ISSN 2344-102X ISSN-L 2344-102X

FINANCIAL-ACCOUNTING MODEL FOR TRANSFER PRICING BASED ON STANDARDISED ACCOUNTING POLICIES

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Abstract

The globalisation of the world's economies and the internationalisation of companies are contributing to the development of new accounting and tax paradigms, which require a particular approach by regulators and multinationals. Increasing tax pressure on multinationals has led to the development of tax minimisation mechanisms through transfer pricing, a niche that has developed mainly due to the lack of tax regulation, i.e. clear tax and accounting policies for pricing transactions between related parties. The aim of this research is to develop a financial-accounting model for transfer pricing based on standardised accounting policies. The research methodology is oriented on the analysis of tax and accounting policies of 163 countries, which are affiliated to different economic and political groups. The results of the research are translated into the design of an econometric model of transfer pricing based on economic and financial information. The results of the research indicate that the method of transfer pricing depends on the economic strength of the affiliated entities that are based in the analysed state, and the dynamics of fiscal health is directly proportional to the overall development of economic security and the economic growth rate of the group. At the same time, it is observed that standardization is a method of optimising the calculation of transfer pricing if the distribution of the tax health index in dynamics at the level of the sample applying standardization is homogeneous. The proposed model helps to ensure that transfer pricing practices are consistent and transparent and that they comply with relevant laws and regulations. The limitations of the research are that the specific details of the model depend on the company's industry, its size and the nature of its operations.

Key words: transfer pricing; accounting policies; fiscal health; financial-accounting model.

JEL Classification: M40.

I. INTRODUCTION

Transfer pricing is an ambiguous topic, both for the companies that use it and for regulators trying to harmonise tax regulations and practices for related parties transactions. The transfer pricing issue has become more pronounced in the last decade, due to the internationalisation of companies and their use of transfer pricing as a tool to erode the tax base. In this respect, national and international bodies have joined forces to identify clear and specific rules on how to determine and assess transfer pricing. The first transfer pricing rules were developed and agreed in 1995 by the OECD in a document called "Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations", which was updated in the course of time with cases that were not initially addressed. This document is basically a guide explaining the methodology for selecting transfer pricing methods and preparing the related documentation for various related party transactions, be they cross-border services or transactions involving financial assets, intangible assets, etc. The OECD Transfer Pricing Guidelines have been transposed into the national legislation of over 69 countries, some of which have adopted it in its entirety without modification and others making additions in accordance with the needs and particularities of the national economy.

However, existing tax regulations and policies have failed to mitigate the effects of transfer pricing on the tax collection process to the state budget. The latest regulation on multinational taxation was the international approval of a single 15% tax rate so that multinationals would no longer be motivated to use transfer pricing to transfer assets to subsidiaries, which operate in low tax rate areas, usually tax havens. The global adoption of the single tax rate could be a solution to fight economic crime through transfer pricing. At the same time, the need to strengthen tax regulations and policies and adapt them to the current changing economic context remains a priority for all economies.

ISSN 2344-102X ISSN-L 2344-102X

In this context, the aim of our research is to develop a financial-accounting model for transfer pricing based on standardised accounting policies, which allows the objective assessment and pricing of related party transactions, a tool that can be used by companies to avoid suspicion from tax authorities and also by tax authorities to assess whether the price of transactions has been determined in accordance with tax regulations and practices and that it is not subject to tax base erosion. Thus, in order to achieve the proposed purpose, the following research objectives were outlined: O1 - literature review and substantiation of research hypotheses; O2 - assessment of correlations between the economic strength of affiliated entities and the transfer pricing model; O3 - assessment of the dynamics of tax health index in relation to the overall development of economic security and the growth rate of research clusters. The results of the research are the development of a financial-accounting transfer pricing or other specific regulations. This approach ensures that transfer pricing practices are consistent, transparent and in line with relevant regulations. It involves the use of techniques such as the arm's length principle, which compares the price of transactions between related parties with that of comparable transactions between unrelated parties. In addition, the implementation of standardised accounting policies facilitates the comparison of transfer prices and increases the accuracy of financial reporting.

The research is limited by the fact that the data collected in the model design, for some countries, is incomplete, i.e. geographical, linguistic, cultural, etc. or other factors that may influence the model design were not included in the model design. At the same time, in applying the projected model, the company's sector of activity, size and nature of operations should be taken into account.

