The objective of the article is presenting initial results of the research focused on the development of an arithmetic model for energy regulation purposes in the form of an empirical instrument that can be used for tariffing the energy production by SME and as a value creation tool for SME energy providers.

Methodology covers review of world-wide literature and studies based on sources of power industry. Author is carrying out questionnaire surveys on a sample of SME sector power companies pursuing concession activities in energy industries in UE and questionnaire surveys carried out among Regulators from European power markets and global markets.

The research contribute to the development of the theory of tariffing through the development of empirical measures to limit the negative impact of state intervention in sector of SME energy companies operating in the regulated market and the development of the use of econometric models in the process of enterprise value creation. The model will also contribute to the development of tools catalogue under the concept of SME VBM.

The regulation processes for the SME energy segment should be based on empirical fundamentals to stimulate their effectiveness that leads to price reductions. There are some symptoms for the proliferation of empirical instruments in both science and economic practice in the form of econometric models used for regulatory purposes in tariffing procedures for energy business.

The Model will represent an empirical approach to the task of negotiation of the regulated income for SME energy providers. The Model in its instrumental and methodological dimension will be designed based on best practices on the global energy markets and will contribute to design the VBM tools for SME value development. Implementation results of the research can be a pioneering approach to the creation of the empirical basis for the process of tariffing.

Keywords: regulatory process in energy, tariffing, arithmetic models, SME energy providers, VBM

JEL Classification: G390, G380, C58, C51

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**Introduction**

The main objective of the article is presenting initial results of the research focused on the development of an arithmetic model for energy regulation purposes, in the form of an empirical instrument that can be used for tariffing the energy consumption in the SME sector and as a value creation tool for SME energy providers. The resulting model will represent an empirical approach to the task of administrative negotiation of the regulated income for energy providers, as a compromise between the recipients’ price preferences and the suppliers’ (distributors’) rate of return preferences related to the expected return on invested capital at the level surpassing that of the average capital cost in Poland. The resulting model, both in its instrumental (econometric) and methodological dimension (the methodology of its application for tariffing purposes) will be designed from the ground up, based on selected best practices in the field, as employed for similar purposes on the energy markets of the EU and the world.

Indirect objectives of the research include:

- determination of regulative solutions targeted for the SME sector, as adopted on energy markets in the EU and in other developed energy markets of the world,
- determination of regulative solutions adopted in Polish sectors of electrical power engineering, heat engineering and gas engineering,
- the establishing of regulative solutions (accepted by Regulatory Offices) that may be employed for the SME sector in relation to solutions adopted elsewhere,
- evaluation of the significance of cooperation between SME energy recipients upon the tariff prices (preferred cooperation forms, directions of influence, manifestations of influence).

In Poland at present, there are no Regulator-approved tariff negotiation solutions based on econometric models to address the SME sector and even to state-owned companies quoted on the Warsaw Stock Exchange (main sector in Polish energy business), particularly with respect to the principles of calculating the operating expenditures of licensed activities (OPEX), regulatory asset valuation or the weighted average cost of capital (WACC). The need for an empirical approach in the calculation of regulated income in Polish energy sector was first observed in the sectors of electrical power engineering and gas engineering. The Polish electrical power distribution sector was subject to a three-year regulation period, initiated on January 1, 2008 (Zaleski 2010). In 2009, the regulations were in force for 14 Distribution System Operators; those entities were formally obliged to submit their tariff proposals based on a pre-established methodology. The electrical power sector in Poland is being regulated on the basis of the retail price index (RPI-X). In the years 2008-2009, the regulated income for electrical power distribution was calculated as a sum of operating expenditures of licensed activities and the associated cost of capital. In the case of the gas engineering sector, the pending Long-Term Regulation Model (Długoterminowy Model Regulacji - DMR), based on an econometric model, was used for the six Gas Distribution System Operators affiliated with the PGNiG S.A capital group. The model was intended to stay in force for the period of three consecutive annual tariff years of 2012-2014. In 2012, it was temporarily put on suspension, and, later on (in 2013), set aside, as a result of consolidation processes in the sector of gas distribution (Węgrzyn 2013).

