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The impact of long-term interest, short-term interest, and exchange for price

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Abstract

This study examines and proves the effect of the long-term interest, short-term interest, and exchange on the formation of price activity in Europe in 2014-2018. The issues to be discussed are about the variables that affect the formation of the price activity Europe in 2014-2018. The purpose of this study is to prove the effect of the long-term interest, short-term interest, and exchange on the formation of price activity in Europe in 2014-2018. To analyze and prove this hypothesis, an empirical test was conducted in the form of Q Square prediction with WarpPLS 7.0 on the magnitude of the influence of the short-term interest, long-term interest, and

exchange level. The method used in data collection is a combination of secondary data derived from European Statistical Recovery Dashboard data. The method used to analyze the data is the time series data method. The results showed that the short-term interest indicator had a negative effect on the formation of the price activity. Long-term interest variable is an independent variable that also has negative effect on the formation of price activity. The exchange variable is an independent variable that has a positive and significant effect on the total Price Activity.

Keywords: Short-term Interest, Long-term Interest, Exchange, Price

1. Introduction

A price is that the (usually not negative) quantity of payment or compensation given by one party to a different reciprocally for one unit of products or services. A price is influenced by production costs, supply of the specified item, and demand for the merchandise. A price could also be determined by a monopolist or could also be imposed on the firm by market conditions. In modern economies, prices are generally expressed in units of some sort of currency. (For commodities, they're expressed as currency per unit weight of the commodity, e.g. euros per kilogram or Rands per KG.) Although prices might be quoted as quantities of other goods or services, this type of barter exchange is never seen. Prices are sometimes quoted in terms of vouchers like trading stamps and air miles. In some circumstances, cigarettes are used as currency, for instance in prisons, in times of hyperinflation, and in some places during war II. During a black free enterprise, barter is additionally relatively common. In many financial transactions, it's customary to quote prices in other ways. The foremost obvious example is in pricing a loan, when the value are going to be expressed because the percentage rate of interest. The entire amount of interest payable depends upon credit risk, the loan amount and therefore the period of the loan. Other examples are often found in pricing financial derivatives and other financial assets. as an example the worth of inflation-linked government securities in several countries is quoted because the actual price divided by an element representing inflation since the safety was issued. "Price" sometimes refers to the number of payment requested by a seller of products or services, instead of the eventual payment amount. This requested amount is usually called the selling price or asking price, while the particular payment could also be called the transaction price or traded price. Likewise, the price or buying price is that the quantity of payment offered by a buyer of products or services, although this meaning is more common in asset or financial markets than in consumer markets. Economic price theory asserts that during a free free enterprise the market value reflects interaction between supply and demand: the worth is about so on equate the number being supplied which being demanded. In turn, these quantities are determined by the utility of the asset to different buyers and to different sellers. Supply and demand, and hence price, could also be influenced by other factors, like government subsidy or manipulation through industry collusion. When a commodity is purchasable at multiple locations, the law of 1 price is usually believed to carry. This essentially states that the value difference between the locations can't be greater than that representing shipping, taxes, other distribution costs and more. Interest is that the monetary charge for the privilege of borrowing money, typically expressed as an annual percentage rate (APR). Interest is that the amount of cash a lender or financial organization receives for lending out money. Interest also can ask the quantity of ownership a stockholder has during a company, usually expressed as a percentage. An exchange may be a marketplace where securities, commodities,

derivatives and other financial instruments are traded. The core function of an exchange is to make sure fair and orderly trading and therefore the efficient dissemination of price information for any securities trading thereon exchange. Exchanges give companies, governments, and other groups a platform from which to sell securities to the investing public.

