effect, whereas the political stability variable is positive and significantly influences the rupiah exchange rate in the foreign exchange market. The model’s adjusted R-squared value is 0.384204, meaning that the inflation and political stability variables together explain 38.4% of the changes in the rupiah exchange rate, with the remaining 61.6% explained by other variables outside the model. This study highlights the importance of political stability in influencing currency exchange rates and suggests that further research should explore additional factors affecting the rupiah's movement in the foreign exchange market.

**Keywords:** Inflation, Political Stability, Exchange Rate

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1. **Introduction**

According to Dumairy in [Suryanto & Kurniati (2022)](#Suryanto) international trade refers to export and import activities that occur between different countries. The purpose of this trade is to improve the quality of life in a country [(Schumacher: 2013)](#Schumacher). Other benefits of international trade include increased economic growth, job creation, encouraging industrialisation, and stimulating investment from multinational companies. However, there are also various challenges in international trade that make it difficult for some countries to gain maximum benefits from the activity [(Castellani et al., 2010)](#Castellani). In international trade, if exports are greater than imports, the country will generate more foreign exchange as payment earned from international trade transactions. The foreign exchange can then be converted to currency. The process of converting foreign exchange to domestic currency can increase the demand for domestic currency in the foreign exchange market. With the increased demand for the domestic currency, the exchange rate of the domestic currency tends to strengthen against the foreign currency.

Furthermore, the sustainability of international trade is affected by the stability of exchange rates, as large changes can cause uncertainty in the global market [(Sujianto et al., 2024)](#Sujianto). An exchange rate is the price of a currency used by citizens of one country to transact with another country, which can be identified as the exchange rate between the two countries. This is an agreement known as the exchange rate between the two currencies of each country or region [(Mankiw, 2007).](#Gregory) The exchange rate indicates the amount of money of one domestic currency required to buy one unit of currency from another country [(Christianingrum, 2019)](#Christianingrum). Exchange rates can be expressed in nominal rates and real rates. The nominal rate is a comparison of relative prices between the currencies of two countries, while the real rate is the exchange rate used to exchange goods. The main liquidity centre that provides access to buying and selling foreign currencies, thus facilitating capital movements in the global market, is known as the Forex Market (Forex Exchange).

Madura in [Herawati (2021)](#Herawati) explains that one of the factors that can cause changes in currency exchange rates in the foreign exchange market is inflation. Inflation is a general and sustained increase in the price of various products. Inflation can affect exchange rates by putting pressure on the purchasing power of domestic currencies compared to foreign currencies in the foreign exchange market.

**Table 1. Exchange Rates of Domestic Currencies of Indonesia and Other ASEAN Countries against the US Dollar 2008-2022**

|  |  |
| --- | --- |
| **Years** | **Countries** |
| **Indonesia** | **Malaysia** | **Philippines** | **Thailand** | **Singapore** |
| 2008 | 10950 | 3.46 | 44.49 | 34.90 | 1.44 |
| 2009 | 9400 | 3.42 | 46.36 | 33.32 | 1.40 |
| 2010 | 8991 | 3.08 | 43.89 | 30.15 | 1.29 |
| 2011 | 9068 | 3.18 | 43.93 | 31.69 | 1.30 |
| 2012 | 9670 | 3.06 | 41.19 | 30.63 | 1.22 |
| 2013 | 12189 | 3.28 | 44.41 | 32.81 | 1.27 |
| 2014 | 12440 | 3.50 | 44.62 | 32.96 | 1.32 |
| 2015 | 13795 | 4.29 | 47.17 | 36.09 | 1.41 |
| 2016 | 13436 | 4.49 | 49.81 | 35.83 | 1.45 |
| 2017 | 13548 | 4.06 | 49.92 | 32.68 | 1.34 |
| 2018 | 14481 | 4.14 | 52.72 | 32.45 | 1.36 |
| 2019 | 13901 | 4.09 | 50.74 | 30.15 | 1.35 |
| 2020 | 14105 | 4.01 | 48.04 | 30.04 | 1.32 |
| 2021 | 14269 | 4.18 | 50.77 | 33.42 | 1.35 |
| 2022 | 15731 | 4.41 | 56.12 | 34.56 | 1.34 |

