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# The Impact of Trade by Partner Country, Energy Market Commodity, and Type of Trader for Exports Intensity in Europe Before the Pandemic of Covit19

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#### Abstract

A trader acts as intermediary between the manufacturer and therefore the consumers. Trade is confined to purchasing or selling of products and may be a part of commerce, which is wider term that has trade and aids to trade. Trade could also be classifies in two categories: Internal Trade and External Trade. This study examines the pattern of Exports Intensity in European countries, which consists of 7 (seven) countries, by looking at the patterns of exports intensity for the last 4 (four) years. This type of research is causality research. With the influencing variables are Trade by Partner Country, Trade by Commodity, Trade by Type of Trader. Existing variables will be processed using the WarpPLS statistical tool. Trade by energy market commodity has no effect on exports intensity. So, the European Union countries must increase the trade by partner country and trade by type of traders in order to increase the exports intensity.

Keywords: Trade, Partner Country, Commodity, Type of Trader, Export Intensity.

# **1. INTRODUCTION**

According to the European Commission Directorate-General for Trade. The 10 largest trading partners of the European Union with their total trade (sum of imports and exports) in many euro for civil year 2017 are US, China, UK, Switzerland, Russia, Turkey, Japan, Norway, South Korea and India (European Statistical, 2021). Commodities are raw materials that are wont to produce finished goods. Commodities include agricultural products, mineral ores and fossil fuels they're basically any quite natural resources that's consumed by companies and individuals (Liu et al., 2023). Commodities are physical goods that are bought, sold and traded in markets, distinct from securities like stocks and bonds that exist only as financial contracts. There are four main sorts of commodities. The energy market includes oil, gas, coal and ethanol even uranium (Prasad et al., 2021, Binh et al., 2022). Energy also includes sorts of renewable energy, like wind generation and solar energy (Li et al., 2022, Dong et al., 2023). Metals. Commodity metals include precious metals, like gold, silver, palladium and platinum, also as industrial metals, like

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ore, tin, copper, aluminium and zinc. Agriculture covers edible goods, like cocoa, grain, sugar and wheat, also as nonedible products, like cotton, vegetable oil and rubber. Livestock includes all live animals, like cattle and hogs.

Commodity trading is that the exchange of various assets, typically futures contracts, that are supported the worth of an underlying physical commodity (Coupé & Shepotylo, 2021, Yuan et al., 2023). With the buying or selling of those futures contracts, investors make bets on the expected future value of a given commodity. If they think the worth of a commodity will go up, they buy certain futures or go long and if they think price the commodity will fall, they unload other futures or go short (Balistreri and Hillberry, 2021 & Zhang et al., 2023). Given the importance of commodities in lifestyle, commodity trading began long before modern financial markets evolved as ancient empires developed trade routes for exchanging their goods. Trade refers to purchasing and selling of products. A traders purchases goods from manufacturers and sell them to consumers.

# **2. LITERATURE REVIEW**

#### 2.1. Trade

Trade is a basic economic concept involving the buying and selling of products and services, with compensation paid by a buyer to a seller, or the exchange of products or services between parties (Muradov, 2021, Rahman et al., 2022). Trade can happen within an economy between producers and consumers. International trade allows countries to expand markets for both goods and services.it is the rationale why an American consumer can pick between a Japanese, German, or American car. As a results of international trade, the market contains greater competition and thus, more competitive prices, which brings a less costly product home to the customer (Hafner and Kleinert, 2021, Hermawan et al., 2023). In financial markets, trading refers to the buying and selling of securities, just like the acquisition of stock on the bottom of the NYSE

## 2.2. Partner Country

Saadallah & Outtaj (2021) state that a trading nation (also mentioned as a trade-dependent economy, or an export-oriented economy) may be a country where international trade makes up an outsized percentage of its economy. Smaller nations tend to be more tradedependent than larger nations. In 2008, the foremost trade-dependent OECD member was Luxembourg, where trade was worth 313.08% of GDP, while the littlest amount tradedependent was the us, where trade made up 30.41% of GDP (Ingebritsen, 2018). The countries which can become trade partners will make an agreement. A trading partner agreement is an agreement involved by two parties that have agreed to trade certain items or information. The agreement outlines the terms of the trade or trading process. including responsibilities, who's involved, how goods or information are getting to be delivered and received, and duties or fees. Trading partner agreements are often utilized in complex financial trade transactions (Singh, 2021). They'll even be utilized in managing the terms for a selection of business deals, including information releases or distribution of products. Trading partner agreements are often developed in various formats and will include a selection of varied provisions. Covenants and provisions included during a trading partner agreement will typically detail the duties and obligations of both parties. Other important information may include a handout of procedure or statement of labour outlining certain expectations. The aim of the trading partner agreement is to urge out the responsibilities of each party and to help prevent disputes on agreed-upon terms.