The main premise behind the design of the DMR model was the negative evaluation of the sector’s profitability and economic added value. The evaluation was done by the owner (indirectly; the State Treasury), as the gas distribution sector was an element of the public capital group quoted on the Warsaw Stock Exchange. The analysis in question identified a number of negative factors to influence the performance of individual gas engineering companies, namely (Węgrzyn 2013):

- no potential for including the full return on invested capital in the regulated income (the so-called RoIC gap),
- the lack of potential to include the full depreciation rate value in the regulated income (the so-called amortisation gap),
- the lack of capacity to include the full value of operating expenditures in the regulated income (the so-called expenditure gap).

In the light of the above, the Regulator decided to introduce measures intended to optimize the operating expenditures of the distribution segment, with particular focus on the inclusion of those costs which had been deemed unsubstantiated by the Regulator for the purpose of the tariffing process. In addition, the Regulator intended to increase the income level by negotiating individual tariff rates to cover the real value of operating expenditures related to the licensed activities and to ensure proper allocation of return on capital among the applicable energy sector companies. Previous to that, the regulation principles applied to the gas distribution sector in Poland had been quite volatile, both in terms of its main assumptions and the methods used in the calculation of the distribution tariffs, resulting in considerable uncertainty on the part of individual companies, since there was no way to forecast the future tariff rates approved by the Regulator for the next tariff period. This had also had a
negative effect on the companies’ financial performance, since the Regulator offered no warranties of full return on invested capital and repeatedly questioned the eligibility of certain cost items on the list of the operating expenditures related to the licensed activities. Such a short-sighted approach to tariff regulation has also contrasted with the best practices used by regulators in other EU Member States. The new regulation model for gas engineering companies required changes in the regulation principles in three fundamental areas, namely:

- regulation periods for companies,
- regulation of eligible rates of return on capital,
- regulation of eligible rates of operating expenditures.

With respect to the length of the regulation periods, it was necessary to design a range of assumptions and parameters which would be in force for the whole duration of the regulation period. With respect to the RoC rate regulations, the Regulator had to design a method for establishing fair values of invested capital and specify the methodology for calculation of the weighted average cost of capital (WACC). With respect to setting the range of eligible operating expenditure rates, it was necessary to provide an objective classification of dependent and independent costs, in order to provide a properly diversified structure of the regulation methods. In the latter aspect, the most important task was to establish base (input) level of dependent operating expenditures (OPEXᵦ), to form a basis for setting (indexing) the costs for the following years of the regulation period. Other important elements included establishing a methodology of operating expenditure indexation and designing the applicable indexing indicators. The most important result of the DMR research comes in the form of a calculation sheet representing the econometric regulatory model for gas companies, to support the process of estimating the regulated income for individual entities (Wegryzyn 2013).

For both sectors, i.e. electrical power and gas industry, the postulated solution applied solely to large state-owned companies operating under natural monopoly conditions. For the remaining actors, particularly the SMEs, the tariffing process is still arbitrary (non-empirical), due to the lack of proper methodological approach on the part of the Regulator, with no empirical instruments to support the tariffing process in this segment.

On the demand side of the equation, the numerous forms of company cooperation are well-represented in professional literature. However, the research finding on the benefits of such cooperation are rarely substantiated by examples. It seems that this particular area – the cooperation between SMEs and its effects on tariff pricing – is under-represented in scientific research.

The regulation principles in the sector of energy production and distribution in Poland over the last few years have been quite volatile, both in their fundamental assumptions and the structure of variables used for tariff calculation purposes. This had the effect of elevating the uncertainty level for energy companies, due to difficulties in forecasting the prices for the next tariffing year. Their financial performance also suffered, since the Regulator offered no warranties of full return on the invested capital and repeatedly questioned the eligibility of certain cost items on the list of the operating expenditures related to the licensed activities. Such a short-sighted approach to tariff regulation has also been in contrast with the best practices used by regulators in other EU Member States. This problem is particularly evident in SME sector companies, which are often unable to carry the cost of external consultancy or professional tariffing teams, and reduced to strict observance of administrative decisions imposed by the Regulator, which has the effect of constraining their development opportunities. In the light of the above, it seems advisable to design empirical fundamentals of the tariffing process for the SME segment of the energy sector, based on econometric models, and utilizing some of the best practices observed in the industry, both in domestic electrical power and gas engineering sectors, and the more developed energy markets of Europe and of the world. This approach may contribute to the formation of a predictable environment for tariff negotiations between individual companies and the Regulator, by formulating an empirical fundament for pricing purposes and by alleviating the burden of uncertainty for the involved actors.