II. LITERATURE REVIEW

The transfer pricing process depends on a number of factors, such as the economic strength of the related entities located in the host country, geographical location, level and quality of regulation, tax rate, etc. The economic status of the country, or their affiliation to international economic organisations, in which the related entities are located can have a significant influence on the prices charged for goods or services traded between related parties. An affiliated entity located in a country with a strong economy and high labour costs may be able to charge higher prices for goods or services than an affiliated entity located in a country with a weaker economy and lower labour costs. In addition, state tax laws and regulations, exchange rates and other economic factors also play a role in determining transfer prices. In this regard, studies in the literature provide strong evidence regarding the correlation between transfer pricing and the level of regulation, tax rate, geographic location, corruption, etc. According to Sikka and Willmott (2010), transfer pricing techniques are adaptable to identify values in a manner that can lead to increased personal profits, ultimately leading to a relative decrease in societal wealth by circumventing the obligation to pay government taxes. In other words, companies use transfer pricing to reduce the tax base/profit in order to increase their personal income for shareholders/associates. These practices are widely used by multinationals, e.g. Baker (2005) argues that artificial profit shifting to jurisdictions where the tax burden is low or even zero are practices used by almost all multinational companies. In the same agreement is Smith (2015), who argues that "transfer pricing has income tax consequences that are, of course, more pronounced when the parties to a transaction are taxed in different jurisdictions." Thus, the main motivation for the use of transfer pricing is tax pressure, which practically forces companies to identify ways to reduce their tax base using transfer pricing, which sometimes goes to the limits of legislation. In order to avoid such situations, national and international regulators are developing more and more clearer mechanisms that leave no room for interpretation in the pricing of transactions between related parties. In this regard, Melega et al. (2022) note that "countries with a high tax burden have more rigid transfer pricing tax regulations, the aim of which is to prevent tax evasion through transfer pricing."

The increasing importance of transfer pricing has led to increased interest among researchers in identifying models for determining and evaluating transfer prices, while at the same time attempting to identify and include in the model a number of variables that may affect multinationals' profits through transfer pricing. For example, Melega et al. (2023), based on a sample of 157 countries developed a geographic location index for transfer pricing determined by a multiple linear regression method using GDP, country risk, corporate tax rate and credit default swap as country-specific predictor variables. Gross Domestic Product is an indicator, which is directly correlated with transfer pricing, i.e. the volume of goods and services can be reduced by transferring them to the group's subsidiaries. At the same time, countries with a high level of corruption and a high tax rate are more prone to transfer pricing and the quality of tax regulation and policies is hampered by corruption. Gao and Zhao (2015) constructed a model for determining an optimal transfer price that maximizes multinational profits. According to them, the designed model "incorporates elements such as international transportation costs, holding costs, taxes, tariffs (including the introduction of a second tariff) and exchange rates, which provides important managerial insights into the impact of transfer pricing in different currencies on the variance of each subsidiary's profit, given the uncertainty of the exchange rate". However the model is limited, due to the fact that only one multinational was included in the analysis and model development and it may not provide the same results if applied on other

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multinationals. The transfer pricing optimization is in a close correlation with the company's scope of activity as well as the fiscal health index. Another author, Lakhal (2006) has developed "an operational profit-sharing and transfer pricing model for networked manufacturing companies that allows the maximization of operating profits by the manufacturing network within its broader supply chain, suggesting a move away from the model that maximizes profits for each individual company within the scope of its own supply chain."

The transfer pricing phenomenon is strongly connected to accounting, not only in terms of taxation, but also in terms of profit reporting, i.e. the financial and non-financial assets subject to transfer pricing and last but not least, moving the company's production to a more tax-friendly area. For example, da Silva Stefano et al. (2022) argue that "inventory levels are an important part of accounting, relocated supply chains and transfer pricing, and traditional costing and accounting methods favour higher inventory levels and can overestimate net income outcomes by up to 70% - especially in scenarios of higher demand variation - compared to yield accounting." Agustiningsih et al. (2022) analysed the effect of tax expenditures, incentive tunneling and leverage on transfer prices concluding that tax expenditures and leverage do not have a significant effect on transfer prices, while incentive tunneling has a significant effect on transfer prices. Survarini et al. (2022) also agree, and based on a sample of 145 manufacturing companies, they examined the effects of tunneling incentives on transfer pricing utilization, concluding that tunneling incentives have a positive effect, but at the same time "cannot determine the transfer pricing decision in firms, and minimizing taxes can strengthen the relationship between the tunneling incentive and the transfer pricing decision."

