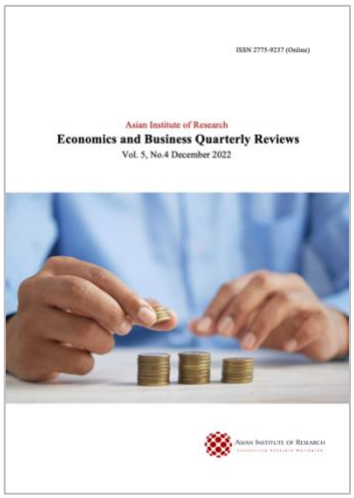

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Macroeconomic Factors and Current Account Deficit in Indonesia

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Abstract
This study aims at investigating the relationship between macroeconomic factors and Indonesia's current account deficit (CAD). This study employed time series data with up to 42 observations from 1980 to 2021. The vector error correction model (VECM) was implemented for data analysis because it can dynamically describe the short and long-term impacts of macroeconomic variables on the CAD. It is considered that macroeconomic variables that have the potential to determine the CAD are fiscal balance (FB), growth of GDP (GRGDP), inflation (INF), a real effective exchange rate (LNREER), terms of trade (TOT), and trade openness (TRADOP). The findings show that FB has no effect on the current account in the short and long-term. Meanwhile, lag 1 GRGDP, lag 1 INF, and lag 1 LNREER has a positive effect on the current account. On the other hand, TRADOP has a negative effect on the current account at lag 1 and TOT has a long-term positive effect. This study suggests that the government should optimize and synchronize economic policies and efforts to improve the current account performance.

Keywords: Fiscal Balance, Growth of GDP, Inflation Real Effective Exchange Rate, Terms of Trade, Trade Openness, Vector Error Correction Model

1. Introduction

Since the 2008-2009 financial crisis, followed by 2010-2013 European debt crisis and the COVID-19 pandemic in March 2020, several countries, including Indonesia, have experienced external imbalances. The current account position, which reflects a country's ability to export and import goods and services, can be used to identify external imbalance indicators.

The government has consistently emphasized the sustainability of the current account as it is often used as a barometer to measure a country's ability to support international transactions. In addition, a current account is also an indicator that influences market participants' sentiment. High and continuous external imbalances (particularly account deficits) must be monitored closely because they may cause a country's exchange rate to decline (currency

crisis), jeopardizing economic stability and exacerbating the burden of repaying foreign debts denominated in foreign currencies.

Indonesia frequently experiences budget and current account deficit (CAD) issues in terms of international trade. Indonesia's current account position fluctuated between surplus and deficit from 1980 to 2021. From 1980 to 1997, Indonesia's current account was in deficit but had been experiencing a surplus from 1998 to 2001. However, Indonesia experienced CAD during the 2012-2020 period. The imbalance was caused by the crisis in trading partner countries. It reduced the demand for Indonesian exports and resulted in weak export commodity prices, which increased CAD.

Due to the European debt crisis, Indonesia's export to Europe decreased from 11.77% in 2010 to 10.20% in 2013. During the 2010-2020 period, the lowest export to Europe was 10.06% in 2019. On the other hand, the domestic economy remains heavily reliant on imported goods, particularly raw materials. During the 2012-2020 period, the highest CAD occurred in 2013, reaching 3.19% of GDP. In 2014, CAD decreased by around 1% from the previous period, which was 3.09%.

The fiscal budget deficit is the cause of CAD in the trade of goods and services. This is similar with the conventional approach's twin deficit hypothesis. It states that fiscal deficit increase will also increase or burden the CAD (Salvatore, 2006). Studies on the FB factor have been conducted by several researchers (Altayligil & Çetrez, 2020; Bollano, 2015; Eita, 2019; Elhendawy, 2014; Garg & Prabheesh, 2017; Lin & Kueh, 2019; Neaime, 2015). These studies confirm the conventional approach's twin deficit hypothesis, showing that fiscal balance has a positive effect on the current account. Meanwhile, (Gossé & Serranito, 2014) found that fiscal balance does not affect the current account. The study supports the twin deficit Ricardian equivalence theory, which suggests that budget deficit and CAD have no relationship (Salvatore, 2006). According to the Mundell-Fleming approach, acceleration of budget deficit will increase CAD via saving, interest rates, capital inflows, and exchange rate variables (Salvatore, 2006).