Source: International Monetary Fund (data processed: 2025)

In table 1 the exchange rates of the rupiah, Philippine peso and Thai baht show a fluctuating trend against the US dollar from 2008 to 2022. The Ringgit exchange rate against the US dollar also fluctuates, with a general trend of strengthening at the beginning of the period (2009-2013) and then declining (Depreciation) in 2014-2022. Meanwhile, Singapore has a stable and strong exchange rate against the US dollar throughout 2008-2022



**Figure 1. Currency Turnover of Indonesia and Other ASEAN Countries in the Foreign Exchange Market in Billions of US Dollars**

Source: Bank for International Settlements (data processed: 2025)

Figure 1 reflects the currency trading activities of Indonesia and other ASEAN countries in the forex market, surveyed on a three-yearly basis by the [Bank of International Settlements (2022)](#Bank). In general, the five countries show a significant upward trend in currency turnover. The highest amount in 2010, 2013, 2016, 2018 and 2022 came from Singapore Dollar which is very actively traded in the forex market followed by Thai Baht, Indonesian Rupiah, Malaysian Ringgit and the lowest came from Philippine Peso although accumulatively it had a stable turnover during the period.

[Latifah & Michael (2022)](#Latifah) conducted research on the effect of interest rate and inflation variables and the balance of payments on the rupiah exchange rate. The results of the analysis show that inflation has a negative and significant effect on the rupiah exchange rate in Indonesia. This finding is in line with research conducted by [Afriyanti & Prasetiyo (2021),](#Afriyanti) which found that the inflation variable has a significant effect on the exchange rate variable. However, this finding is different from the research conducted by [Fernanda Nayottama & Andrian (2022)](#Fernanda) the results of the analysis show that Inflation is positive and has a significant effect on the exchange rate in Indonesia.

Previous studies have highlighted economic variables such as inflation in influencing exchange rates, but there is no study that comprehensively analyses the role of political stability in addition to these economic variables, especially in the context of Indonesia. Therefore, this study aims to fill the void by adding political stability variables in analyzing their influence on exchange rates in the foreign exchange market. Political stability variable is considered as a relevant variable to be analyzed along with other economic variables because it gives special attention to political aspects that can affect the foreign exchange market

Based on this, the purpose of the study which includes the analysis of the effect of inflation and political stability on the exchange rate of the Indonesian state currency in the foreign exchange market is to analyze how the variables used can affect the exchange rate of the Indonesian state domestic currency in the Foreign Exchange Market.

1. **Research and Method**

**Research Type and Data Source**

The research uses a quantitative literature study method sourced from journals as the main reference and various other sources found through supporting sites on the internet. The data used in the research is secondary data obtained from the websites of the International Monetary Fund, Bank for International Settlements and World Bank. The object of observation consists of time series from 2008-2022 with the scope of Indonesia. The variables used in the study are one dependent variable, namely the domestic exchange rate of Indonesia and two independent variables.

**Table 2. Variable Measurement Indicators**

|  |  |
| --- | --- |
| **Research Variable** | **Measurement Indicator** |
| Exchange Rate (Y) | *Exchange Rates (National Currency per U.S. Dollar, end of period)* |
| Inflation (X1) | *Inflation, consumer prices (annual %)* |
| Political Stability (X2) | *Political Stability and Absence of Violence/Terrorism: Estimate* |

**Data Analysis Methods**

The data analysis method used in this study consists of two stages, namely the Classical Assumption Test and Parameter Test. The Classical Assumption Test is carried out to ensure that the data used meets the requirements in regression analysis, so that the estimation results become valid and reliable. Meanwhile, the Parameter Test is conducted to determine how much influence the independent variable has on the dependent variable in the regression model built. The explanation of each test is as follows:

*Classical assumption test*

Normality test

According to [Ghozali (2006)](#Ghozali) the normality test is used to determine whether the confounding variables or residual values in the regression model have a normal distribution. Decision making in the normality test is seen from the Jarque-Bera probability value. If the probability of Jarque-Bera is greater than 0.05, then the data is considered normally distributed. However, if the probability of the Jarque-Bera Test is less than 0.05, the data is not normally distributed.

