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Issues in Determining the Real Value of Concession Fees When Granting Concession for Commercial Use of Maritime Domain

Vlado Mezak¹, Alen Jugović², Donald Schiozzi³, Filip Vice Lapov²

¹ Švalbina 8, 51000 Rijeka, Croatia, e-mail: vlado2010@yahoo.com

² University of Rijeka, Faculty of Maritime Studies Rijeka, Studentska 2, 51000 Rijeka, Croatia

³ Rovinj Port Authority, Obala Aldo Rismondo 2, 52210 Rovinj, Croatia

ABSTRACT

This paper analyzes the legislation related to concessions on maritime domains and indicates the need to adjust certain legal provisions to improve the quality of the concession granting procedure. The object of this paper is to indicate the issues in determining the real value of a concession fee in the process of preparing a feasibility study for granting the concession, and to give a scientific contribution by proposing procedures and measures, which can enable setting more precise concession fee values. Using the methods of comparison, analysis, and synthesis, authors prove that in the process of preparing a feasibility study for granting the concession it is not possible to assess the real value of the concession and concession fee with certainty, as it is necessary to estimate economic sizes in the long term. Each concession contract, lasting longer than five years, should be subject to a peer review owing to changes in economic, political, demographic, and other indicators, and if necessary, the value of concession fee should be adjusted accordingly. The authors explain the stated imprecision in the estimate of economic indicators by the index of uncertainty of economic policies, and with the inability of long-term forecasting of potential economic crises.

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1 Introduction

The term concession can be defined according to the linguistic, legal theory and normative meaning [11]. The linguistic root of the term concession comes from Latin word *concessio*, which generally means approval, permission, license or guarantee [10]. Latin word *concessio* served as basis and root of this term in Croatian and other European languages. In terms of legal theory meaning, the term concession is limited to the classic granting of a right, by public authorities to natural or legal persons [18]. Thirdly, the normative meaning of the term concession is provided by the legislator.

A reference to the legislation governing the concessions in the Republic of Croatia is provided at the outset of this paper. The procedures of preparing the feasibility study for granting concession and estimating the value of a concession are thoroughly analyzed. Subsequently, the paper describes the process of granting concession on

maritime domain for economic use and defines criteria for determining the amount of the concession fee, as well as criteria for the bid evaluation procedure. Content of the economic feasibility study is defined in the third part of the paper. The end of the paper presents the analysis of the issues in determining the real value of the concession fee and proposals for improving the quality of the concession fee value estimate, which would not be impacted by the long term of the concession contract.

2 Concessions and the Governing Legislation

Concessions in the Republic of Croatia, on a basic level, are governed by the Concessions Act [22] of 2017 (hereinafter: CA), while the concessions on a maritime domain are governed by a special law – Maritime Domain and Seaports Act [23] (hereinafter: MDSPA) of 2003. The CA is the general umbrella regulation, which determines basic principles and regulations, and has the function of “lex

generalis”, while the specific issues for particular areas or activities for which concessions are granted are regulated by the MDSPA, which acts as “lex specialis”.

Concession granting procedure is regulated in detail by the Regulation on the Procedure of Granting a Concession on the Maritime Domain [19] (hereinafter: Regulation) as a bylaw.

2.1 Concessions Act

This part of the paper presents a concise review of CA articles related to the issues of determining the value of concession and the concession fee.

The CA governs the procedures for granting concessions, concession contracts, concession expiration, legal protection in the processes of granting concessions, concession policy, and other issues related to concessions [22] (Art 1). Types of concessions are concession for economic use of common or other goods, works concession and service concession [22] (Art 3).

The concession grantor is a public authority, i.e. a legal person authorized for granting concessions in accordance with this and special laws, while the concessionaire is an economic operator, with whom the grantor enters into a concession contract [22] (Art 5).

Preparatory actions for granting concession include all the activities conducted with the purpose of granting a concession, but precede the start of the concession granting procedure. Those actions are conducted by the grantor following the CA, the special law, regulations governing the public procurement and other regulations relating to the type and subject of a concession [22] (Art 14).

Preparing the feasibility study for granting concession or a concession granting analysis, as well as the concession value estimate are, among others, important parts of preparatory actions.

2.1.1 Feasibility study for granting a concession

The concession grantor conducts the feasibility study for granting a concession. The study takes public interest, impact on the environment, protection of nature and cultural goods, financial impacts of the concession on the Republic of Croatia state budget, i.e. budget of local and regional authorities, and compliance with economic development plans and concession granting plans into special consideration. In the matter of service concession and concession for economic use of common or other goods, with an estimated value under HRK 15,000,000.00, without value-added tax, the grantor can make an analysis of concession grant instead of feasibility study for concession granting. Analysis of concession granting has to adequately include the basic elements of the feasibility study for concession granting referred to in Article 19 of the CA, so the procedure of concession granting could be conducted according to the principles and rules of the procedure for concession granting governed by this Act [22] (Art 18).

Feasibility study for concession granting consists of an operative summary, a general part, technical, financial, economic and legal analysis, and, according to need, a paper on environment protection following special regulations, i.e. an appropriate assessment of the ecological network, where applicable, cultural goods and health, as well as relevant annexes, conclusions and recommendations.