From the research perspective, very interesting aspect is the impact of the SME sector on the pricing of tariffs for the whole industry. In recent years, there has been a marked increase of research reports in the area of cooperation between companies, particularly those operating in cluster formations. Another important element of the regulated market of energy is the impact of individual contracting parties on the pricing decisions. In this context, the research on impact of small entities with relatively limited volume seems justified, since those entities cannot possibly influence the pricing decisions by themselves. The central problem here is the cooperation between small entities (the pros and cons), its forms, directions and operating methods. Another aspect deserving attention can be expressed in the following form: do the entities involved in various cooperation forms seek to influence the pricing decisions and, if so, what types of activities do they employ to that effect.

The novelty of the postulated approach can be justified by the fact that it represents an attempt at formulating an empirical instrument that can be used as platform for tariff negotiations conducted annually by state authorities, represented by the office of the Regulator, with the SME segment of energy companies. In methodological terms, the pioneering nature of the research is substantiated by the use of the best practices benchmarking method, based on the existing solutions employed on mature energy markets of Europe and the world, to complement
the design of econometric models for tariffing purposes in the energy sector. The unique character of the postulated research lies also in the attempt at producing a scientific solution for state administration and business entities, to enhance the empirical fundamentals of the process instead of resorting to the largely arbitrary administrative decisions imposed by the state-appointed executive bodies. The pioneering character of the project is also be observed in the intent of the research team to address the needs of a specific segment of the market, namely the small and medium-sized enterprises operating on the regulated market of energy, under the competitive pressure from large, multi-utility energy conglomerates benefitting from natural monopoly.

Another pioneering aspect of the research is focused on inclusion of SME actors in the negotiation of tariffs for the SME segment, represented by coordinators appointed by individual groups of cooperating entities (Porter 2000) (Asheim and Coenen 2006) (Golej 2012).

Results of empirical studies are the development of tariff negotiation strategies in Poland and elsewhere, since empirical instruments have the potential of reducing the extent of state interventionism in the sector, particularly the highly susceptible segment of SMEs operating on regulated markets. The results of empirical research will contribute to the development of econometric models for business, particularly with respect to value creation in the segment. The resulting empirical econometric model will also broaden the range of applicable Value Based Management instruments that can be used in the design of development strategies for small and medium-sized enterprises of the energy sector. The research also offer utility value, by offering a pioneering approach to the design of empirical fundamentals for tariff negotiations, as well as value creation for individual companies (and not limited to the SME segment). Another utility value is the potential range of benefits offered to SME actors through their involvement in the price negotiation processes. In addition, the study of cooperation as a factor involved in price negotiations also contribute to the development of cooperation strategies in other areas and in other sectors of the economy.

1 Materials and Methods

Presented empirical research is conducted with the application of the following methods: relevant Polish and world-wide literature review and review of relevant studies based on corporate sources of power companies, industry organisations (e.g. Chambers of Commerce), materials of Energy Regulatory Offices, Ministry of Economy and Treasury of the Republic of Poland, reports of consulting companies, publicised materials prepared by the European Commission and UE Parliament. Author plans to carry out questionnaire surveys on a sample of SME sector power companies pursuing concession activities in electrical power, heat generation and gas distribution industries in Poland and questionnaire surveys carried out among Regulators from European power markets and developed global markets. Analysis of survey data based on statistical data processing applications will be next important issues. Investigator plans to review of econometric models used in the power industry in Poland and all over the world, study visits and practical observation of the econometric models used in the power industry for tariffication purposes. The practical result of the research will be development of an econometric model for power companies with the use of professional IT tools available on the market based on good practices applicable all over the world. If, in the course of the research, the differences in the specificity of individual groups of examined enterprises prove to be too big, which is highly probable, thus preventing unification, i.e. for instance, the differences between a heat network transmission company and an electrical power generation and distribution company will regard e.g. core processes (with regard to their specificity and hence cost-generation), the econometric model will be developed for every examined group, i.e. for the group of combined heat and power generation, electric power, and gas power generation companies separately, and also by generation, distribution as well as generation and distribution companies.