Thus, according to the analysis of the literature, the premises of the financial-accounting model for transfer pricing determination, which are also the hypotheses of the research, are:

H1: How transfer pricing is determined depends on the economic strength of the affiliated entities based in the state under review.

H2: The dynamics of fiscal health are directly proportional to the overall evolution of economic security and the group's economic growth rate.

H3: Standardization is a measure for optimisation of transfer pricing if and only if the distribution of the tax health index in dynamics across the sample applying standardization is homogeneous.

Transfer pricing is a complex topic that manages to link a multitude of factors and processes in its use, determination and valuation. In addition to the negative effects on government revenues, transfer pricing is an important tool for ensuring sustainable development. In practice, the transfer of goods and services between the group's subsidiaries helps to alleviate the financial problems of the subsidiaries, which together contribute to the development of the parent company. In this respect, the development of financial-accounting and other transfer pricing models is of real benefit to all stakeholders involved in this process.

III. RESEARCH METHODOLOGY

For the design of the financial-accounting model, data were collected from 163 national economies belonging to the following economic and financial development groups: BRICS (Brazil, Russia, India, China, South Africa), OECD (Organisation for Economic Co-operation and Development), OPEC (Organization of the Petroleum Exporting Countries) and WTO (World Trade Organization). The database construction structure contained references to the following topics of interest (indicators): the level of IFRS adoption, transfer pricing, transfer pricing regulations and practices for intangible assets, simplified approach to intra-group transactions, creation of adjustments, application of penalties, transfer pricing record keeping and the level of fiscal health at the level of each economy (see Table 1).

Variable	Explanation
MSPT	Method of transfer prices setting
IFRSP	Adoption of IFRS for public entities
IFRSS	Adoption of IFRS for foreign entities
IFRSIM	Adoption of IFRS for SMEs
MEPT	Method of transfer prices assessment
HTVI	Transfer pricing rules or special measures for hard-to-value intangibles
IFAP	The internal rules contain specific guidance for pricing the controlled transactions involving intangible assets
TINTR	Specific guidelines for intra-group service transactions
TINTRS	Simplified approach to intra-group transactions
ATSPT	Application of rules other than transfer pricing rules that are relevant to the tax treatment of transactions involving services
TRF	Specific guidance on financial transactions
ATRF	Other rules on financial transactions

Table 1. Variables included in the development of the financial-accounting transfer pricing model

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RACC	Rules on cost contribution agreements
DPT	Transfer pricing documentation
PSTCT	Safe harbour rules for certain industries, types of taxpayers or types of transactions
PSPT	Specific transfer pricing penalties and/or transfer pricing documentation compliance incentives
AJS	Secondary adjustments
AJSF	Adjustments at the end of the year
SF	Fiscal health

Source: developed by the authors

The indicators included in the analysis are reported by the Organisation for Economic Co-operation and Development and the consolidation of the database was carried out using statistical data processing methods, transformation of qualitative information into quantitative information, parameterisation, regression analysis, frequency distributions, criteria segregation of the sample, statistical tests of homogeneity and representativeness. Thus, the results of the database parameterization are presented in Table 2 as follows:

Indicator/ Setting step	1	2	3	4	5	6	7
MSPT	No response	No	From				
IFRSP	No	No scholarshi p	Not adopted	Not allowed	Permits	Mandator y	
IFRSS	No	No scholarshi P	No foreign companie s	Not allowed	Permits	Obliigato rs	
IFRSIM	No	Not adoption	Are taken into account	Formal adoption	Adopted	Permits	Mandator y
MEPT	No answer	No	From				
HTVI	No answer	No	From				
IFAP	No answer	No	From				
TINTR	No answer	No	From				
TINTRS	No response	No	From				
ATSPT	No response	No	From				
TRF	No answer	No	From				
ATRF	No answer	No	From				
RACC	No answer	No	From				
DPT	No response	No	From				
PSTCT	No response	No	From				
PSPT	No response	No	From				
AJS	No response	No	From				
AJSF	No response	No	From				
SF	under 25%	under 50%	under 75%				

