

THE EFFECT OF BANK INDONESIA CERTIFICATES, COMPOSITE STOCK PRICE INDEX AND EXCHANGE RATE ON MUTUAL FUND PERFORMANCE FOR PERIOD OF 2012-2014

Rosalina Wahyuningtyas¹, Bambang Dwi Hartono²

¹Business & Tourism of PPPPTK Institution. ² University of Muhammadiyah Prof. Dr. Hamka, INDONESIA.

¹rosalinaw@yahoo.co.id, ²bdh_hartana@yahoo.com

ABSTRACT

The study aims to analyze the effect of Bank Indonesia (SBI) certificates composite stock price index (JCI), and exchange rate partially and simultaneously on the Performance of 10 mutual funds of Dana Investment Management company. The study adopted quantitative approach by using causal survey method. Secondary data were collected from data published by Bank Indonesia, the Indonesia Stock Exchange and Danareksa Investment Management company (Investment Manager) during the period of 2012 - 2014. Path analysis technique was employed to analyse the data. The research findings have shown that: SBI has a direct significant effect on JCI, SBI has a direct significant effect on exchange rate, JCI has a direct significant effect on Rupiah exchange rate. JCI and exchange rate do not have a direct effect on mutual fund performance, whereas SBI has a direct effect on mutual fund performance. SBI, JCI and exchange rate simultaneously affect directly on the performance of the fund. Mutual funds, stocks mixture, money market and fixed income are still stimulating and have potential to gain return as well as they have somewhat good performance. It is concluded that to determine interesting products, it must be in line with its objective and investor's ability to take risks. Thus, specific strategy is required for market fluctuation as to make investors discipline and assist them to invest.

Keywords. SBI, JCI, Exchange rate, mutual fund performance.

INTRODUCTION

Cited from Indonesia capital market (2014: 2) that during 2014, from January 2, 2014 until December 24, 2014 Net Asset Value Total (NAV) of Mutual Funds (either the public offering or limited investment) had grown by 21.49% from 219.12 trillion to 266.22 trillion IDR. NAV of Mutual Fund, which does public offering had increased by 24.61% from 192,54 trillion to 239,93 trillion IDR. While NAV of limited investment had decreased by 1.09% from 26.58 trillion to 26.29 trillion IDR. Up to December 29, 2014 there were 890 Mutual Funds, including 202 of them are effective. There were 79 limited investment mutual funds up to December 29, 2014. The 77 mutual funds are entirely managed by the investment manager and its assets are stored in 17 custodian banks. In addition to these indicators, the level of investor confidence in the investment fund industry also increases shown by the rising number of investment unit circulation. In January 2014, the 120.64 billion investment units are in circulation, rising to 143.20 billion on December 24, 2014, or increasing by 18.70%. This indicates investors do more subscriptions instead of doing redemption. This is reflected in net subscription amounting to 29.42 trillion IDR during the period. Capital market conditions and the improved macroeconomic bring a positive impact on the performance of the fund. Educational process also gives considerable influence to investors in understanding the product along with the risk of the Fund.

Due to a large number of investment options, the investors need to learn and compare each investment before investing. Although the policy of asset allocation sets vary, its principle has the same aim; giving higher investment returns with specific risks. Portfolio investment always has two opposite sides: profits and risks. The level of risk depends on asset allocation policy; how investment managers allocate funds in available asset classes and the amount of funds distribution. Securities' selection is very important for investors to be included in the portfolio. This stage requires the evaluation of securities.

The research showed the rate of inflation, SBI and JCI interest rates entirely had an effect simultaneously on the rate of return on equity funds. The inflation rate, SBI interest rate and JCI also partially affected on the return of mutual fund shares, whereas JCI was the most dominant variable on the return of equity funds shown by beta worth 0.404. So, the JCI variable has the most dominant and highest value among three independent variables. The independent variables affected the dependent variable by 18.1%, while other factors did not participate in the test at 81.9%. (Sholihat, Zulkirom & Topowijono, 2015).

METHOD

The fieldwork was conducted in Danareksa Investment Management Company, central Jakarta from January to July 2015. The study adopted causal survey method. 50 products of Danareksa Investment Management Company during the period of 2012 -2014 are population, which 10 samples were taken by employing purposive sampling, composing of five stocks, four fixed incomes and one balanced fund. The study used secondary data: NAV per unit for calculating the rate of return and investment risk, namely the risk-free asset data of SBI, the monthly stock index over the study period, and the rupiah against the US dollar.