Multicollinearity test

Multicollinearity test aims to identify whether there is a relationship between independent variables in the study. The presence of correlation in the model is natural and unavoidable; therefore, the relationship between variables in the model can produce valid estimates. However, the correlation in question is not a linear correlation. As a result, if multicollinearity is perfect, the estimation process may fail and inference may experience difficulties [(Supiyanti: 2023).](#Supiyant) Multicollinearity symptoms on the data can be seen from the VIF value. If the VIF calculation result is less than 10, the model is declared free from multicollinearity symptoms. Conversely, if the VIF value is more than 10, this indicates serious multicollinearity in the regression model [(Digdowiseiso, 2017)](#Digdowiseiso).

Heteroscedasticity test

The heteroscedasticity test aims to analyze the distribution of data or to find out whether there is inequality in the regression model related to the residual variable between one observation and another [(Wisudaningsi et al.,2019)](#Wisudaningsi). One method that can be used to detect Heteroscedasticity is the Glejser test. Decision making is based on the probability value of Obs\*R-Squared; if the value is more than 0.05, this indicates that there is no heteroscedasticity problem. Conversely, if the probability value is less than 0.05, it indicates a heteroscedasticity problem [(Wahyuni & Andriyani, 2022).](#Wahyuni)

Autocorrelation test

Autocorrelation is a problem that arises when there is a relationship between observations. Autocorrelation occurs when consecutive observations in time are related. Regression that is free from autocorrelation is a good regression model [(Hasania, 2016)](#Hasania). The Breusch Godfrey statistical test, also known as the Lagrange Multiplier test (LM test), is one method used to detect autocorrelation. If the Obs\*R-Squared probability value is more than 0.05, this indicates that there is no autocorrelation, otherwise if the probability value is less than 0.05, there is an autocorrelation problem [(Bernanthos & Vera, 2019)](#Bernanthos).

*Parameter test*

Testing the best model parameters aims to determine the significance of the best model regression coefficients both simultaneously and partially. Parameter testing includes:

Coefficient of determination (R2)

Testing the coefficient of determination is used to assess the percentage contribution of the independent variable to the dependent variable. The range of the coefficient of determination value is between zero and one. The use of the adjusted R² value is a criterion, a value close to one indicates that the independent variable provides most of the information needed to estimate the dependent variable

F-test

The simultaneous significant test is used to determine whether the independent variables together have a significant effect on the dependent variable. Decision making is based on the prob F-statistic if it is smaller than 0.05 it is concluded that the independent variable simultaneously affects the dependent variable and vice versa.

t-test

Partial significant test is used to determine whether each independent variable has a significant effect or not on the dependent variable individually. Decision making is based on the prob t-statistic if it is smaller than 0.05 it is concluded that the independent variable simultaneously affects the dependent variable and vice versa.

1. **Results and Discussion**

***Statistical Result***

Classical assumption test

Normality test

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**Figure 2. Normality Test Result**

Source: Eviews 12 (data processed:2025)

Based on Figure 2, the probability value of the Jarque-Bera Test = 0.542896> 0.05 is obtained, so the data is normally distributed.

Multicollinearity test

**Table 3. Multicollinearity Test Results**

|  |  |  |  |
| --- | --- | --- | --- |
| **Variable** | **Coefficient Variance** | **Uncentered VIF** | **Centered VIF** |
| C | 2436270. | 11.91286 | NA |
| Inflation  | 78290.72 | 9.950587 | 1.659291 |
| Political Stability | 10412714 | 19.69907 | 1.659291 |

Source: Eviews 12 (data processed:2025)

Based on Table 3, the VIF value < 10 is obtained, so there is no multicollinearity.

Heteroscedasticity test

**Table 4. Heteroscedasticity Test Results**

|  |  |  |  |
| --- | --- | --- | --- |
| **F-statistics** | 1.678187 | **Prob. F(2,12)** | 0.2277 |
| **Obs\*R-Squared** | 3.278483 | **Prob. Chi-Square(2)** | 0.1941 |
| **Scaled explained SS** | 1.160053 | **Prob. Chi-Square(2)** | 0.5599 |

Source: Eviews 12 (data processed: 2025)

Based on Table 4, the probability value Obs \* R-Squared = 0.1941> 0.05 is obtained, so there is no heteroscedasticity.