Many researchers from various countries have been drawn to investigate the factors that influence the current account and current deficit. It was found that these factors include FB, private sector credit, oil prices, unemployment rate, consumer price index, exports and imports of goods and services, energy imports, trade openness, foreign direct investment, exchange rates, foreign direct investment (FDI), interest rates, and others.

Several studies also investigate macroeconomic factors, while others examine institutional and financial factors. Previous studies that linked macroeconomic variables to current account imbalances were conducted by (Bollano, 2015; Comunale, 2015; Cota et al., 2017; Das, 2016; Eita, 2019; Eita et al., 2018; Elhendawy, 2014; Gehringer, 2012; Gruber & Kamin, 2007; Gudmundsson & Zoega, 2014; Kim & Lee, 2008; Lin & Kueh, 2019; Neaime, 2015; Nyongesa & Mohamed, 2013; Oshota & Badejo, 2015; Yang, 2011). Meanwhile, according to (Altayligil & Çetrez, 2020; Chinn & Ito, 2007; Marzinotto, 2020; Putri, 2021; Schmitz & Hagen, 2011), current account determinants can be concluded by incorporating macroeconomic, institutional, and financial factors.

Referring to (Altayligil & Çetrez, 2020), the macroeconomic variables that can be used to determine current account imbalances include FB, GRGDP, INF, LNREER, TOT, and TRADOP. An increase in GRGDP will encourage goods exports to increase and it will increase the current account (narrowing the CAD). According to (Das, 2016), GRGDP has a positive effect on current account balances. The study divided the countries into three groups (developed, emerging, and developing economies) and a positive effect was found in emerging countries. The finding is similar to (Ugwu et al., 2021) and(Yurdakul & Cevher, 2015). (Altayligil & Çetrez, 2020) also found a positive sign of GRGDP in industrialized countries and a negative effect in high-income countries.

Inflation is another factor that can affect the current account as low inflationary pressure indicates macroeconomic stability and encourages capital inflows, which can increase the exchange rate. It is also explained that the appreciation of the domestic currency exchange rate reduces the value of exports by increasing the price of exported goods abroad, resulting in a decrease or widening of the CAD. On the other hand, (Altayligil & Çetrez, 2020) discovered that inflation positively influenced the current account, particularly in developing countries.

Meanwhile, inflation has a negative effect on the industrialized countries' current accounts. It was also revealed that inflationary factors negatively influenced on the current account (Caliskan & Dilek, 2015).

According to the Mundell-Flemming approach's conventional hypothesis, the exchange rate factor can influence current account. Real effective exchange rate increase or an appreciation of the exchange rate reduces the value of exports and causes a trade balance deficit, increasing or decreasing the CAD. Several studies also found that the real effective exchange rate negatively influenced on the current (Altayligil & Çetrez, 2020; Das, 2016; Gossé & Serranito, 2014) and a study found the opposite (Yurdakul & Cevher, 2015). Meanwhile, (Garg & Prabheesh, 2017) found that a real effective exchange rate has no impact on the current account, whereas, in the short run, it has a negative effect.

Another current account determinant is a term of trade (TOT) whose increase will influence the value of exports so that the current account will also increase. TOT's positive effect on current accounts was discovered by (Altayligil & Çetrez, 2020). On the other hand, (Hicham, 2019) revealed that TOT has no effect on current accounts in the full, high, middle, and low-income countries groups.