FINDINGS AND DISCUSSION

The result of hypothesis testing of variable X_1 on X_2 partially

It shows there is an effect between SBI (X_1) and JCI (X_2) on 10 mutual funds Danareksa Investment Management company. It is indicated by coefficient p-value of 0.000, which is less than 0.05, and the t value of 8.328 is greater than the critical point 1.967.

The result reinforces Suramaya's finding (2012) that SBI interest rate has no effect on JCI partially in which regression coefficient value amounted to -15.779 with $t = -0.903$ and $p\text{-value} = 0.368$. Theoretically, the SBI interest rate and stock prices have a negative relationship (Eduardus,T., 2010: 205). Too high interest rate will affect the present value of the company's cash flow, so investment opportunities won't be attractive anymore. The high interest rates also will increase capital cost borne by the company. Based on interest rate, the loan or other investment payment rate over the repayment agreement is stated in annual percentage. Interest rates affect the individual's decision on spending or saving money in the banks. Then, the interest rate is determined by the interaction between supply and demand (Dornbusch, Fischer & Richard. 2008:43). The reduction trends of SBI interest rates is along with JCI increase. Monetary contraction which boosts interest rates can increase the cost of capital for companies. Additionally, an interest rate increase makes the value of deposits return and bonds become more attractive, so a lot of capital market investors divert its stock portfolio. Increased selling and lack of demand will lower stock prices and vice versa (Prastowo, 2008:15). The SBI interest rate development will lead to an increase and decrease of stock prices. If the interest rate of SBI tend to decrease, the investor will invest in shares. As the result, JCI will increase too. If the interest rate of SBI tend to increase, the investor will invest in SBI, so in this case JCI will experience a decline (Jones. 2004:85). The effect of

SBI on JCI indicates that interest rate increase imposed by Bank of Indonesia gives impact for shareholders or the capital market doers in the form of bonds and mutual funds overall. Low interest rates can attract investors to determine stock levels. SBI has a negative and insignificant effect on JCI. This shows that the interest rates increase has no impact for shareholders or investors of capital market. The effect of real interest rates on JCI indicates that the strengthening of the real interest rates may result in reduced value of JCI. This condition is in accordance with Jogiyanto (2010: 115) that an interest rate or deposit increase brings a negative impact on the capital market because investors are no longer interested to invest their funds in the stock market and total return received by investors is smaller than saving or deposit interest. Furthermore, stock prices in the stock market experiences a drastic decline and has an impact on JCI.

The result of hypothesis testing of variable X_1 on X_3 partially

It shows there is an effect between SBI (X_1) and Rupiah exchange rate (X_3) on 10 mutual funds Danareksa Investment Management company. It is indicated by coefficient p-value of 0.000, which is less than 0.05, and the t value of 42.807 is greater than the critical point 1.967.

Madura's theory affirmed that the SBI interest rate variable significantly affects the exchange rate. It means, SBI interest rate increase is along with a rise in rupiah exchange rate. It occurs because of the confidence crisis and the unstable political conditions, which cause foreign investors not interested to invest their funds in Indonesia. This condition results a decline in demand for foreign currency in the foreign exchange market. SBI interest rate significantly affects exchange rate, which means SBI interest rate is along with a rise in rupiah (2003: 126-135). In the interest rate channel, the change BI rate of SBI affects deposit rates and bank lending rates. When the economy slows down, Bank Indonesia may use expansive monetary policy through interest rate cuts to stimulate economic activity. The decline of BI Rate cuts their loan rates so that the credit demand from companies and households will rise. The decline of mortgage interest rates will also decrease the capital cost of company for investment. All of these will increase consumption's activity and investment as economic activity becomes more passionate. Conversely, when the pressure of inflation increases, Bank Indonesia will respond by the rise of BI Rate to slow down rapid economic activity as to reduce inflationary pressures. BI Rate changes can also affect the exchange rate. This mechanism is often called the exchange rate channel. BI Rate increase, for instance, will push up the difference between the interest rates in Indonesia and overseas interest rates. With the widening of interest rate differentials, encouraging foreign investors to invest in financial instruments in Indonesia such as SBI because they will get a higher rate of return. These foreign capital inflows will encourage appreciation of the rupiah exchange rate. The rupiah currency appreciation causes the lower price of imported goods and the higher price or less competitive of exported goods. As a result, it will encourage imports and reduce exports. The decline of net exports will have an impact on economic growth and the decline of economic activity. BI rate changes affect the macro economy through changes in asset prices. The increase of interest rates would lower the price of assets such as stocks and bonds. Thus, it will reduce the wealth of individuals and companies, which finally reduces their ability to engage in economic activities such as consumption and investment. The impact of changes in interest rates on economic activity also affects public expectations of inflation. Expected lower interest rates will stimulate economic activity and ultimately inflation encourages workers to anticipate a rising inflation by asking for higher wages. This wage will eventually be charged by the manufacturer to the consumer through price increase. The transmission mechanism of monetary policy works by requiring time (time lag), each of which can be