## 2.3. Commodity

Commodities are tangible objects that are relatively easy to trade, can be physically delivered, can be stored for a certain period of time and can be exchanged with other

products of the same type, which investors can usually buy or sell through a futures exchange (Cui et al., 2022). More generally, a commodity is a product that is traded, including foreign exchange, financial instruments and indices (Dzienis, 2021). Characteristics of Commodities, namely prices are determined by market supply and demand, not determined by distributors or sellers and these prices are based on the calculation of the prices of each commodity actor, for example (but not limited to): minerals and agricultural products such as iron ore, oil, ethanol, sugar, coffee, aluminium, rice, wheat, gold, diamonds or silver, but there are also so-called "commoditized" products (no longer differentiated by brand) such as computers (Saadallah and Outtaj, 2021, Varshney et al., 2023). In linguistics, the word "Commodity" began to be known and used in England in the 15th century from the French word "commodité" which means "something pleasant" in quality and service. In the Latin root it is called commoditas which refers to various ways of measuring something that is right; the right time or condition, good quality; the ability to produce something or property; and added value or profit.

#### 2.4. Type of Trader

There are four main sorts of trading available to technical traders. Scalpers are the last word short term traders (Unger, 2021). They operate in even smaller time frames than day traders. They're frenetic traders who spend an outsized chunk of your time glued to their chosen markets, making scalpers among the foremost dedicated traders (Westerhoff & Reitz, 2005). While scalpers don't necessarily need an outsized amount of capital to start trading, they're going to need a gentle flow of cash for them to require advantage of any opportunities that crop up within the marketplace. Scalpers don't believe large trades for his or her profit, but rather small gains multiplied over an outsized number of small trades. Over time, these small gains add up to a considerable amount. consider them being almost like business owners who sell products at a lower rate with lower profits per item sold but structure for it by the sheer amount of merchandise moved.

## 2.5. Export Intensity

Export intensity was measured because the ratio of aggregated export sales to total firm sales. Exports are the products and services produced in one country and purchased by residents of another country (Furceri et al., 2021). It doesn't matter what the great or service is. It doesn't matter how it's sent. It are often shipped, sent by email, or carried in personal luggage on a plane. If it's produced domestically and sold to someone during a foreign country, it's an export. Exports are one component of international trade. the opposite component is imports. They're the products and services bought by a country's residents that are produced during a foreign country. Combined, they create up a country's balance of trade. When the country exports quite it imports, it's a trade surplus. When it imports quite it exports, it's a deficit.

# **3. METHOD**

This study uses secondary data which consists of country data from Germany, Lithuania, Netherlands, Austria, Poland, Portugal, Slovenia. The 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. The research variables are as follows Trade by Partner Country, Commodity and Type of Trader in ratio scale. Analysis with SEM Warp PLS still requires several suitability indices to measure the correctness of existing indicators (Schuberth et al., 2021). WarpPLS is a structural equation modeling software developed by Professor Ned Kock which is reliable enough to solve and estimate P values for path coefficients automatically, estimate several fit indices, build an indicator product structure that underlies the moderating relationship, provide a distribution plot display for each relationship between latent variables, provides various graphs to choose from,

calculates the Variance Inflation Factor (VIF) for latent variables, calculates the coefficient of influence or Cohen's f-squared coefficient, calculates the indirect effect on the path, calculates various coefficients of causality assessment. The algorithm that underlies WarpPLS is Partial Least Square (PLS) regression, where the main characteristic is being able to minimize Multicollinearity among latent variables.