2 Results of initial research

The need for an empirical approach to the process of regulating the licensed activities in the sector of energy is quite pronounced at present. In particular, econometric models may be employed to enhance the empirical character of regulatory instruments for the SME segment of the sector under study. The fundamental elements of the value creation process for energy companies should be based on empirical models, such as the Regulator-approved econometric models. So far, the regulation process in the sector of energy in Poland has principally been based on administrative decisions, devoid of the empirical dimension. Initial research analyses allowed to determine the existing best regulatory practices adopted in other countries of the EU region. The best practices were found to provide a good balance of interests for both parties of the market exchange, i.e. the customers and the companies of the energy sector. Best practices identified in the course of initial research include:

- prolonged regulatory periods for energy companies, to increase the predictability of the Regulator’s activities and ensure their invariability over a given period,
• the use of motivational (incentive) regulation methods for energy companies, designed to improve the operating effectiveness (e.g. by creating incentives for the reduction of costs associated with the licensed activities),
• setting clear and predictable rules for determination of allowable levels of operating expenditures for the subsequent tariff periods, based on transparent indexing formulas (typically, the RPI-X formula, with X representing a compilation of different variables that determine the expenditure level of networked companies, such as cost optimization indexes, scale of operation indexes, and others),
• inclusion of activities related to the introduction of new technologies in the list of allowable operating costs, for example: energy saving solutions, energy use monitoring, effective infrastructure management (smart metering, etc.).

The key conclusions obtained in the course of initial research are unambiguous: the regulation processes for the companies of the energy sector – particularly the most susceptible companies of the SME segment – should be based on clear and transparent fundaments, to allow the companies make informed and rational decisions and to stimulate their effective operation that leads to price reductions per unit. The most important aspect in the rational approach to regulatory processes in the industry is to provide the relative long-term stability of the regulatory environment, in order to reduce the investment risks and improve the stability and security of energy infrastructure. For this purpose, it seems advisable to introduce prolonged regulatory periods (3-5 years), with relatively unchanged regulatory principles.

There are some symptoms for the proliferation of empirical instruments in both Polish science and economic practice, in the form of econometric models used for regulatory purposes in tariffing procedures for electrical power, heat engineering and gas engineering sectors (Osiewalski and Wróbel-Rotter 2002) (Węgrzyn 2013). In the course of regulatory proceedings for the year 2008, the Polish Regulator introduced and communicated to the electrical power Distribution Systems Operators a list of allowable operating expenditures for the period of 2008-2010, calculated on the basis of an econometric model designed by professor Jacek Osiewalski and his team at Cracow University of Economics (Osiewalski and Wróbel-Rotter 2012). In the case of gas engineering, the Long-Term Regulatory Model was designed on the initiative of the Polish Board of Gas Engineering, based on an econometric model for the 6 Distribution System Operators affiliated with the PGNiG S.A Capital Group. The model was intended to stay in force for the period of three consecutive annual tariff years of 2012 -2014. In 2012, it was temporarily put on suspension, and, later on (in 2013), set aside, as a result of consolidation processes in the sector of gas distribution. Consequently, it still remains in the sphere of theoretical models.

For both sectors, i.e. electrical power and gas industry, the postulated solution applied solely to large state-owned companies operating under natural monopoly conditions. For the remaining actors, particularly the SMEs, the tariffing process is still arbitrary (non-empirical), due to the lack of proper methodological approach on the part of the Regulator, with no empirical instruments to support the tariffing process in this segment. The subject is also largely under-represented in domestic professional literature.

The initial research allowed to determine the concept for a regulatory model for the SME segment. Under the adopted assumptions, the Model shall comprise of two elements (sub-models) (Węgrzyn 2013). The first sub-model is a benchmarking\(^2\) model (for cost-effectiveness assessment), based on historical expenditures, asset information, and cost intensiveness indicators, to allow for comparison of the cost-effectiveness across the segment and the determination of individual cost-effectiveness indicators for companies under study. The second element – the regulated revenue forecast sub-model – shall be employed for the purpose of forecasting costs, return on invested capital, the regulated revenue and the mean average pricing for the subsequent years of the forecast, adjusted against the benchmarking sub-model data.

\(2.1\) Benchmarking sub-model

The benchmarking sub-model will serve the purpose of assessing cost-effectiveness of the enterprises covered by the examination and is aimed at comparing the historical effectiveness of the enterprises as well as at determining the potential cost-effectiveness gap to be reduced in the future tariff years.

The historical effectiveness of enterprises will be compared through:
• analysis of historical dependent operating expenditures of a concession activity (without amortization, taxes and fees, and balance sheet difference),
• analysis of key parameters which determine the behaviour of dependent expenditures of enterprises,
• calculation of metrics for cost-effectiveness assessment for each of the enterprises carried out based on historical expenditures by areas and parameters assigned to the areas.