It was also found that the increase in trade openness will also increase export and import activities. Trade openness is defined conceptually as the removal of barriers to international trade through the elimination or reduction of tariffs and the increase of quotas. According to (Altayligil & Çetrez, 2020), trade openness has a negative effect on the current account. On the other hand, (Das, 2016; Romelli et al., 2018; Yurdakul & Cevher, 2015) concluded that the degree of economic openness positively influenced the trade balance and current account.

It can be inferred that there are result differences between the previously mentioned studies regarding the effect of macroeconomic variables on a current account. Hence, this study was conducted to confirm the effect of macroeconomic variables on a current account. Unlike (Lin & Kueh, 2019) who investigated ASEAN-6, the sample of this study is limited to a case study in Indonesia with 42 observations from 1980 to 2021 using a dynamic vector error correction model (VECM).

The goal of this study is to investigate the influence of fiscal balance (FB), growth of GDP (GRGDP), inflation (INF), a real effective exchange rate (LNREER), term of trade (TOT), and trade openness (TRADOP) on a current account. In this case, two study hypotheses were formulated. First, it is assumed that FB, GRGDP, INF, LNREER, and TOT have a positive effect on CAD. Second, it is hypothesized that TRADOP has a negative effect on CAD. By understanding the relationship and the influence of the CAD determinants, it is hoped that the government will coordinate policies and efforts to reduce CAD.

2. Method

This study employs quantitative methods. The data were time series from 1980 to 2021, with a total of 42 observations. The data were obtained from the Central Bureau of Statistics (BPS, *Badan Pusat Statistik*), World Bank (World Development Indicators), and International Financial Statistics. Next, the data in this study were analyzed employing EViews version 10 software.

Based on the hypotheses, the research model's specifications are as follows:
CA = f (FB, GRGDP, INF, LNREER, TOT, TRADOP)
Variables information and measurements are defined as follows:

Table 1: Variables and Measurement

Variable	Measurement
Current account deficit (CAD)	Current account balance, % of GDP
Fiscal balance (FB)	Fiscal balance, % of GDP
Growth of GDP (GR_GDP)	GDP growth (annual %)
Inflation (INF)	Inflation, consumer prices (annual %)

Real effective exchange rate (LNREER)	Natural real effective exchange rate logarithm $REER = ER\ x\ \frac{INF\ DN}{INF\ LN\ (USA)}$ Explanation: ER = exchange rate INF IDN = domestic inflation (Indonesia) INF USA = imported inflation (USA)
Term of trade (TOT)	The ratio of the price of exportable goods to the price of importable goods is represented by the terms of trade (TOT). $TOT = \frac{PX}{PM} x100\%$ Explanation: PX = export price index PM = import price index
Trade openness (TRADOP)	$TRADOP = \frac{X + M}{GDP} x100\%$ Explanation: X (% of GDP) = export (percentage of GDP) M (% of GDP) = import (percentage of GDP)

The time series vector error correction model (VECM) was used in this study. VECM was adopted to examine the long-term and short-term relationships between the independent and the dependent variables. The model was a restricted form of vector autoregression (VAR) because the data was cointegrated rather than stationary. Before VECM was employed, several procedures were conducted including testing the data stationarity, determining the optimal lag, and performing a cointegration test. It is explained that if the data is not stationary, the process is continued by developing a VECM model that will be tested for feasibility (Gujarati, 2009).

The following are the stages of a VECM analysis:
1. Stationarity test
2. Optimal lag determination test
3. Vector autoregression (VAR) stability test
4. Cointegration test
5. VECM test

2.1. Stationarity Test

The data stationarity test uses a unit root test to analyze the data unit roots. Non-stationary data is defined as having unit roots in the variable. Furthermore, the unit root test can be used to determine the order of integration to know the number of differentiation tests to be taken to make the data stationary. The Augmented Dickey-Fuller test (DF) test is one of several unit root test methods that are widely used.