Autocorrelation test

**Table 5. Autocorrelation Test Results**

|  |  |  |  |
| --- | --- | --- | --- |
| **F-statistics** | 2.839952 | **Prob. F(2,10)** | 0.1055 |
| **Obs\*R-Squared** | 5.433614 | **Prob. Chi-Square(2)** | 0.0661 |

Source: Eviews 12 (data processed: 2025)

Based on the test results, the probability value Obs \* R-Squared = 0.0661> 0.05 is obtained, so there is no autocorrelation problem.

Parameter test

The best model parameter testing aims to determine the significance of the best model regression coefficients both simultaneously and partially. Parameter testing includes:

Coefficient of determination (R2)

**Table 6. Coefficient of Determination Results**

|  |  |  |  |
| --- | --- | --- | --- |
| **R-squared** | 0.472175 | **Mean dependent var** | 12398.27 |
| **Adjusted R-squared** | 0.384204 | **S.D. dependent var** | 2231.936 |
| **S.E. of regression** | 1751.460 | **Akaike info criterion** | 17.95114 |
| **Sum squared resid** | 36111361 | **Schwarz criterion** | 18.09275 |
| **Log likelihood** | -131.6336 | **Hannan-Quinn criterion** | 17.94964 |
| **F-statistic** | 5.367398 | **Durbin-Watson stat** | 1.084520 |
| **Prob(F-statistic)** | 0.021624 |  |  |

Source: Eviews 12 (data processed: 2025)

Based on Table 6, the Adjusted R-Squared value is obtained = 0.384204.

F-test

**Table 7. F-Test Results**

|  |  |
| --- | --- |
| **F-statistic** | 5.367398 |
| **Prob(F-statistic)** | 0.021624 |

Source: Eviews 12 (data processed: 2025)

Based on Table 7, the Prob (F-statistic) value = 0.021624 <0.05, meaning that the independent variables are jointly significant in influencing the dependent variable.

T-test

**Table 8. t-Test Results**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Variable** | **Coefficient** | **Std. Error** | **t-Statistic** | **Prob.** |
| C | 17267.45 | 1560.856 | 11.06281 | 0.0000 |
| Inflation  | 37.39517 | 279.8048 | 0.133647 | 0.8959 |
| Political Stability | 8472.640 | 3226.874 | 2.625650 | 0.0222 |

Source: Eviews 12 (data proceed:2024)

Based on Table 8, the probability value for the Inflation variable is 0.8959, which is greater than 0.05. This means that the Inflation variable partially has no significant effect on the rupiah exchange rate variable. Conversely, for the stability variable with a probability value of 0.0222 <0.05, it shows that the political stability variable partially significantly affects the rupiah exchange rate variable.

***Discussion***

Relationship between inflation and Rupiah exchange rate

Based on the results of the previous t test, the probability value of the Inflation variable (X1) = 0.8959 > α = 0.05 with a coefficient of -37.3915. This means that the inflation variable is positive and has an insignificant effect on the rupiah exchange rate in the foreign exchange market.

The analysis results obtained are in line with the results of research conducted by [Gusmianto (2022)](#Gusmianto) dan [Fernanda Nayottama & Andrian (2022)](#Fernanda) but contradict research conducted by [Afriyanti & Prasetiyo (2021)](#Afriyanti) dan [Latifah & Michael (2022)](#Latifah). The results of the analysis obtained show that Inflation has a negative and significant effect on the rupiah exchange rate in Indonesia.

Political stability variable relationship to Rupiah exchange rate

Based on the results of the previous t test, the probability value of the political stability variable (X2) = 0.0222 < α = 0.05 with a coefficient of 8472.640. This means. Political Stability variable is positive and has a significant effect on the exchange rate of the rupiah currency in the foreign exchange market (Foreign Excange Market). This indicates that the higher the level of political stability, it will cause the rupiah exchange rate to appreciate by 8472.640 assuming other variables are in a ceteris paribus condition.