\(^2\) The benchmarking methodology has been presented comprehensively in the first polish manual on benchmarking written by Adam Aleksander Węgrzyn (Węgrzyn 2000)
The potential cost-effectiveness gap reduction in the future years will be determined through:

- calculation of the gap in a given cost area relative to the adopted reference level, which will be carried out on the basis of effectiveness metrics assigned to a given area and metric weights in the area,
- calculation of the cost gap at the level of a given enterprise, which will be carried out on the basis of effectiveness gaps in individual areas and area weights within the enterprise.

The benchmarking cost-effectiveness assessment sub-model will be supplied by three groups of data: cost data, operational data, and weights.

Cost data will comprise dependent operating expenditures of a concession activity by individual groups (as part of unification, the following are suggested provisionally):

- infrastructural equipment operation (a specific division will depend on the specificity of a given group of examined enterprises),
- commercial consumer service,
- energy flow management (depending on the group of examined enterprises – electrical, heat, gas fuel energy),
- ancillary activities.

For verification purposes, expenditures related to the area of the so-called non-concession activities, and the value of independent operating expenditures (amortization, taxes and fees, and balance sheet difference) will also be included within the model.

Operational data will include key parameters regarding operating activities of enterprises, which will constitute cost-effectiveness assessment parameters in individual areas of the activity (the so-called drivers) within the model. They will comprise major parameters (e.g. length of the power grid, number of infrastructural facilities, such as transformer substations, heat generation facilities, gas pressure reducing stations, number of consumers, volume of the transmitted energy) coupled with sub-parameters and their cost-absorption ratios. The data regarding weights will include, in turn, weights of individual cost metrics and weights of operating activity areas. Metrics for cost-effectiveness assessment of enterprises will be calculated based on adjusted parameter values (e.g. adjusted length of the power grid), since parameters being cost drivers in various enterprises are diverse in many aspects (e.g. the length of the grid can be diversified in terms of the material used, age of the grid, terrain conditions of the power grid location).

The so-called adjustment factors, which reflect the fact that given sub-parameters within a given parameter (e.g. length of the network by medium and low pressure in the case of gas transmission networks) are characterised by different cost-absorption, will serve the purpose of calculating the adjusted parameter values. For example, the calculation of an adjusted parameter of the length of the power grid could be as follows:

\[
\text{Adjusted length of the grid} = \text{Nominal length of the grid} \times \text{Adjustment factor regarding the age of the grid} \times \text{Adjustment factor regarding the grid location}
\]

Adjustment factors within a given sub-group, in turn, can be calculated by determining the cost-absorption of individual sub-parameters making up a given parameter. It will be determined empirically (with the assumption that the sub-parameter with the lowest cost-absorption within a given group will be assigned ratio 1, while in the case of other sub-parameters the cost-absorption ratio is calculated as a relation of unit cost-absorption of this parameter to the parameter with the lowest cost-absorption) for individual examined enterprises and it will be used as average values in the model. An example calculation of adjustment factors based on a group of sub-parameters of grid voltage for electrical power companies is as follows:

\[
\text{Adjustment factor regarding grid voltage} = \text{Share of the high voltage grid in the total length of the grid} \times \text{Cost-absorption ratio for the high voltage grid} + \text{Share of the low voltage grid in the total length of the grid} \times \text{Cost-absorption ratio for the low voltage grid}
\]

Metrics will be defined in the benchmarking model and then assigned to the identified cost areas. If, in the course of the research, the differences in the specificity of individual groups of enterprises prove to be too big, thus preventing unification, i.e. for instance, between a gas distribution network company and a heat distribution network company, cost areas will be determined for every examined group individually.

Metrics for cost-effectiveness assessment will be calculated as a relation of the cost value of a given area of activity to the adjusted parameter value (e.g. cost of the area infrastructural equipment operation / adjusted length of the grid).

The point of reference for thus calculated metrics will be the median value of a given metric calculated for all examined enterprises in a given year. Therefore, the cost-effectiveness gap is the difference between the median value of all metrics and the metric value for a given enterprise.
Only negative deviations from the median will be taken into account in the process of determining the effectiveness gap since the primary objective of the cost-effectiveness assessment model is to identify only such areas in which enterprises disclose effectiveness at a level lower than the median.

Where more than one metric for effectiveness assessment (e.g. the cost of infrastructural equipment operation / grid km) is calculated within a given cost area, the calculated effectiveness gaps (deviations) will be "weighed" at the level of individual metrics. Metric weights within areas, which will be determined as average values on the basis of the weights determined for the examined enterprises, will be used for this purpose.