The following is the stationarity test hypothesis:
H_0: $\delta = 0$ (unit root was found or Yt time series data is not stationary)
H_1: $\delta \neq 0$ (unit root was not found or Yt time series data is stationary)
If the p-value is higher than 5%, H_0 is accepted or the data is not stationary. On the other hand, if the p-value is lower than 5%, H_0 is rejected or the data is stationary. In this step, Augmented Dickey-Fuller (ADF) test was conducted using EViews software.

2.2. Optimal Lag Determination

Optimal lag determination is a method for concluding the lag length in a study before conducting the cointegration, Granger causality, VAR, and VECM tests. The determination of optimal lag is a critical step in the VAR model because the goal of the model is to see the behavior and relationship of each variable in the system. The Akaike

information criterion (AIC) is one of the most common methods for determining lag length, with the lowest AIC value obtained from the VAR estimation results with various lags indicating the best lag length to use. To achieve better results or avoid autocorrelation, the optimal number of lags must be chosen.

2.3. Vector Autoregression (VAR) Stability Test

The stability of the VAR must first be tested before progressing with further analysis. The VAR Stability test is performed by calculating the polynomial function's roots. If all of the roots of the polynomial function have an absolute value (modulus) less than one, the VAR model is said to be stable.

2.4. Cointegration Test

To continue the analysis of non-stationary time series data, the cointegration test is conducted. The cointegration test is based on the fact that some time series data can deviate from the average in the short term and they cannot deviate from the equilibrium in the long term (comovement or cointegration). For a longer period, the data is approaching a state of equilibrium in the long term and if several variables are moving together in the long term in the same order, the variables in the model can be considered to be cointegrated.

According to the economic interpretation, cointegration concerns with a long-run equilibrium where economic system intersects over time. If there is a shock in an economic system, there are forces that encourage the economy to recover to its equilibrium state in the long term.

There are several cointegration test approaches, such as Engel and Granger (1987), Johansen and Juselius (1990), and Johansen (1991). However, the Johansen approach is the cointegration test approach that is frequently used in the VECM method. The following are the hypotheses of Johansen's cointegration test:
H_0: $r = r^* < k$ (no cointegration relationship)
H_1: $r = k$ (cointegration relationship exist)

Analyzing the Trace statistics and the Max-Eigen statistics values and comparing them to each of the critical values can be done to determine the result. If the critical value at 1%, 5%, or 10% is higher than the Trace statistics or the Max-Eigen statistics values, the null hypothesis is accepted. On the other hand, the null hypothesis is rejected if the critical value at 1%, 5%, or 10% is lower than the Trace statistics and the Max-Eigen statistic values. In this study, the null hypothesis was not accepted, indicating that the equation under consideration has a cointegration relationship. Another method for analyzing the result is by examining the probability of each statistic. The null hypothesis is rejected if both values are lower than the critical value (1%, 5%, or 10%). If the Johansen approach test result shows that there is a cointegration relationship in the variable equation, VECM can be used to determine the long-term and short-term relationship. However, if the Johansen approach test result shows that there is no cointegration relationship in the variable equation, the method used is unrestricted vector auto-regression (Unrestricted VAR) rather than VECM.

2.5. Vector Error Correction Model (VECM) Test

The short and long-term connection between the independent and the dependent variables will be determined by the VECM test results. In this case, a t-test can be used to determine the significance of an effect by comparing $t_{statistic}$ to t_{table}. If $t_{statistic}$ is higher than t_{table}, it implies that the independent variable significantly influences the dependent variable. On the other hand, the model's feasibility can be tested by comparing p-values. If the p-value is higher than 0.05, the null hypothesis is accepted. It means that there is no residual autocorrelation or that the optimal lag has met the model's feasibility. The result of the long-term causality relationship analysis between the independent and the dependent variables of the VECM can be seen in the error correction term (ECT) coefficient, which is based on the sign and the results of the coefficient significance test using the ordinary least square (OLS) method.