Political stability is defined as an assessment of the potential for instability or politically motivated violence in a country. This includes the possibility of irregular changes in government power, social disturbances, armed conflicts, demonstrations, acts of terrorism, international tensions, and external and internal conflicts [(Mina, 2012)](#Mina). Measures to assess the stability of a country involve consideration of standards of good governance, track record of constitutional order, respect for human rights, and the overall strength of democracy [(Basit & Haryono, 2021)](#Basit). The World Bank publishes the Political Stability Index. The calculation of this index includes an assessment of the transition of power, the government's ability to implement policies, and the interaction between the quality of government and potential threats that can disrupt and undermine stability, such as coups, instability, terrorism, and other factors [(Wahid, 2018)](#Wahid).

 Furthermore, according to [Nurhasanah (2022)](#Nurhasanah) in the World Governance Index, the potential risk of violence involves several aspects, namely: ***Protests and riots:*** Risks related to the possibility of damage to assets or injury to individuals due to the nature and impact of protests and riots. This is a major concern if such activities disrupt normal activities and business operations. ***Terrorism: A risk*** threat involving the activities of non-state armed groups or individuals that may cause property damage as well as result in death or injury due to acts of violence. In this context, the risk includes terrorism that uses violence or threats to achieve political goals, as well as similar tactics employed by organised crime for profit. ***Interstate war***: Risks associated with impacts such as death and damage to property and infrastructure, with the aim of changing government or occupation. Last, **Civil war:** The risk of armed conflict within a country, including organised insurgency, separatist conflict or full-blown civil war. In these situations, rebels seek to overthrow the government, achieve independence, or at least influence key government policies

1. **Conclusions**

Based on the results of simultaneous parameter testing, the results of the analysis obtained independent variables have a significant effect on the dependent variable, meaning that inflation and political stability variables together have a significant effect on the rupiah currency variable in the foreign exchange market in the foreign exchange market. While the results of partial parameter testing obtained the results of the analysis of the current account variable is negative and has an insignificant effect on the rupiah currency exchange rate variable in the foreign exchange market. Inflation variable is positive and has an insignificant effect on the rupiah currency exchange rate in the foreign exchange market. While the political stability variable is positive and has a significant effect on the exchange rate of the rupiah currency in the foreign exchange market.

The variability of the independent variable to explain the dependent variable is 0.384204, meaning that the inflation and political stability variables are able to explain any changes that occur in the rupiah currency exchange rate variable in the foreign exchange market by 38.4%. Then the remaining 61.6% is explained by other variables outside the model.

**Reference**

**Serial/journal article (online with DOI):**

Afriyanti, N., & Prasetiyo, L. (2021). Pengaruh Inflasi dan Pertumbuhan Ekonomi Terhadap Nilai Tukar Rupiah dalam Jangka Pendek dan Jangka Panjang Tahun 2010-2018. *Journal of Islamic Economics (JoIE)*, *1*(1), 24–40.

Bank of International Settlements. (2022). BIS Triennial Central Bank Survey 2022. *BIS Papers*, *October*.

Basit, A., & Haryono, S. (2021). Analisis Pengaruh Stabilitas Politik Dan Faktor Ekonomi Terhadap Indeks Harga Saham Gabungan. *Jurnal Aplikasi Akuntansi*, *5*(2), 220–237. Retrieved from https://doi.org/10.29303/jaa.v5i2.96

Bernanthos, B., & Vera, V. (2019). Analisis Penyusutan Aktiva Tetap Dan Penjualan Aktiva Tetap Terhadap Arus Kas. *Jurnal Akuntansi*, *13*(1), 99–113.

Castellani, D., Serti, F., & Tomasi, C. (2010). Firms in international trade: Importers’ and exporters’ heterogeneity in Italian manufacturing industry. *World Economy*, *33*(3), 424–457.

Christianingrum, R. (2019). The Effect of Macroeconomic Variables on Rupiah Exchange Rates. *Jurnal Budget*, *4*(1), 43–63. https://ejurnal.dpr.go.id/index.php/jurnalbudget/article/view/28

Digdowiseiso, K. (2017). Metode Penelitian Ekonomi dan Bisnis. In *Universitas Pendidikan Indonesia* (Vol. 1).

