Implications of the Trade Balance on the Indonesia Composite Index

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Abstract- This paper aims to determine the effect of the Covid-19 scenario, the Rupiah Exchange Rate, on the Indonesia Composite Index via the Balance Of Trade. From September 2019 to August 2021, the variables employed in this study are the development of active Covid-19 (C-19) cases in Indonesia, as well as macroeconomic indicators such as the Rupiah Exchange Rate (ER), Balance Of Trade (BOT), and Indonesia Composite Index (ICI). The research approach used in this study is a quantitative descriptive study with the analytical tool WarpPls version 5.0. The obtained results prove that C-19 has a considerable adverse influence on BOT in Indonesia. The second finding is that ER has a significant favourable impact on BOT. Thirdly, C-19, ER, and BOT have a strong beneficial effect on ICI. The Sobel test established that BOT can mediate the effects of C-19 and ER on ICI. The research concludes that investors should monitor the evolution of C-19 and macroeconomic variables such as ER and BOT that substantially impact ICI movements before participating in the capital market.

Keywords: Covid-19, Exchange Rate, Balance Of Trade, Indonesia Composite Index

1. INTRODUCTION

For the majority of people, 2020 has been a challenging year. The World Health Organization (WHO) declared the Coronavirus Disease 19 (Covid-19) pandemic on March 9, 2020. As of August 31, 2021, over 217.2 million cases of COVID-19 had been identified in over 210 countries and regions, including Taiwan, Thailand, Japan, Singapore, Saudi Arabia, South Korea, Vietnam, Malaysia, India, Australia, Canada, Finland, Nepal, Sri Lanka, Cambodia, South Korea, Philippines, Finland, France, and Germany. Coronavirus cases were initially reported in Indonesia on March 2, 2020, and have since increased to as many as two. According to data from August 31 2021, there are over 4.1 million confirmed cases and 133.023 deaths (Ministry Of Health Of The Republic Of Indonesia, 2021). When the first case was detected in Indonesia, market sentiment shifted, as evidenced by the ICI's decline to 4,538.93 at the end of March 2020. This circumstance created havoc in the market, to the point where the Indonesian Stock Exchange (IDX)

had to implement many temporary trading freezes or halts. When the ICI falls by more than 5%, the trading halt is imposed 30 minutes. The drop in ICI from 6,200 to 4,500 in the last six months demonstrates that the pandemic is severe. However, the ICI is gradually regaining its 5,000-point level. The recovery of ICI was precipitated by the gradual opening of economic activity in several countries following the discovery of vaccines and immunization programs. In Indonesia, the government has moved to ease implementation restrictions on the Large-Scale Social Program (PSBB). The drop of daily Covid-19 infection cases in the country is a favourable stimulus for the domestic stock market to accelerate this year (https://www.cnbcindonesia.com).

According to Riki and Margana (2020), the COVID-19 pandemic will result in a deficit in Indonesia's trade balance, as several of Indonesia's export items to other trading partner countries will decline. However, this condition is distinct from the occurrence. Since April 2020, the Central Statistics Agency (BPS) has reported a trade balance surplus for 15 consecutive months. Indonesia had a trade

surplus of around USD 4.74 billion, or IDR 67.5 trillion (exchange rate of IDR 14,250 per US dollar). According to Sitompul & Siahaan (2020), there is a favourable correlation between the exchange rate and Indonesia's trade balance. This analysis contradicts previous findings that the exchange rate harms the trade balance. This means that as the currency rate appreciates (depreciates), the trade balance decreases (Nur'aini & Lumintang, 2019). According to Fatmasita's (2021) research, the Covid-19 pandemic has a negative and critical impact on ICI on the IDX. The Rupiah Conversion scale has a positive and essential effect on ICI on the IDX, and both Covid-19 and the Rupiah Conversion scale have a significant positive impact. They can account for 43.9 % of the ICI movement. Meanwhile, Indonesia's trade surplus of USD 19.17 billion between January and August 2021 propelled the ICI higher (https://investasi.kontan.co.id/). Three objectives guided this investigation. First, we will examine the impact of C-19 and ER on the balance of trade (BOT). Then, the influence of C-19, ER, and BOT on the Indonesia Composite Index (ICI) is determined. Finally, the role of the balance of trade in the relationship between C-19 and ER and the ICI is determined.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

The coronavirus-associated severe acute respiratory syndrome is contagious (Ahmed, 2021). According to earlier research, covid has a considerable negative influence on the Balance of Trade (Lal, 2021; Chong et al, 2021; Wang et al, 2021). In his research, Ahmed (2021) stated that covid has a positive correlation with BOT. Thus, hypothesis 1 is H1. C-19 has a considerable negative effect on the BOT exchange rate (ER). The exchange rate is when two or more different currencies are converted into one another (Suhadak, 2020). The greater the exchange rate, the more favorable the balance of trade (Oskooee, 2020). Ibrahim and Bashir's (2020) research concluded that exchange rates did not affect the trade balance. Thus, hypothesis 2 is: H2. ER has a favourable solid influence on BOT.