Table 2. Results of database parameterization

Source: developed by the authors

For the development of the transfer pricing model, the method of transfer pricing (MSP) was defined as the dependent variable and its evolution was projected in relation to the other regression variables (see Table 2)

ISSN 2344-102X ISSN-L 2344-102X

at the level of the overall sample and at the level of the sub-samples of each economic development group: BRICS, OECD, OPEC and WHO. Thus, the multiple linear regression model takes the following form:

$$MSPT = \sum_{i=1}^{29} \alpha_i \cdot x_i + \varepsilon$$

where

MSPT – method of transfer pricing; α_i - the coefficients of the regression variables; x_i - regression variables; ε - residual value.

IV. RESULT AND DISCUSSION

Transfer pricing is a phenomenon that has prompted a real reform at international level in the field of taxation and the regulations and rules governing its application, as well as the way it is assessed and determined. Improvements in traditional transfer pricing methods by national and international regulators, together with innovative methods developed by researchers, can mitigate or reduce the use of transfer pricing for illegal purposes, i.e. to erode the tax base through transactions between related companies in offshore areas. The globalisation of the world's economies requires the creation of international rules and regulations that facilitate the economic and commercial activity of companies without creating any discrimination between national and multinational companies. In this respect, the adoption and application of a single tax rate of 15% for multinationals is a first step towards reducing economic crime, which will ensure that multinationals are taxed under fair conditions. The new international tax rules will apply from 2024 and according to Brun and Bray (2022), "the large companies will pay more tax in countries where they have customers and less in countries where they have their headquarters, employees and operations; the agreement sets a global minimum tax of 15%, which would increase taxes for companies with revenues in low-tax jurisdictions." The adoption of the single global tax rate could reduce the use of transfer pricing for tax purposes, which will continue to be used by affiliated companies for commercial purposes to support their business without eroding the tax base. In this context, is important that the development of transfer pricing methods addresses the shortcomings of traditional methods, which do not take into account all the determinants of related party transactions and their implications for company performance and the investment process within the group.

M. 1.1	Unstandardized Coefficients				
Model	В	Std. Error			
(Constant)	0,002	0,152			
MSPT	-0,039	0,033			
IFRSP	0,047	0,041			
IFRSS	0,002	0,010			
IFRSIM	0,033	0,110			
MEPT	0,120	0,118			
HTVI	0,096	0,100			
IFAP	0,017	0,105			
TINTR	0,222	0,121			
TINTRS	-0,006	0,090			
ATSPT	0,325	0,117			
TRF	-0,107	0,082			
ATRF	-0,040	0,089			
RACC	-0,128	0,105			
DPT	-0,118	0,097			
PSTCT	-0,004	0,087			
PSPT	0,440	0,157			
AJS	-0,065	0,096			
AJSF	0,226	0,084			
SF	-0,023	0,091			

Table 3. Table of model regression function coefficients

Source: developed by the authors with SPSS

According to the data in Table 3, we observe that at the level of the sub-samples applying economic and financial standardisation rules, there is an increase in the level of statistical significance. Thus, we find that

EUROPEAN JOURNAL OF ACCOUNTING, FINANCE & BUSINESS

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standardisation is a measure of welfare if they apply homogeneous standardization. At the same time, for WTO member states (which do not apply standardisation), the correlation coefficients are below those determined for the overall sample. Or, when standardisation rules are applied to smaller subsets of economic and financial data, the results become more statistically significant.

By the Pearson regression correlation test, the statistical significance level of the overall model is 92.6%, while the adjusted level of the R^2 coefficient shows that at the overall sample level, the significance level decreases to 91% (see Table 4).