different pathways. Exchange rate channel normally works faster because the impact of interest rate changes to the exchange rate works very fast. The condition of the financial and banking sector is also very influential on the speed transmission of monetary policy. If banking sees the quite high-risk economy, its response to BI rate decrease is usually very slow. If banking does consolidation to improve capital, the decline in loan rates and credit demand is not necessarily responded by a rise of loan as well. On the demand side, the decline of bank loan rates is also not necessarily responded by rising credit demand from the public when the economic outlook is weak. In conclusion, the financial sector, the banking sector and the real sector have a significant role in determining the effectiveness of the transmission process of monetary policy.

The result of hypothesis testing of variable X_2 on X_3 partially

It shows that there is an effect between JCI (X_2) and exchange rate (X_3) on 10 mutual funds Danareksa Investment Management company. It is indicated by coefficient p-value of 0.000, which is less than 0.05, and the t value of 12.117 is greater than the critical point 1.967.

This reinforces Suramaya's finding (2012) that the rupiah exchange rate against the US dollar had a negative and significant impact on JCI with a regression coefficient of -0.081, $t = -4.331$ and $p = 0.000$. The results differ from previous research. Gupta, *et al*, (1997) found that the exchange rate has a low causal relationship with stock prices. Wangbangpo and Sharma (2002) found that the exchange rate had a positive correlation with stock prices in Indonesia, Malaysia and the Philippines. Otherwise, it had a negative correlation in Singapore and Thailand. The exchange rate affects positively to the return of all existing portfolios. (Kandir 2008). Rose's finding (1985) shows stock index decline in New York is due to the circulation of large amount of money, which results the obstruction of economic growth. While Tumanggor and Desy (1999) found that one of the triggering factors of JCI increase is the stability and the strengthening of rupiah against the US dollar. Pribadi and Jogiyanto (2002: 243-253) found that the rise of share prices in the stock market is the negative effect of the exchange rate, that is, if the rate increases, stock prices will also rise. The rise of interest rates results more attractive activities for domestic and foreign investors in the country. The capital investment tends to result the increased value of the currency that depends on the magnitude of the interest rate differentials in domestic and abroad. Thus, it is necessary to see which one is lower, inside or outside the country (Madura, 2003:123). Granger, *et al* (2000: 337-354) stated that different directions of the relationship between exchange rates and stock prices can be explained by traditional approaches and models of portfolio balance. The "portfolio balance" assumes that the shares as part of the wealth can affect the exchange rate behavior through the law of the demand for money which fits with the monetarist model of exchange rate determination. This approach assumes there is a negative relationship between stock prices and exchange rates, with the causality direction from the stock market to the money market which is in accordance with very rapid interaction of financial markets. This is because the relationship between the two markets occur in a short period of time. Eduardus (2010:210) asserted that the rupiah exchange rate showed a negative and significant effect on JCI. This indicates, the relationship between rupiah and stock prices is in the opposite direction. It means the stronger rupiah against the US dollar is, the more increase the stock price will be, and vice versa. Maryanti (2009: 14) states that the dollar exchange rate is one of the influential factors on the rise and fall of JCI. If dollar exchange rate is high, investors would prefer investing in the US dollar to investing in securities as investments in marketable securities are long-term investments and vice versa.

Deephouse (1985) has found that a strong foreign exchange rate will have an important effect against JCI in determining the policy of economic development.

The result of hypothesis testing of variable X_1 on Y partially

It shows there is an effect between SBI (X_1) and the performance of mutual fund (Y) on 10 mutual funds Danareksa Investment Management company. It is indicated by coefficient p-value of 0.010, which is less than 0.05, and the t value of -2.575 is smaller than the critical point 1.967.