The balance of trade is calculated by dividing exports by imports. Increased net exports will impact the balance of payments. A healthy balance of payments will result in the country's economic conditions improving (Affandi, 2015). This is critical in recruiting global and domestic investors to the country. Previous research indicates that macroeconomic variables affect the Composite index (Amaliawati et.al, 2021; Sukmawati, 2021; Hussain, 2012; Ahmad and Ghazi, 2014)

According to previous research, the balance of trade does not affect the Indonesia Composite Index. Xiufang Wang, 2010) (Kusumawati, 2017; Xiufang Wang, 2010).

Index of Stock Prices Composite. Anoraga & Pakarti (2006) define the Composite Stock Price index as historical data indicating the price fluctuation of a company's shares in a particular listed company. The composite stock index serves as a reference point for investors when developing investing strategies. Previous research has established that the exchange rate has a favourable effect on the Composite Index (Sukmawati, 2021; Kumar & Patel, 2019; Natsir et al, 2019, Juliodinata et al , 2019). Previous research has established that the Balance of Trade affects the composite stock price (Fuad and Yuliadi, 2021; Novitasari, 2013). According to past studies, exchange rates significantly negatively impact the Composite Stock Price Index (Fuad and Yuliadi, 2021). Meanwhile, another study discovered that the trade balance does not affect the Composite Index (Kusumawati & Asandimitra, 2017). As a result of past research, the following hypotheses are made:

H4. Currency exchange rates have a measurable positive effect on the Composite Index.

H5. The Balance of Trade has a considerable beneficial effect on the Composite Index.

H6. Balance of trade can act as a mediating factor. Exchange rate concerning the Composite Index, Covid

3. RESEARCH METHOD

This research employed a quantitative descriptive design and the analytical tool WarpPls version 5.0. The data for this study came from secondary sources, including weekly reports issued by the Central Bureau of Statistics, the Financial Services Authority of the Republic of Indonesia, and the Ministry of Health of the Republic of Indonesia between September 2019 and August 2021. In this review, inspections were conducted using a purposive testing technique. The active instances of covid-19, the Rupiah exchange rate versus the US dollar, the trade balance, and the Indonesia Composite Index are used for this examination. The relapse investigation and path examination techniques were utilised in this study. The impact of the C-19 and ER factors on ICI was examined in this review, along with the effect of BOT as an intervening variable. The movement of the ICI index during the last two years is depicted in Figure 1 below:
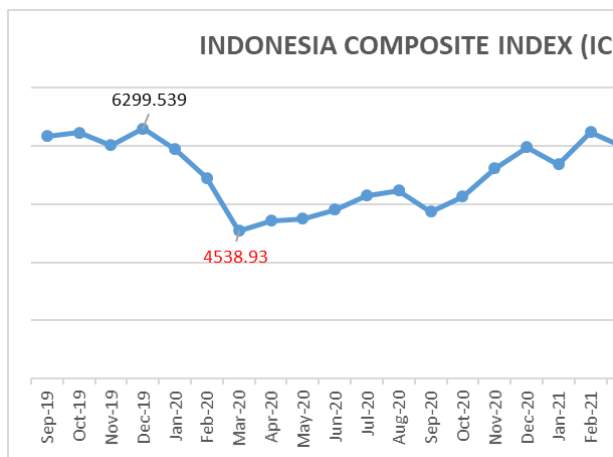
Fig. 1. Indonesia Composite Index Sep 2019-Aug 2020 (Source: Financial Services Authority of the Republic of Indonesia, 2021)

4. RESULTS AND DISCUSSION

The AVIF values of 1.067 and 1.594, as well as the GoF value of 0.615, indicating that this exploration model is fit. There is no multicollinearity between variables in the results of this study because the AVIF value is 1.067 and the AFVIF value is 1.594, both of which are less than 3.3. is enormous in comparison to 0.36. As seen in Table 2, the model used in this survey is exceptional because it is dependent on the normalization of thumb, which is 3.3. It implies that the model is free of upward, sidelong collinearity, and usual strategy inclination issues. Additionally, the exchange equilibrium was examined at R squared 0.204, which indicates that the impact of variations in Covid-19 and Exchange Rate on Balance of Trade is 20.4 %. In comparison, the remaining 79.6 % is governed by factors not included in the review. The modified R squared result for variations in the impact of Covid-19, the exchange rate, and the balance of trade on the Indonesia Composite Index is 0.551 or 55.1 %; the remaining 44.9 %is controlled by numerous factors not included in this inquiry model. The rule of thumb for surveying the fundamental model in this audit is that it should be in a strong class, where a changed R squared of 0.551 is more noticeable than an adjusted R squared of 0.25.