2. Literature Review

2.1 Price

Price is that the amount of cash charged for a product or a service. But there must be quite that. what's a price really? Speaking broadly, the worth is that the sum of all the values that a customer gives up to realize the advantages of getting or employing a product or service. Thus, customers exchange a particular value for having or using the merchandise – a worth we call price. Historically, price has been the main factor affecting buyer choice. However, in recent decades, non-price factors have gained increasing importance. Yet, the worth remains one among the foremost important elements of the marketing mix. it's going to determine considerably of a firm's market share and its profitability. deserve note is that the incontrovertible fact that the worth is that the only element within the marketing mix that produces revenue. All other elements, in fact, represent costs: the merchandise must be developed and produced, the place means facility and transportation costs, and promotion is expensive anyway. Also notable: the worth is one among the foremost flexible marketing mix elements. While product features and channels, as an example, are rather inflexible, prices are often changed quickly to satisfy changing conditions. doubtless, prices have an immediate impact on the firms profitability. And even more important: the worth is a component of the firm's overall value proposition. Prices play a key role in creating customer value and building customer relationships. So, price is such a lot quite only the quantity of cash charged for a product.

2.2 Short-term Interest

Short-term interest rates are the rates at which short-term borrowings are effected between financial institutions or the rate at which short-term government paper is issued or traded in the market. Short-term interest rates are generally averages of daily rates, measured as a percentage. Short-term interest rates are based on three-month money market rates where available. Typical standardised names are "money market rate" and "treasury bill rate".

2.3 Long-term

Long-term interest rates refer to government bonds maturing in ten years. Rates are mainly determined by the price charged by the lender, the risk from the borrower and the fall in the capital value. Long-term interest rates are generally averages of daily rates, measured as a percentage. These interest rates are implied by the prices at which the government bonds are traded on financial markets, not the interest rates at which the loans were issued. In all cases, they refer to bonds whose capital repayment is guaranteed by governments. Longterm interest rates are one of the determinants of business investment. Low long-term interest rates encourage investment in new equipment and high interest rates discourage it. Investment is, in turn, a major source of economic growth.

2.4 Exchange

A marketing exchange is what happens any time two or more people trade goods or services. In marketing theory, every exchange is supposed to produce "utility," which means the value of what you trade is less than the value of what you receive from the trade. Of course, all exchanges in the real world are much more complicated. Marketing theorists consider exchange to be the central concept without which there would be no such thing as marketing. For an exchange to happen, both parties have to have something of value for each other. For instance, a man visiting a coffee shop might have enough money to buy a cup of coffee while the cafe has the coffee. Both parties must be able to communicate with each other, and both must want to exchange something and be able to do so.

3. Method

This study uses secondary data which consists of country data from Belgium, Bulgaria, Czechia, Denmark, Germany, Estonia, Ireland, Greece, Spain, France, Croatia, Italy, Cyprus, Latvia, Lithuania, Luxembourg, Hungary, Malta, Netherlands, Austria, Poland, Portugal, Romania, Slovenia, Slovakia, Finland, Sweden, United Kingdom, Iceland, Norway, and Switzerland. And data from these countries are obtained from the European Union financial data. All existing data are collected and can be used as data in this study. Analysis with SEM Warp PLS 7.0 software still requires several suitability indices to measure the correctness of existing indicators.

4. Result and Discussion

4.1 Result

4.1.1 Goodness of fit model test

The model fit indicator is based on three indicators; the mean path coefficient (APC), the R-Squared average (ARS) and the mean variance inflation factor (AVIF). P values are given for both the APC and ARS indicators calculated by resampling estimation and Bonferroni correction (Sholihin & Ratmono, 2013). The results show:

Average path coefficient (APC)=0.143, P=0.025

Average R-squared (ARS)=0.072, P=0.104

Average adjusted R-squared (AARS)=0.049, P=0.146

Average block VIF (AVIF)=1.014, acceptable if ≤ 5 , ideally ≤ 3.3

Average full collinearity VIF (AFVIF)=1.023, acceptable if ≤ 5 , ideally ≤ 3.3 Tenenhaus

GoF (GoF)=0.268, small ≥ 0.1 , medium ≥ 0.25 , large ≥ 0.36

Sympson's paradox ratio (SPR)=1.000, acceptable if ≥ 0.7 , ideally = 1

R-squared contribution ratio (RSCR)=1.000, acceptable if ≥ 0.9 , ideally = 1

Source: Result Test of Warp PLS (2020)

Thus, the APC and ARS values are significant at the alpha level below 5% and the AVIF value below the 5 value, indicating that the model is suitable.