The final stage in the effectiveness assessment process will consist in determining cost-effectiveness gaps (deviations) at the level of individual enterprises, i.e. with all cost areas that are included in the model taken into consideration. The previously calculated effectiveness gaps at the level of individual areas and area weights in individual enterprises will be applied for this purpose. Hence, the total effectiveness gap of a given enterprise will be the sum of products of its effectiveness gaps at the level of areas and the corresponding weights. Area weights will be calculated based on the share of costs of a given area in the total costs of all areas.

To sum up, the total effectiveness gap will be the average of the gaps determined for the analysed years and will operate in the regulated revenue forecast model as X ratio, that is the cost-effectiveness ratio.

3.2 Regulated revenue forecast sub-model

The regulatory Model being developed is aimed at estimating and analysing regulated revenue components by individual examined years, in particular return on the committed capital, dependent operating expenditures, and costs of amortisation/depreciation, taxes and balance sheet difference, as well as estimating average regulated prices for the successive examined years based on the forecast of volume and of regulated revenue. The rates will be for reference only and serve as the basis for negotiations with the Regulator.

General assumptions of the Model will include:

- inflation forecast,
- planned dependent operating expenditures optimisation path - X ratio,
- planned activity scale change path - Y ratio,
- various variants of achieving the full return on the committed capital.

The Model will also use the source data regarding concession activities obtained from the individual examined enterprises:

- dependent operating expenditures – executed in year n (e.g. 2014), which constitute the cost basis for further forecast periods (the so-called OPEX$_n$),
- amortisation/depreciation cost forecast as well as tax and fee cost forecast,
- balance sheet value of property, plant and equipment and net intangible assets as at the end of year n, which serves the purpose of determining the Regulatory Asset Base (RAB),
- forecast capital expenditures,
- forecast energy supply volume,
- forecast operational data serving the purpose of determining the planned activity scale change.

Regulated revenue will be calculated by: return on the committed capital, dependent operating expenditures, amortisation/depreciation, taxes and fees.

An example dependent operating expenditures forecast is presented below. Dependent operating expenditures, including costs of outsourced services, materials and energy, remunerations, performances for employees, and other costs by type, will be forecast based on the initial level of such costs (the so-called OPEX$_0$), that is executing dependent operating expenditures of year $n$. Dependent operating expenditures will be indexed within the assumed regulation period according to the Formula 1:

$$OPEX_n = OPEX_{n-1} \times \left[1 + \left(RPI_n + X_n + Y_n\right)\right]$$

where: $OPEX_n$ = dependent operating expenditures, $OPEX_{n-1}$ = dependent operating expenditures recognized for tariff calculation in the previous tariff year, $RPI_n$ = annual average increase in prices of consumer goods and services determined on the basis of the assumptions adopted by the Council of Ministers for the purpose of preparing a draft State budget for a given year, $X_n$ = individual cost-effectiveness ratio, $Y_n$ = activity scale change ratio of individual enterprises.

Tax and fee as well as amortisation/depreciation costs will be forecast based on schedules of costs prepared by the individual independent enterprises.

The return on the committed capital based on initial examination of good regulatory practices on developed power markets, in turn, will be forecast based on the variant in which return on capital is an element closing
forecasts of other regulated revenue components with the simultaneous assumed maximum regulated revenue increment. The above assumption is illustrated by the Formula 2:

\[ R = RR - (OPEX + A + T) \]  

where: R = return on the committed capital, RR = regulated revenue for a given year, OPEX = dependent operating expenditures, A = amortization/depreciation, T = taxes and fees.

**Conclusion**

The results of initial, empirical research presented in article are of particular importance for the development of the theory of tariffing around the world through the development of empirical measures to limit the negative impact of state intervention in the development of the sector, which is particularly sensitive sector of SME energy companies operating in the regulated market. The test results also contribute to the development of the use of econometric models in business especially in the process of enterprise value creation. Developed by empirical research econometric model will also contribute to the development of tools catalogue under the concept of Value Based Management that can be used in the design of the development of SME. Implementation results of the research is a pioneering approach to the creation of the empirical basis for the process of tariffs. The nature of research is also driven by utilitarian benefits that they can get through the SME entrepreneurs the opportunity to influence the price. The ability to exert influence through the mechanism of cooperation, it can also be a contribution to the further cooperation of enterprises in other areas.

**References**