Table 1. Full Collinearity VIF, R Squared and Adjusted R squared tests

	C-19	ER	BOT	ICI
Full collinearity	1.193	1.856	1.058	2.074
R *squared*			0.204	0.551

Table 2. Path Coefficient and P-Value Results

Path	Coefficient	*P-value*
C-19 →BOT	-0.316	<0.001***
ER → BOT	0.271	0.003***
C-19 → ICI	0.426	<0.001***
ER → ICI	0.552	*<0.001***
BOT→ ICI	0.223	*0.011***
o	*Sig 1% Sig 5% Sig 10%*	

The test results for the primary hypothesis indicate that C-19 has a significant effect on the BOT, as evidenced by the C-19 coefficient value of - 0.316 and p-esteem 0.001, at which point theory one is accepted. To test the second hypothesis, the p-value of 0.003 and the BOT coefficient of 0.271 indicate that speculation 2 is correct. Thus, ER was shown to have a beneficial and statistically significant influence on BOT. Additionally, the positive and significant effect of C-19 on ICI (0.426 coefficient and p-value 0.001) implies that hypothesis 3 is accepted. Additionally, the coefficient value for the fourth hypothesis is 0.552, and the p-value is 0.001, indicating that hypothesis (H4) is acknowledged. The test findings suggest that speculation 5 is correct, with a coefficient of 0.223 and a p-value of 0.011. The Sobel test results demonstrate the effect of C-19 and ER on ICI. The result of testing the complete examination model, which depicts the causal link between factors, is shown in Figure 2, where C-19 and ER are independent variables and ICI is the dependent variable intervened by BOT.
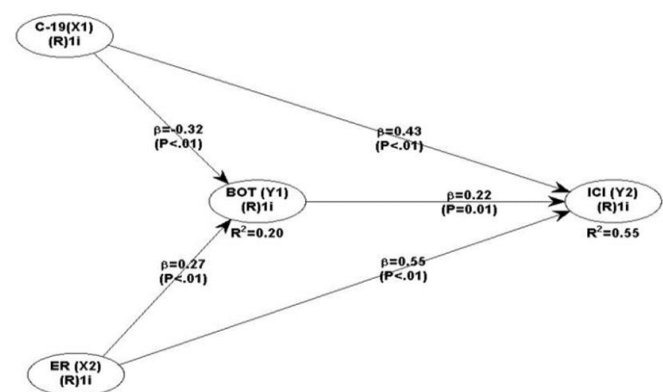

Fig. 2. Complete Research Model

Sobel Test

The Sobel test was used to determine whether or not the intervening variable could act as a substantial mediator in the relationship between the independent and dependent variables. The intervening variable has a significance level of 5% and a Sobel test value of greater than 1.660, indicating an indirect influence.
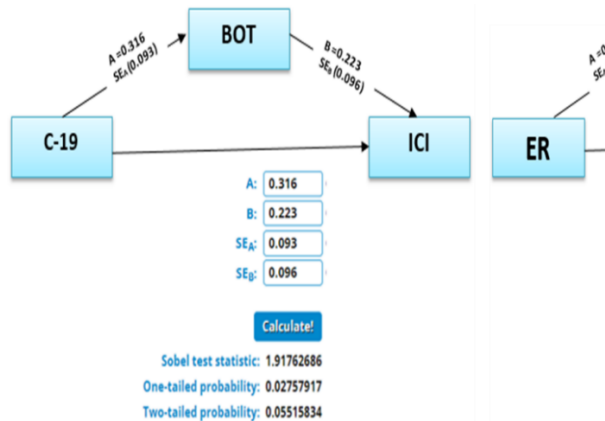
Fig. 3. Sobel Test (Source: Sobel Test's online calculator)

Covid-19 effects and Exchange Rate (ER) on the Indonesia Composite Index (ICI) via Balance of Trade (BOT) as an intervening variable is illustrated in Figure 3.

Indeed, the effect of Covid-19 (C-19) and Exchange Rate (ER) on the Indonesia Composite Index (ICI) via Balance of Trade (BOT) as an intervening variable is illustrated in Figure 3. The impact of the exchange rate (ER) on the Indonesia Composite Index (ICI) via the Balance of Trade (BOT) as an intervening variable obtained a z value of 1.80125448, indicating that the BOT variable can mediate the ER variable's influence on the ICI.

5. CONCLUSION AND RECOMMENDATION

The obtained results demonstrate that the variables affecting ICI are C-19, ER, and BOT. BOT has been shown to mediate the effect of variables C-19 and ER on ICI using the Sobel calculator. Additional analysts are proposed to search for a more extensive and more diverse population to provide a more explicit representation of the effect of C-19 and ER on ICI with BOT as an intervening variable. Similarly, it is critical to conduct a more in-depth study on other variables projected to affect the ICI via macroeconomic indicators.

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