ModelRR SquareAdjusted R SquareError of the EstimateR SquareF Changedf1df2Mr F ChangeDurbin-WatsonGeneral,962a0,9260,9100,2810,92659,519281340,0001,751BRICS1,000a1,0001,0001,000a1,000400,6670,227OECD,878a0,5200,7700,3020,4860,7700,7182860,7482,3151,344OPEC1,000a0,9001,0000,0001,000910,4441,846WTO,971a0,7730,9430,9230,2260,94348,65528830,0002,1461,602a. Predictors: MSPT; IFRSP; IFRSS; IFRSIM; MEPT; HTVI; RAIPT; TINTR; TINTRS; ATSPT; TRF; ATRF; RACC;DPT; PSTCT; PSPT; AJS; AJSF; SFb. Unless noted otherwise, statistics are based only on cases for which Afiliere = 1,2,3,4						Std.		Change					
BRICS 1,000 ^a 1,000 1,000 1,000 4 0 0,667 0,227 OECD ,878 ^a 0,520 0,770 0,302 0,486 0,770 0,718 28 6 0,748 2,315 1,344 OPEC 1,000 ^a 0,900 1,000 0,000 1,000 9 1 0,444 1,846 WTO ,971 ^a 0,773 0,943 0,923 0,226 0,943 48,655 28 83 0,000 2,146 1,602 a. Predictors: MSPT; IFRSP; IFRSS; IFRSIM; MEPT; HTVI; RAIPT; TINTR; TINTR; ATSPT; TRF; ATRF; RACC; DPT; PSTCT; PSPT; AJS; AJSF; SF	Model		R			the	Square	Change	df1	df2		Durbin-	Watson
OECD ,878 ^a 0,520 0,770 0,302 0,486 0,770 0,718 28 6 0,748 2,315 1,344 OPEC 1,000 ^a 0,900 1,000 1,000 1,000 9 1 0,444 1,846 WTO ,971 ^a 0,773 0,943 0,923 0,226 0,943 48,655 28 83 0,000 2,146 1,602 a. Predictors: MSPT; IFRSP; IFRSS; IFRSIM; MEPT; HTVI; RAIPT; TINTR; TINTRS; ATSPT; TRF; ATRF; RACC; DPT; PSTCT; PSPT; AJS; AJSF; SF 5 5 5 5 5 5 5 5 6 0,748 2,315 1,344	General											51	
OPEC 1,000 ^a 0,900 1,000 0,000 1,000 9 1 0,444 1,846 WTO ,971 ^a 0,773 0,943 0,923 0,226 0,943 48,655 28 83 0,000 2,146 1,602 a. Predictors: MSPT; IFRSP; IFRSS; IFRSIM; MEPT; HTVI; RAIPT; TINTR; TINTRS; ATSPT; TRF; ATRF; RACC; DPT; PSTCT; PSPT; AJSF; SF SF ATSPT; ATSPT; ATRF; ATRF; <td>BRICS</td> <td>1,000^a</td> <td>1,000^a</td> <td>1,000</td> <td>1,000^a</td> <td></td> <td>1,000</td> <td></td> <td>4</td> <td>0</td> <td></td> <td>0,667</td> <td>0,227</td>	BRICS	1,000 ^a	1,000 ^a	1,000	1,000 ^a		1,000		4	0		0,667	0,227
WTO ,971 ^a 0,773 0,943 0,923 0,226 0,943 48,655 28 83 0,000 2,146 1,602 a. Predictors: MSPT; IFRSP; IFRSS; IFRSIM; MEPT; HTVI; RAIPT; TINTR; TINTRS; ATSPT; TRF; ATRF; RACC; DPT; PSTCT; PSPT; AJS; AJSF; SF 0,943 0,943 48,655 28 83 0,000 2,146 1,602	OECD	,878 ^a	0,520	0,770	0,302	0,486	0,770	0,718	28	6	0,748	2,315	1,344
a. Predictors: MSPT; IFRSP; IFRSS; IFRSIM; MEPT; HTVI; RAIPT; TINTR; TINTRS; ATSPT; TRF; ATRF; RACC; DPT; PSTCT; PSPT; AJS; AJSF; SF	OPEC	PEC 1,000 ^a 0,900 1,000 1,000 0,000 1,000 9 1 0,444 1,846									1,846		
DPT; PSTCT; PSPT; AJS; AJSF; SF	WTO	WTO ,971 ^a 0,773 0,943 0,923 0,226 0,943 48,655 28 83 0,000 2,146 1,602										1,602	
c. Dependent Variable: MSPT													

Table 4. Summary	v of the general	model and l	by grouns of	countries
I abic 4. Dummar	y or the genera	i mouci anu i	oy groups or	countings

Source: developed by the authors with SPSS

ANOVA (analysis of variance) test was performed to validate the model by testing two hypotheses: the null hypothesis and the alternative hypothesis. The null hypothesis states that there is no significant difference between the means of the compared groups. The alternative hypothesis states that there is a significant difference. The test results showed that the null hypothesis was rejected and the alternative hypothesis was accepted because the significance level (p-value) was less than 0.005, which is the selected error significance threshold. This is indicated by the value "Sig < 0.005" in Table 5.