4.1.2 Analysis on the test of qualitative data

Of the 124 questionnaire data distributed, it is used as an indicator of convergent validity which is part of the

measurement model in SEM-PLS. The output is expected to show the construction on the column and the indicator on the existing row, the following results are obtained:

* Combined loadings and cross-loadings *
LTI_X1 STI_X2 EXC_X 3 price_Y Type (a SE P value

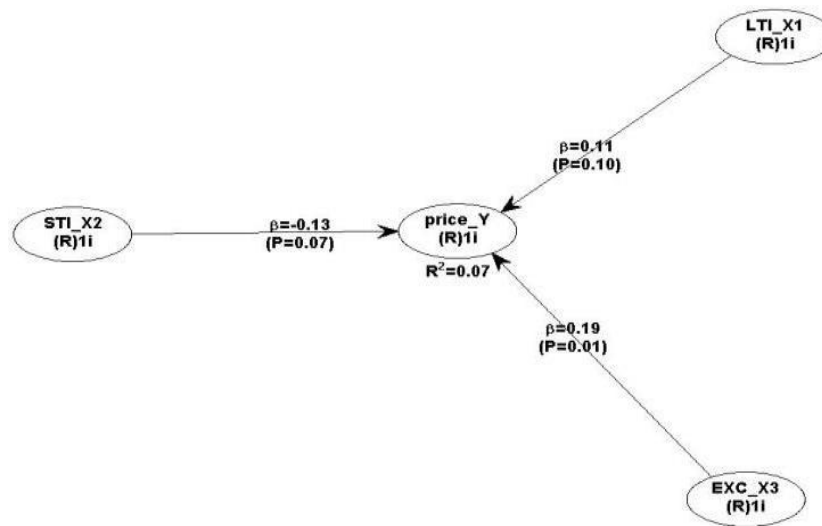
Table 1

X1	1.000	-0.000	0.000	0.000	Reflect	0.070	<0.001
X2	-0.000	1.000	-0.000	0.000	Reflect	0.070	<0.001
X3	-0.000	-0.000	1.000	-0.000	Reflect	0.070	<0.001
Y	0.000	-0.000	0.000	1.000	Reflect	0.070	<0.001

Notes: Loadings are unrotated and cross-loadings are oblique-rotated. SEs and P values are for loadings. P values < 0.05 are desirable for reflective indicators. Source : Result Test of WarpPLS (2020)

4.1.3 Hypothesis Testing

The results of hypothesis testing on the data above are that short-term interest and longterm interest have no or no effect on price activity. And only exchange has an effect and has a more impact on product price. To test the partial regression coefficient individually from each independent variable can be seen in the following figure:



Source: Warp PLS result test (2020)

Fig 1: Testing Result WarpPLS 7.0 (2020)

4.2 Discussion

Based on goodness fit of model test Statistical suppression ratio (SSR)=1.000, acceptable if ≥ 0.7 . Nonlinear bivariate causality direction ratio (NLBCDR)=0.833, acceptable if ≥ 0.7 . Thus, the APC and ARS values are significant at the alpha level below 5% and the AVIF value below the 5 value, indicating that the model is suitable. Based on the Analysis on the Test of Qualitative Data results, it shows that the external model does not meet the convergent validity requirements. The reflective construct and significant p value < 0.05 indicated that the outer model did not meet the convergent validity of the reflective construct. The results of hypothesis testing on the data above are that short-term interest and long-term interest have no or no effect on price activity. And only exchange has an effect and has a more impact on product price. From the results of the above discussion that short-time interest and long-term interest have no or no effect on income from Price product or price activity. If we pay further attention to the reason that these three factors have no effect or only have a slight impact, it is because, like long-term interest and shortterm interest, in fact, countries in the world have a different interest ratio, so that it does not really affect price activity. An interest rate is the amount of interest due per period, as a proportion of the amount lent, deposited or borrowed (called the principal sum). The total interest on an amount lent or borrowed depends on the principal sum, the interest rate, the compounding frequency, and the length of time over which it is lent, deposited or borrowed. The interest rate in an economy determined of the strength of the economy and the