## 4. RESULT AND DISCUSSIONS

4.1 Result

The statistics on the development of Partner Country, Commodity, Type of Trader and Exports Intensity during 2015-2018 are presented in the following Table 1:

Table 1. Development of Partner Country, Energy Market Commodity, Type of Trader and Exports Intensity during 2015-2018

		· · · · ·				
Years	No.	Country	Partner Country_X <sub>1</sub>	Energy Market Commodity_X <sub>2</sub>	Type of Trader_X <sub>3</sub>	Exports Intensity_
	1	Germany	39.876.256,61	18.700.195,59	1.849.093.114	528.875.246,91
	2	Lithuania	513.580,87	727.600,08	39.240.380,77	13.294.250,26
	3	Netherlands	26.505.438,80	8.481.263,88	661.621.149,31	164.576.626,93
2015	4	Austria	2.996.737,34	2.826.732,72	270.136.750,86	104.970.685,77
	5	Poland	4.668.455,52	5.462.710,13	296.939.136,84	104.639.583,53
	6	Portugal	1.622.482,44	2.303.159,99	107.947.030,48	45.541.030,79
	7	Slovenia	408.465,99	378.255,29	42.627.742,50	17.335.986,63
	1	Germany	39.335.297,78	19.541.548,11	1.777.530.326,22	511.348.879,18
	2	Lithuania	538.574,81	745.500,40	38.604.433,43	13.831.588,17
	3	Netherlands	26.052.411,52	8.963.031,18	668.307.406,55	169.726.671,40
2016	4	Austria	2.966.113,88	2.842.362,13	273.669.360,44	109.115.348,64
	5	Poland	5.026.228,13	5.965.960,16	300.035.762,56	108.749.049,39
	6	Portugal	1.627.769,84	2.246.327,96	109.395.697,26	47.138.064,03
	7	Slovenia	474.488,49	382.686,94	44.307.120,05	18.112.970,50
	1	Germany	43.155.968,05	20.731.880,28	1.979.457.627,71	579.016.523,03
	2	Lithuania	646.891,37	844.850,82	44.014.129,79	15.401.085,96
	3	Netherlands	29.180.224,48	9.566.037,70	726.652.240,89	182.888.213,10
2017	4	Austria	3.113.847,65	3.142.432,29	297.295.859,24	117.989.465,19
	5	Poland	5.527.608,31	6.294.807,69	333.809.860,28	121.234.572,26
	6	Portugal	1.823.617,62	2.539.754,61	122.017.968,56	52.151.889,31
	7	Slovenia	586.518,61	424.206,78	50.748.753,81	20.649.885,86
	1	Germany	44.440.077,38	19.417.735,21	2.059.325.444,09	605.841.001,50
2018	2	Lithuania	658.917,83	896.086,34	47.834.595,26	16.602.421,51
	3	Netherlands	29.908.902,62	9.909.996,94	768.127.000	194.060.258,46
	4	Austria	3.144.082,73	3.495.672,99	302.059.659,08	124.867.377,39

_	5	Poland	6.136.265,84	6.691.098,43	360.251.080,61	129.568.369,39
-	6	Portugal	1.707.590,80	2.545.262,28	122.061.453,03	52.437.355,75
	7	Slovenia	628.120,53	415.112,94	55.825.487,14	22.121.610,34

Sources : European Statistical (2021), <u>https://ec.europa.eu/eurostat/data/browse-statistics-by-theme</u>.

The Table 1 shows statistics on the development of transaction volumes for Partner Country, Energy market Commodity, Type of Trader and Exports Intensity variables during 2015-2018 in several European countries including Germany, Lithuania, Netherlands, Austria, Poland, Portugal, Slovenia.

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 Bonferronike correction (Kock, 2020). The results show in Table 2 as a follows :

Table 2. Goodness of Fit Model Test

Average path coefficient (APC)=0.583, P<0.001

Average R-squared (ARS)=1.741, P<0.001

Average adjusted R-squared (AARS)=1.833, P<0.001

Average block VIF (AVIF)=95.748, acceptable if <= 5, ideally <= 3.3

Average full collinearity VIF (AFVIF)=407.657, acceptable if <= 5, ideally <= 3.3

Tenenhaus GoF (GoF)=1.319, small  $\geq 0.1$ , medium  $\geq 0.25$ , large  $\geq 0.36$ 

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

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

Statistical suppression ratio (SSR)=1.000, acceptable if  $\geq 0.7$ 

Nonlinear bivariate causality direction ratio (NLBCDR)=1.000, acceptable if >= 0.7

Source : Result Test of WarpPLS (2021).

Thus, based on Table 2, 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 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 in Table 3:

Table 3. Combined Loadings and Cross-loadings

PC_X	$C_X_2$	ToT_X	3EI_Y	Type (aSE	P value	
Х	1.000	0.000	0.000	-0.000	Reflect 0.113	< 0.001
$X_2$	0.000	1.000	-0.000	0.000	Reflect 0.113	< 0.001
$X_3$	-0.000	0.000	1.000	-0.000	Reflect 0.113	< 0.001
Y	0.000	0.000	-0.000	1.000	Reflect 0.113	< 0.001

Source: Result Test of WarpPLS (2021)

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.