Sholihat, Zulkirom and Topowijono (2015) showed the rate of inflation, SBI interest rates and JCI entirely affected on the return of equity funds simultaneously. The inflation rate, interest rate of SBI and JCI also partially affected on the return of equity funds, while the most dominant variable on the return of equity funds is JCI, shown by beta worth 0.404. Thus, the variable of JCI is the most and the highest dominant value among the three independent variables. In this study, the independent variables affected the dependent variable by 18.1%, whereas other untested factors were at 81.9% explained by other variables outside of the three independent variables. The effect of SBI interest rate on the level of fund performance showed positive results. In other words, the net profit obtained by the company is more likely due to rising interest rates of SBI. Consequently, many companies invest in SBI since its return is high enough with lower risks. This leads to inconsistent effect of SBI interest rate on mutual fund performance, especially equity funds.

The result of hypothesis testing of variable X_2 on Y partially

It shows that JCI (X_2) doesn't affect mutual fund performance (Y) on 10 mutual funds Danareksa Investment Management company. It is indicated by coefficient p-value of 0.875, which is greater than 0.05, and the t value of 0.157 is smaller than the critical point 1.967.

Unaffected condition of JCI on mutual fund performance could be caused by pessimistic market conditions. Furthermore, the performance of stock market and mutual funds doesn't meet the expectation of many investors whose majority use portfolio shares. Propelling performance of mutual fund shares particularly is bolstered by the growth of JCI, which then escalates the average return of mutual funds using portfolio shares, by noticing the return of each equity fund and balanced funds. The low growth of JCI gives an impact to the decrease of mutual fund and portfolio stocks. Various positive sentiments both globally and domestically have supported the improvements of Indonesian stock market performance which ultimately affect mutual fund performance. The rise of JCI shows most or all of the shares have a rise. Conversely, the decrease of JCI shows that most or all of the stock have a decline. It shows JCI increase will affect positively on equity fund return. By contrast, the decrease of JCI will negatively affect equity fund return. (Manurung and Raharja, 2004: 24-29).

Notionally, the performance and the returns of mutual funds, mainly equity funds has increased slightly or stagnant. However units of equity participation in several equity fund products have declined. There is likely a possible transfer of customer portfolio allocation from equity funds into bond or balanced funds. Investor perception of JCI is already so high that they shift the portfolio investment of mutual funds and it occurs in most industries. Its transfer is a usual thing since the investment of mutual fund refers to the moment when they make an initial investment. Whereas mutual fund investment has a long-term investment horizon. One thing needs to be socialized by the investment manager is that the mutual fund of investment horizon should be long term. Another thing to note for investors is the adjustment of long-term investments with their risk profiles.

The result of hypothesis testing of variable X_3 on Y partially

It shows that exchange rate (X_3) doesn't affect mutual fund performance (Y) on 10 mutual funds Danareksa Investment Management company. It is indicated by coefficient p-value of 0.398, which is greater than 0.05, and the t value of 0.846 is smaller than the critical point 1.967. According to Levi (2005: 122-130), this thing can happen because there are three factors affecting the exchange rates are: 1) Term of trade and the amount of trade: Terms of trade effects concern export versus import prices. Where the exports and imports are different products. The price of a country's exports relative to the price of its imports is called the country's terms of trade. A country's terms of trade are said to improve when the price of its exports increases relative to the price of its imports; 2) Inflation: Exchange rates are also influenced by inflation which affects the competitiveness of one country's products versus the same products from another country; 3) Foreign investment: Foreign investment in a country represents a demand for the country's currency when that investment occurs. Therefore, foreign investment in a country, whether it be direct investment, portfolio investment, or addition to bank deposits of nonresidents, shifts the demand curve for the country's currency to the right. Similarly, investment abroad by a country's residents represents a supply of the country's currency and shifts the currency supply curve to the right.

The result of hypothesis testing of variable X_1, X_2, X_3 on Y

Simultaneously, three variables of SBI (X_1), composite stock price index (X_2) and Rupiah exchange rate (X_3) affect significantly the performance of mutual fund (Y). It is indicated by the value of $F = 7.323$ and p-value = 0.000 less than 0.05. It is likely that the three variables move together in the same direction and they are correlated and interacted one another as well.