willingness to save, the rate of inflation, the riskiness of the borrower, the tax treatment of the interest, and the time period of the loan. Long-term rates are not always higher than short-term rates, however. Expectations also influence the shape of the yield curve. Suppose, for example, that the economy has been booming and the central bank, in response, chooses a restrictive monetary policy that drives up interest rates. To implement such a policy, central banks sell short-term bonds, pushing their prices down and interest rates up. Interest rates, short term and long term, tend to rise together. But if bond investors believe such a restrictive policy is likely to be temporary, they may expect interest rates to fall in the future. In such an event, bond prices can be expected to rise, giving bondholders a capital gain. Thus long-term bonds may be particularly attractive during periods of unusually high short-term interest rates, and in bidding for these long-term bonds, investors drive their prices up and their yields down. It is defined as the proportion of an amount loaned which a lender charges as interest to the borrower, normally expressed as an annual percentage. It is the rate a bank or other lender charges to borrow its money, or the rate a bank pays its savers for keeping money in an account. Much of the discussion of exchangerate systems concentrates on the costs of fixed rates and concludes that since these are high, flexible rates are superior. In domestic discussion there is little question that the benefits of money outweigh the costs. In the international economy, the benefits of international money are seldom considered at all. It is recognized that the exchange market has the task of effecting payments between national currencies; with the price free to move under flexible rates, it

is usually felt that the exchange market functions more efficiently under flexible than under fixed rates. The case for money in the domestic economy - its function as a medium of exchange, unit of account, store of value and standard of deferred payment, to use the old-fashioned textbook list, is not applied internationally.

5. Conclusion

Short-term interest (X1), long-term interest (X2), have no effect on price (Y). So that the European Union countries must intensify activities on these three indicators. And keep exchange (X2) in order to keep increasing.

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7. References

1. European Statistical, <https://ec.europa.eu/eurostat/data/browsestatistics-by-theme>
2. Jawaid, Syed Tehseen, UL HAQ, Anwar. Effects of interest rate, exchange rate and their volatilities on stock prices: evidence from banking industry of Pakistan. *Theoretical & Applied Economics*. 2012; 19:8.
3. Fornari, Fabio *et al*. The impact of news on the exchange rate of the lira and longterm interest rates." *Economic Modelling*. 2002; 19(4):611-639.
4. Fornari F, Monticelli C, Pericoli M, Tivegna M. The impact of news on the exchange rate of the lira and long-term interest rates. *Economic Modelling*. 2002; 19(4):611-639.
5. Saraç, Taha Bahadır, Kadir Karagöz. Impact of short-term interest rate on exchange rate: the case of Turkey. *Procedia economics and finance*. 2016; 38(1):195-202.
6. Dornbusch R. Exchange rate economics: where do we stand?. In *International Economics Policies and their Theoretical Foundations Academic Press*, 1982, 557-599.
7. Clouse, James *et al*. Monetary policy when the nominal short-term interest rate is zero." *The BE Journal of Macroeconomics*. 2003; 3:1.
8. Jawaid ST, Ul Haq A. Effects of interest rate, exchange rate and their volatilities on stock prices: evidence from banking industry of Pakistan. *Theoretical & Applied Economics*. 2012; 19:8.
9. Priti, Verma. The impact of exchange rates and interest rates on bank stock returns: evidence from us banks." *Studies in Business and Economics*. 2016; 11(1):124-139.
10. Ahmad, Muhammad Ishfaq, Rehman R, Awais Raof. Do interest rate, exchange rate effect stock returns? A Pakistani perspective. *International Research Journal of Finance and Economics*. 2010; 50:146-150.