3. Results

The results of the data stationarity test are shown in table 2.

Table 2: Stationarity Test Result

Data	P-Value	The Stationarity
CAD	0.0000***	1st Difference
FB	0.0000***	1st Difference
GRGDP	0.0000***	1st Difference
INF	0.0000***	1st Difference
LN REER	0.0000***	1st Difference
TOT	0.0000***	1st Difference
TRADOP	0.0000***	1st Difference

Source: processed data

Notes: CA= Current Account to GDP, FB=Fiscal Balance to GDP, GRGDP=Growth of Gross Domestic Product, , INF = Inflation,
LNREER= Log. Natural Reel Effective Exchange Rate (USD/Rupiah), , TOT= Terms of Trade , TRADOP= Trade Openess
The sign*, **, and *** indicate significance at the level of 10%, 5%, and 1%, respectively

The stationarity test shows that all variables are stationary in the first difference and significant at the 1% level. The next stage is to determine the optimal lag and the results can be seen in Table 3.

Table 3: Optimal Lag Result

Lag	LogL	LR	FPE	AIC	SC	HQ
1	-600.7304	NA	1725417.	34.19634	36.30796*	34.94764*
2	-546.2470	68.82118*	1618536.	33.90774	38.13099	35.41034
3	-479.7650	59.48393	1323668.*	32.98763*	39.32250	35.24153

Source: processed data

At the 5% level, the lag length was calculated using sequential modified LR statistics, final prediction error (FPE), Schwarz information criterion (SC), Akaike information criterion (AIC), and Hannan-Quin information criterion (HQ). The optimal lag was determined by choosing the most sequential modified LR test statistics or the fewest FPE values, AIC, SC, and HQ. Because there are three significant criteria, the maximum lag length used in this study is the third lag. Optimal lag length test results can be seen in Table 3. The results of the VAR stability are presented in Table 4.

Table 4: VAR Stability Test Result

Root	Modulus
-0.324145 - 0.760605i	0.826795
-0.324145 + 0.760605i	0.826795
0.112069 - 0.723817i	0.732442
0.112069 + 0.723817i	0.732442
-0.154846 - 0.671492i	0.689114
-0.154846 + 0.671492i	0.689114
0.364800 - 0.473700i	0.597888
0.364800 + 0.473700i	0.597888
-0.596008	0.596008
-0.406207 - 0.432947i	0.593672

-0.406207 + 0.432947i	0.593672
-0.170204 - 0.471232i	0.501028
-0.170204 + 0.471232i	0.501028
0.298903	0.298903

Source: processed data

VAR satisfies the stability condition.

These findings show that VAR is in a stable state because its modulus value is lower than one. Furthermore, Table 5 below is the result of the cointegration test.

Table 5: Cointegration Test Result

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.957963	256.3639	111.7805	0.0000
At most 1 *	0.657274	135.9338	83.93712	0.0000
At most 2 *	0.573932	95.24251	60.06141	0.0000
At most 3 *	0.419836	62.82258	40.17493	0.0001
At most 4 *	0.367893	42.13372	24.27596	0.0001
At most 5 *	0.282594	24.70324	12.32090	0.0003
At most 6 *	0.272376	12.08291	4.129906	0.0006

Trace test indicates 7 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

Based on the Johansen cointegration using trace test, seven cointegration equations were found. It is because the trace statistics value was higher than the critical value of 5% or the p-value was lower than 0.05, implying that the alternative hypothesis is accepted, as shown in Table 5.

From the Johansen cointegration test result, it was revealed that the equation contains a cointegration relationship and that the variable is stationary at the 2nd difference. This result allowed the VECM method to be taken to determine long-term and short-term relationships. Table 6 presents the VECM variables calculation results.