ModelSum of SquaresDfMean SquareFMr										
	Regression 131,125 28 4,683 59,519 ,000 ^b									
General	Residual	10,543	134	0,079						
	Total	141,669	162							
	Regression	0,800	4	0,200		,000 ^b				
BRICS	Residual	0,000	0							
	Total	0,800	4							
	Regression	4,753	28	0,170	0,718	,005°				
OECD	Residual	1,418	6	0,236						
	Total	6,171	34							
	Regression	6,545	9	0,727		,000 ^b				
OPEC	Residual	0,000	1	0,000						
	Total	6,545	10							
	Regression	69,338	28	2,476	48,655	,000°				
WTO	Residual	4,224	83	0,051						
	Total	73,563	111							
a. Depend	ent Variable: MSTP	· · ·								
b. Selectin	g only cases for which	n Afiliere = 1,2,3,4								
c. Predicto	ors: MSPT: IFRSP: IFI	RSS: IFRSIM: MEPT: F	TVI: RAIPT	TINTR: TINTRS: A	ISPT: TRF: ATE	RE: RACC:				

Table 5. ANOVA

c. Predictors: MSPT; IFRSP; IFRSS; IFRSIM; MEPT; HTVI; RAIPT; TINTR; TINTRS; ATSPT; TRF; ATRF; RACC; DPT; PSTCT; PSPT; AJS; AJSF; SF

Source: developed by the authors with SPSS

This statement means that the dynamics of Pearson correlation coefficients were used to assess the performance of a financial-accounting model for determining transfer prices. The evaluation was carried out for

ISSN 2344-102X ISSN-L 2344-102X

each sample and the results are shown in Table 6. The Pearson correlation coefficient is a measure of the linear relationship between two variables and the dynamics of these coefficients can provide insight into changes in the relationship over time.

Indicator	General	BRICS	OECD	OPEC	WTO
IFRSP	0,230	-0,250	-0,127	-0,241	0,192
IFRSS	0,245	-0,323	0,068	-0,194	0,192
IFRSIM	-0,118	-0,612	0,284	0,427	0,008
MEPT	0,872	0,250	-0,113	1,000	0,901
HTVI	0,930	0,612	0,232	0,938	0,931
IFAP	0,917	1,000	0,218	0,938	0,924
TINTR	0,904	0,250	0,418	0,938	0,911
TINTRS	0,890	-	0,250	1,000	0,931
ATSPT	0,874	-0,408	0,106	0,938	0,900
TRF	0,920	0,250	0,457	0,938	0,933
ATRF	0,854	0,250	0,047	1,000	0,856
RACC	0,844	-0,408	-0,028	0,938	0,861
DPT	0,871	0,250	0,137	1,000	0,885
PSTCT	0,892	-0,408	-0,067	0,938	0,901
PSPT	0,882	0,250	0,152	1,000	0,903
AJS	0,854	-	-0,194	0,938	0,895
AJSF	0,903	-	0,250	0,938	0,909
SF	0,353	0,352	0,806	0,611	0,531

Table 6. Pearson correlation table for the financial-accounting model

Source: developed by the authors with SPSS

Figure 1 shows the statistical examination of the mean distributions of the estimated variables by a mean distribution test. This examination reveals disparities in the implementation of transfer pricing techniques at the sample level. The mean distributions of the variables are illustrated and a statistical analysis is presented, revealing the extent of the disparities. The mean distribution test, a statistical procedure, is used to understand the distribution of the mean of a set of observations and to determine whether the data are symmetric and whether the mean accurately reflects the data.