CONCLUSION

The key findings of this study demonstrate the important effect SBI has on JCI, exchange rate, and mutual fund performance partially, and JCI on exchange rate partially. However there is no effect of mutual fund performance on JCI. The effect of SBI, JCI and exchange rate on mutual fund performance simultaneously. These findings have important implications for investors. First, down or rising interest rates can influence trading on the stock market. When interest rates rise, investors prefer to invest their money in the bank or SBI. Secondly, one of the main indicators reflecting the capital market performance is whether JCI has experienced an increase or decrease. Thirdly, exchange rate is a macroeconomic variable influencing stock price volatility. The domestic currency depreciation will increase export volumes. Fourthly, Investment aims to gain profit with a certain risk level. The objective of portfolio investment is to diversify the risks in order that the funds have minimum risks. The more investment instruments are included in the portfolio, the lower the risks are.

REFERENCES

- [1] Deephouse, D. L. (1985). Using a trade-weighted currency index. *Federal Reserve Bank of Atlanta Economic Review*, 36–41.
- [2] Dornbusch, R., Fischer, S., & Richard S. (2008). *Makro ekonomi*. Translated by Roy Indra Mirazudin. Jakarta: PT Media Global Edukasi.
- [3] Eduardus, T. (2010). *Portofolio dan investasi*. Yogyakarta: Kanisius.

- [4] Granger, C. W. J., Huang, B. N., & Yang, C. W. (2000). A bivariate causality between stock prices and exchange rates: Evidence from recent Asian flu. *Quarterly Review of Economics and Finance*, 40, 337-354.
- [5] Gupta, H., Harinarayan, V., Rajaraman, A., & Ullman, J. D. (1997). Index selection for OLAP. In A. Gray & P.A. Larson, (Eds.), *Proceedings of the 13th International Conference on Data Engineering (ICDE)*, 208-219. Birmingham, UK: IEEE Computer Society.
- [6] Jogiyanto, H. (2010). *Teori portofolio dan analisis investasi*. Yogyakarta: BPFE.
- [7] Jones, C. P. (2007). *Investment: Analysis and management*. New York: John Wiley & Sons, Inc.
- [8] Kandir, S.Y. (2008). Macroeconomic variables, firm characteristics and stock returns: Evidence from Turkey. *International Research Journal of Finance and Economics*, 16, 35-45.
- [9] Levi, M. D. (2005). *International finance*. New York: Routledge
- [10] Madura, J. (2003). *Financial markets and institution*. Florida: Thomson Learning TM Publisher.
- [11] Manurung, A. H. (2003). *Memahami seluk beluk investasi*. Jakarta. PT. Adler Manurung.
- [12] Manurung & Raharja. (2004). *Teori ekonomi makro*. Jakarta: FEUI.
- [13] Maryanti, S. (2009). Analisis Pengaruh Tingkat Bunga SBI dan Nilai Kurs Dolar AS Terhadap Indeks Harga Saham Gabungan (IHSG) (Studi Pada Bursa Efek Jakarta). *Pekbis Jurnal*, 1.
- [14] Prastowo. (2008). *Dampak BI Rate Terhadap Pasar Keuangan: Mengukur Signifikansi Respon Instrumen Pasar Keuangan Terhadap Kebijakan Moneter*.
- [15] Pribadi & Jogiyanto. (2002). Hubungan Dinamis antara Indeks Harga Saham dan Nilai Tukar dalam Masa Krisis Ekonomi di Indonesia. *Simposium Nasional Akuntansi* 5, 243-253.
- [16] Rose, S. A., Randolph., & Jeffrey. (2005). *Corporate finance*. New York: McGraw-Hill.
- [17] Sholihat, M. Z., & Topowijono. (2015). Pengaruh inflasi, tingkat suku bunga sertifikat bank Indonesia & index harga saham gabungan terhadap tingkat pengembalian reksadana saham. *Jurnal Administrasi Bisnis (JAB)*, 21 (1).
- [18] Suramaya. (2012). Pengaruh inflasi, suku bunga, kurs, dan pertumbuhan PDB terhadap indeks harga saham gabungan. *Jurnal Economia*, 8 (1), 53-64.
- [19] Tumanggor., & Desy. (1999). Analisis Pergerakan IHSG di Tahun 1999 Berdasarkan Pendekatan Metode Arima dan Faktor Makro Sebelum dan Pasca Pemilu 7 Juni 1999. *Jurnal Management*.
- [20] Wangbangpo, P., & Sharma, S. C. (2002). Stock market and macroeconomic fundamental dynamic interactions: ASEAN-5 countries. *Journal of Asian Economics*, 13, 27-51.