## 4.1.3. Hypothesis Testing

The results of hypothesis testing on the data above are that trade by commodity, have no or no effect on export intensity. And only trade by partner country and trade by type of trader have an effect to exports intensity. To test the partial regression coefficient individually from each independent variable can be seen in the following Figure 1:

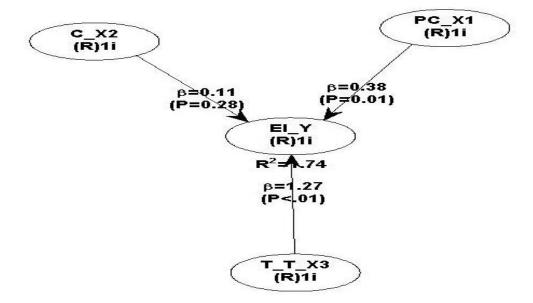


Figure 1. The Model Result

Source: Result Test of WarpPLS (2021)

From the discussion above, we can conclude trade by commodity, does not affect export intensity, it will only affect exports intensity with the percentage below of 5%.

## 4.2. Discussions

Regardless of the complexity of the transaction, trading is facilitated through three primary kinds of exchanges. Trading globally between nations allows consumers to be exposed to goods and services that not available in their own countries. most sorts of product are often found on the international market: food, clothes, spare parts, oil, jewellery, wine, stocks, currencies, and water. A product that's sold to the worldwide market is an export, and a product that's bought from the worldwide market is an import. Imports and exports are accounted for during a country's accounting within the balance of payments. International trade not only results in increased efficiency but also allows countries to participate during a worldwide economy, encouraging the prospect of foreign direct investment (FDI), which is that the quantity of money that individuals invest into foreign companies and other assets. For the receiving government, FDI could also be a way by which foreign currency and expertise can enter the country (Dzienis, 2021). These raise employment levels, and, theoretically, cause a growth within the gross domestic product. For the investor, FDI offers company expansion and growth, which suggests higher revenues. A deficit could also be a situation where a country spends more on aggregate imports from abroad than it earns from its aggregate exports. A deficit represents an outflow of domestic currency to foreign markets. this might even be mentioned as a negative balance of trade (BOT). Day Traders live their trading lives one small chunk at a time (Nga, 2020). They're the blokes who aim for brief term trades, usually for periods of but 20 minutes. Since they trade very short time frames, they have a tendency to focus more on immediate trends than future bias. Often, one among the

explanations day traders trade the way they are doing is that they don't have that much capital to soak up early losses. Thus, day traders can survive with a smaller capital base than other trader types. Day traders don't leave positions open for very long, in order that they are rather limited with their potential profits. These sorts of traders usually profit on volume instead of home runs, with profit usually below 100 pips per trade. Swing Traders hold trades for extended periods, usually up to a couple of days. These sorts of traders have the posh of not constantly monitoring trades, with the flip side of requiring a touch more patience with the mark. Swing traders will need more capital than day traders to weather the storms of volatility which will inevitably come their way. Capital for swing traders should be enough that they don't hit the call level. Thanks to the longer timeframe of open trades, swing traders can potentially earn a bigger profit, with up to many pips per trade between opening and shutting of positions. Swing traders can maximize medium-term trends within the marketplace. Position Traders are the blokes with the most important capital (Fertő et al., 2021). They will hold trades for up to years counting on their trading strategy. Position traders are uncommon with the "regular" crowd, thanks to the high capital requirements. These traders will experience the acute ups and downs of the market, and that they will got to have enough capital to weather the strongest storms. This suggests a bigger capital than what most of the people will usually invest within the market. All that patience means position traders often enjoy the very best potential payoff. Thanks to the posh of having the ability to follow future trends, these traders can often earn up to thousands of pips per trade.

# **5. CONCLUSION**

Trade by Energy market commodity  $(X_2)$  has no effect on exports intensity (Y). So, the European Union countries must increase the trade by partner country  $(X_1)$  and trade by type of traders  $(X_3)$  in order to increase the exports intensity. The results of this study have the implication that the maximum increase in trade cooperation can be done through closer collaboration with various trading partner countries in the global market. Collaboration is needed to deal with various changes in the world economy. To deal with the dynamics of global trade, buyers and investors at the economic forum work together to improve trade and investment competitiveness in international markets. In addition, the importance of innovation and technology in economic development, including research and development.

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