Figure 1 - Norml P-P Plot of Regression Standardized Residual Source: developed by the authors with SPSS

Regression analysis using the statistical distribution of means test shows that at the level of the general sample (163 states), the mean distribution of the MSPT indicator is at the level of 1.76 points, which is similar to the level 2 of the calculated scalar distribution, which shows that at the level of the general sample (163 states), the mean distribution of the studied phenomenon is at the level of the set threshold (No) of the indicator. The mean distribution was calculated with a standard deviation of 0.93 points.

At the level of the BRICS states, according to the regression analysis by the distribution test, it is observed that the average distribution of the MSPT indicator is at the level of 2.8 points, which is similar to the level 3 of the calculated scalar distribution, which shows that at the level of the BRICS sample (5 states), the average distribution of the studied phenomenon is at the level of the set threshold (Yes) of the indicator. The mean distribution was calculated with a standard deviation of 0.44 points.

At the same time, at the level of OECD countries, the regression analysis using the statistical distribution of means test shows that the mean distribution of the MSPT indicator is at the level of 2.77 points, which is similar to the calculated level 3 of the scalar distribution, which shows that the OECD sample (35 countries) has a mean distribution of the phenomenon studied at the level of the threshold (Yes) of the indicator. The mean distribution was calculated with a standard deviation of 0.42 points. At the level of the OPEC member countries, the mean distribution, which shows that the level of 1.36 points, which is similar to the calculated level 1 of the scalar distribution, which shows that the mean distribution of the Studied phenomenon at the level of the set threshold (No response) of the indicator is achieved at the level of the OPEC sample (11 countries). The mean distribution was calculated with a standard deviation of 0.80 points. At the level of the WTO member economies, the mean distribution, which shows that at the level of the WHO sample (112 countries), the mean distribution of the MSPT indicator is 1.43 points, which is equivalent to level 1 of the calculated scalar distribution, which shows that at the level of the WHO sample (112 countries), the mean distribution of 0.81 points.

In this vein, we can see that fiscal health is closely related to international economic security and the application of transfer pricing for the purpose of eroding the tax base, which highlights the need to develop optimal standards for the calculation of transfer pricing, in order to prevent and combat economic crime through such transfer pricing transactions. The OECD (2010) also agrees, arguing that the use of different accounting standards "creates difficulties in determining each member's sales and in valuing assets (e.g. historical cost versus market value), particularly in relation to the valuation of intangible property, accounting standards in all countries should be consistent in order to find an optimal measure of profit for the whole group of multinational enterprises." Thus, uniform standardisation would be an optimal solution for determining optimal transfer prices, validating hypothesis 3 of the research. The economic strength of the affiliated entities, as well as the geographical location are important factors in determining transfer prices (Bernard et al. 2006) and the results of the research show a positive association between these factors, validating hypothesis 1 of the research. At the same time, the research results indicate that the dynamics of fiscal health are directly proportional to the overall evolution of economic security and to the economic growth rate of the group, a hypothesis validated by other researchers, who have analysed the correlations of fiscal implications in the determination and use of transfer prices. For example, Zhang & Wang (2023) argue "that the level of transfer payments plays an important role in regulating the effect of vertical fiscal imbalance." Some scholars attribute transfer pricing to the "paper effect, which implies that compared with local government's own tax revenue, the same amount of unconditional transfer payment stimulates more local government's expenditure expansion motivation, leading to many negative effects" (Liu & Ma, 2015) and the "public fund effect which means that local governments use the public fund provided by transfer payments to share expenditure costs, leading to the easy neglect of their expenditure efficiency" (Fan & Wang, 2019).

V.CONCLUSIONS

Research results indicate that the dynamics of fiscal health are closely linked to economic growth and security. Thus, a strong economy can lead to a healthy fiscal situation for a group, while a weak economy can have a negative impact on fiscal health. In addition, economic security and stability can also affect government spending and revenues, which in turn can have an impact on fiscal health.

Standardisation can be used to measure the level of optimisation of the transfer pricing calculation, ensuring that the distribution of the fiscal health index is homogeneous across the sample. This can be achieved by comparing the tax health index to a standardised benchmark, such as an industry average or target range and also by making adjustments to the transfer pricing calculations, as appropriate. Standardisation can help ensure that transfer pricing decisions are consistent and fair across the sample and that the overall fiscal health of the group is optimised.

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