Fernanda Nayottama, M. R., & Andrian, T. (2022). Analisis Pengaruh, Neraca Transaksi Berjalan, Jumlah Uang Beredar, Inflasi, Suku Bunga, dan Utang Luar Negeri Terhadap Nilai Tukar di Indonesia. *Jurnal Impresi Indonesia*, *1*(12), 1289–1308. https://doi.org/10.58344/jii.v1i12.738

Ghozali, I. (2006). *Aplikasi analisis multivariate dengan program SPSS*. Badan Penerbit Universitas Diponegoro.

Gregory, M. N. (2007). Makro Ekonomi. *Edisi Keenam. Terjemahan. Penerbit Erlangga, Jakarta*.

Gusmianto, A. (2022). Analisis Pengaruh Jumlah Uang Beredar, Suku Bunga, dan Inflasi terhadap Nilai Tukar. *INTEGRAL: Jurnal Inovasi, Teknologi Terapan, Dan Litbang*, *1*(1), 45–62.

Hasania, Z. (2016). Pengaruh current ratio, ukuran perusahaan struktur modal, dan roe terhadap nilai perusahaan farmasi yang terdaftar di bursa efek indonesia periode 2011–2014. *Jurnal Berkala Ilmiah Efisiensi*, *16*(3).

Herawati, M. (2021). Analisis Perubahan Nilai Tukar Rupiah Akibat Peningkatan Inflasi, Tingkat Suku Bunga SBI dan Pertumbuhan Ekonomi (Studi Pada Bank Indonesia Periode 2008 – 2017). *Jurnal Ekonomi*, *23*(1), 20. https://doi.org/10.37721/je.v23i1.759

Latifah, S. L., & Michael, M. (2022). Pengaruh tingkat suku bunga dan inflasi serta neraca pembayaran terhadap kurs rupiah. *Jurnal Ilmu Ekonomi Mulawarman (JIEM)*, *7*(1).

Mina, W. M. (2012). The Institutional Reforms Debate and FDI Flows to the MENA Region: The “ Best” Ensemble. *World Development*, *40*(9), 1798–1809. https://doi.org/10.1016/j.worlddev.2012.04.026

Nurhasanah, E. (2022). Pengaruh Stabilitas Politik, Infrastruktur Telekomunikasi, dan Kebebasan Ekonomi Terhadap Arus Masuk Foreign Direct Investment (FDI): Studi Kasus di Negara ASEAN Plus Three (APT) Tahun 2002-2019. *Jurnal Ilmiah Mahasiswa Fakultas Ekonomi Dan Bisnis*, *10*(2).

Schumacher, R. (2013). Deconstructing the theory of comparative advantage. *World Social and Economic Review*, *2013*(2, 2013), 83.

Sujianto, A. E., Prakosa, A. S., Fadilla, C. Y., Vaganza, A., & Rohmah, N. Z. (2024). Neraca pembayaran dan nilai tukar. *Musytari: Neraca Manajemen, Akuntansi, Dan Ekonomi*, *5*(6), 111–121.

Supiyanti. (2023). *Belanja modal dan penanaman modal asing*.

Suryanto, S., & Kurniati, P. S. (2022). Analisis Perdagangan Internasional Indonesia dan Faktor-Faktor yang Memengaruhinya. *Intermestic: Journal of International Studies*, *7*(1), 104. https://doi.org/10.24198/intermestic.v7n1.6

Wahid, M. A. (2018). *Analisis Pengaruh Stabilitas Politik Dan Faktor Ekonomi Terhadap Jakarta Islamic Index (JII)*. Fak. Ekonomi dan Bisnis Uin Jakarta.

Wahyuni, S., & Andriyani, D. (2022). Pengaruh inflasi, jumlah penduduk dan pertumbuhanekonomi terhadapketimpangan pendapatan di provinsi Aceh. *Jurnal Ekonomi Regional Unimal*, *5*(1), 39–47.

Wisudaningsi, B. A., Arofah, I., & Belang, K. A. (2019). Pengaruh kualitas pelayanan dan kualitas produk terhadap kepuasan konsumen dengan menggunakan metode analisis regresi linear berganda. *Statmat: Jurnal Statistika Dan Matematika*, *1*(1), 103–116.