Table 6: VECM Estimation Results

Short-term		
Variabel	Coefficient	t-Statistic
CointEq1	-0.735817	-3.805838
D(CA(-1),2)	0.229612	0.545963
D(CA(-2),2)	-0.013758	-0.035793
D(FB(-1),2)	-0.287023	-0.704347
D(FB(-2),2	-0.304841	-1.441852
D(GRGDP(-1),2)	0.631570	2.291789**
D(GDP(-2),2)	-0.019265	-0.104422
D(INF(-1),2)	0.368417	2.356548**
D(INF(-2),2)	0.065746	0.781968
D(LNREER(-1),2)	0.288516	2.435119**
D(LNREER(-2),2)	0.068239	0.666421
D(TOT(-1),2)	0.043284	0.586728
D(TOT(-2),2)	-0.015062	-0.273607
D(TRADOP(-1),2)	-0.200119	-2.447813**
D(TRADOP(-2),2)	-0.026264	-0.400576

Long-term		
Variabel	Coefficient	t-statistik
FB(-1)	-0.371370	-1.95775
GDP(-1)	1.242490	10.5944**
INF(-1)	0.962750	16.4420**
REER(-1)	0.298053	3.35641**
TOT(-1)	0.050563	2.15285**
TRADOP(-1)	-0.531006	-16.9587**

Source: processed data

* Signifikan pada level 5% (critical value 1-tailed = 1.70329)

As presented in Table 6, four variables significantly affected the current account in the short-term, namely GRGDP at lag 1, INF at lag 1, LNREER at lag 1, and TRADOP at lag 1. However, it was found that the current account was unaffected by FB and TOT. Furthermore, except for FB, it was revealed that GRGDP, INF, LNREER, TRADOP, and TOT affected current accounts in the long run, particularly in lag 1.

4. Discussion

Table 6 presents four variables that have a significant effect on the CAD in the short term, including the error correction term (ECT). It was revealed that the four variables are significant at the 5% (1-tailed) level, with t_{table} of 1.70329. GRDP at lag 1, INF at lag 1, LNREER rate at lag 1, and TRADOP at lag 1 are the four variables. CAD is unaffected by FB or TOT. Furthermore, the significant error correction parameter demonstrates the existence of a mechanism for shifting from short-term to long-term balance. ECT value of 0.735817 indicates that short-term balance fluctuations will be corrected towards long-term equilibrium, with approximately 73.58% of the adjustment process occurring in the first year and the remaining 26.42% occurring in the following year. In the long-term, five variables have a significant effect on the CAD, which are GRGDP at lag 1, INF at lag 1, LNREER at lag 1, TOT at lag 1, and TRADOP at lag 1.

FB does not affect the CAD, both in the short-term and long-term. This finding does not support the conventional approach of the twin deficit hypothesis predicting that an increase in the government's deficit (budget) will increase the CAD. On the contrary, this finding supports the Ricardian equivalence hypothesis (REH) stating that CAD has no relationship with a budget deficit (Salvatore, 2006). This method demonstrates that the shifting of taxes and budget deficit does not affect real interest rates, investment, or current account balance. Due to the future tax burdens, reducing or cutting current taxes or increasing government spending will not affect the current consumption and investment. As a result, savings will grow to cover the increased future taxes. This finding also supports Gossé & Serranito (2014) who found that FB does not affect the current account.

GRGDP at lag 1 has a positive impact on the CAD both in the short and long-term. This finding also supports Altayligil & Çetrez (2020), Das (2016), Ugwu et al. (2021), Yurdakul & Cevher (2015). This positive effect indicates that economic growth based on energy and raw material imports will increase CAD.

It was found that INF at lag 1 positively influenced CAD, both in the short and long-term. This finding supports Altayligil & Çetrez (2020), especially in developing countries and full samples. High inflation will reduce competitiveness in foreign markets because the prices of export products are relatively more expensive so the value of exports will decrease and have an effect on increasing the CAD.

LNREER at lag 1 has a positive effect on the current account, both in the short and long-term. As a result, this finding supports Yurdakul & Cevher (2015). An increase in the real effective exchange rate indicates currency appreciation that can widen the trade balance deficit by increasing the value of imports while decreasing the value of exports, thus increasing the CAD. Similarly, a decrease in the real effective exchange rate indicates a depreciation of the currency that can narrow the trade balance deficit by increasing the value of exports and decreasing the value of imports, reducing CAD.

TOT at lag 1 does not affect CAD in the short-term. This finding also supports Hicham (2019). However, TOT has a long-term positive effect on CAD, which supports Altayligil & Çetrez (2020) who found that an increase in terms of trade increases CAD. If the export price rises concerning the import price, the term of trade value exceeds 100%. These results imply that that a country earns more in export than it spends on imports. On the other hand, a higher TOT will encourage more imports, particularly energy and raw materials. The high reliance on imported goods will exacerbate CAD.

This study also revealed that TRADOP has a negative long and short-term effect on the CAD, which supports Altayligil & Çetrez (2020). Trade openness reflects a reduction in policies that obstruct international trade, typically through lower tariffs or higher quotas. Trade openness also makes it easier for people to migrate internationally, and capital moves more freely between countries. According to the findings, trade openness has a negative effect on the CAD. This can be caused by a greater outflow of capital than the inflow of capital, causing the domestic currency to depreciate and the price of export goods to fall while the price of imported goods rises. This condition can potentially improve the trade balance and reduce the CAD.

Based on the discussion above, the following are the conclusions of the study:

1. High and continuous external imbalances (particularly account deficits) must be monitored closely because they may cause a country's exchange rate to decline (currency crisis), jeopardizing economic stability and exacerbating the burden of repaying foreign debts denominated in foreign currencies.
2. Fiscal Balance (a budget deficit) does not affect the current account deficit (CAD) in the short and long term. Tax reductions will not increase disposable income because the tax cuts are only temporary. Consequently, the current change in taxes does not affect current consumption and thus has no impact on aggregate demand. In addition, the decrease in government saving due to the tax reduction will be compensated by an increase in private saving by the same amount so that national saving is not affected. As a result, interest rates remain unchanged and there is no flow of capital. Consequently, there will be no effect on the current account deficit.
3. The positive influence of economic growth on increasing CAD in the short-term and long-term implies that economic growth will encourage increased imports. Imported-goods-based economic growth will exacerbate the current account deficit, which implies the significance of import substitution. Therefore, more domestic raw materials must be used in manufacturing activities.
4. Inflation has a short and long-term positive effect on CAD. This demonstrates that high inflation reduces competitiveness in foreign markets because the price of export products becomes relatively expensive. As a result, it will lower the value of exports and increase CAD. In this case, a tight monetary policy is important to control inflation. Furthermore, it is critical to maintain the supply of goods and strictly control the distribution of goods.
5. Real effective exchange rate positively influenced CAD on both terms. This exemplifies that an increase in the real effective exchange rate tends to make export goods more expensive and thus increase CAD. Therefore, it is critical to optimize the policy mix strategy to maintain exchange rate stability. For example, Bank Indonesia can intervene on the spot by selling foreign currency, strengthen international policies by expanding cooperation with central banks and other partner country authorities, and facilitate the implementation of investment and trade promotions in collaboration with relevant agencies.
6. Term of trade positively influenced CAD on the long-term. An increase in trade terms indicates a greater ability to pay for imported goods. On the other hand, increased trade terms will also encourage more imports. If export income is low, high reliance on imported goods will exacerbate CAD. As a result, it is critical to increase the quantity of high-value-added exports relative to commodity exports, which frequently experience price fluctuations in foreign markets.
7. Trade openness has a negative effect on CAD in the short and long-term. This can be caused by a greater capital outflow than capital inflow, causing the domestic currency to depreciate and the price of export goods to fall while the price of imported goods rises. These conditions can boost the trade balance and help to reduce CAD.

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