The following provides the content of the financial and economic analysis of the feasibility study: analysis of expenses and benefits of the concession in relation to the grantor’s budget, i.e. the Republic of Croatia state budget and/or the budget of a local and regional authority, and the financial feasibility of a concession in relation to the concessionaire, in line with industry and international standards.

Feasibility study for granting a concession or an analysis of concession granting must include the determination of the type and subject of concession, estimated value of the concession, proposed minimum capacity conditions of the economic operator, the period for which the concession is granted, statement of reasons stating whether the concession has characteristics of a public-private partnership and any other data necessary for the production of tender documentation [22] (Art 19).

2.1.2 Estimated value of a concession

The concession grantor estimates the value of a concession as the total value of the concession, specified in HRK without value-added tax, including all foreseeable amendments to the concession contract and maximum value of the amendments. The estimated value of a concession is calculated as an estimate of the total revenue, without value-added tax, which will be generated by the concessionaire demonstrating best efforts based on the concession contract during the concession period. The estimated value of a concession is calculated based on the data from the feasibility study for concession granting, or analysis of concession granting [22] (Art 20).

In calculating the estimated value of a concession, market prices at the time of calculation, or the eventual price of the service to be applied in the procedure of granting the concession, or the price of the service regulated by a special law shall be used [22] (Art 20).

If a special law specifies the minimum concession fee payable by the concessionaire, the grantor indicates this amount, in the tender documentation, as the amount above which tenderers are required to submit their tenders [22] (Art 35 and Art 48).

The concession fee may be contracted as a fixed equal amount and/or as a variable amount, depending on the specifics of the subject of the concession, the principles set out in the feasibility study for granting a concession, i.e. the analysis of the concession granting and the special law [22] (Art 57). The concession contract may specify the change in the amount and/or the method of calculating and paying the concession fee for a certain

period, throughout the concession contract, following the tender documentation and the decision on granting the concession.

Changes of the concession fee are possible based on:

1. indexations related to changes of HRK and EURO exchange rate,
2. consumer price index,
3. amendment of the special regulation in the part regulating the amount and the manner of payment of the concession fee,
4. economic circumstances that significantly affect the balance of the ratio between the concession fee and the estimated value of the concession referred in Article 20 of the CA, which was the basis of the concession contract.

The change in the concession fee is determined by the concession contract and special laws and is made depending on the occurrence of circumstances and/or periodically, for specified periods, depending on the conditions of exchange rate fluctuations or changes in consumer prices.

2.2 Maritime Domain and Seaports Act

Concessions have been applied in the Republic of Croatia for 26 years, but the legal framework governing maritime domain concessions is not satisfactory, since the matter is regulated by the MDSPA of 2003, which does not comply with the CA of 2008, nor with the later laws of 2012 and 2017. Today, in practice, two laws are applied to the legal regime of maritime domain concessions (CA and MDSPA), which are not in conformity nor are they compatible [13].

MDSPA defines the concession as a right whereby a part of a maritime domain is partially or totally excluded from general use and granted for special use or economic use to natural and legal persons, in accordance with Zoning Plans [23] (Art 2).

Economic use of maritime domain means the use of maritime domain for carrying out economic activities, with or without the use of existing structures and other facilities on the maritime domain, and with or without the construction of new structures and other facilities on the maritime domain [23] (Art 6). For the economic use of maritime domain, a concession must be granted to natural and legal persons in the procedure prescribed by law [23] (Art 7).

Maritime domain is managed by the Republic of Croatia, either directly or through regional government units or local government units, under the provisions of the MDSPA. Maritime domain management means the maintenance, upgrade, protection of the maritime domain in general use, as well as special or economic use of the maritime domain based on the concession or concession permit [23] (Art 10).

Concession is granted for the period of 5 to 99 years [23] (Art 20). County Government grants a concession for the economic use of maritime domain, and the use or construction of buildings of importance for the County,

for the period not exceeding 20 years. The Government of the Republic of Croatia grants a concession for the economic use of maritime domain that includes the use or construction of structures of importance to the Republic of Croatia, for a period up to 50 years. With the consent of the Croatian Parliament, the Government of the Republic of Croatia grants concession for more than 50 years for the use or construction of new structures of importance to the Republic of Croatia, which requires large investments where the total economic effects cannot be achieved within 50 years. In determining the term of a concession, the purpose, scope and amount of investments required, as well as overall economic effects of the concession, are taken into account.

The decision for granting a concession includes, inter alia, the manner, conditions and time of use or economic use of maritime domain, compensation payable for the concession, as well as rights and obligations of the concession holder, including obligation to maintain and protect maritime domain [23] (Art 24). Based on a concession decision, the grantor and the authorized person conclude a concession contract. The concession contract regulates the closer purpose for which the concession is granted, the conditions that must be met by the concessionaire during the concession, the amount and manner of payment of the concession fee, the guarantees of the concessionaire, and other rights and obligations of the grantor and the concessionaire [23] (Art 25).

Maritime domain concession is subject to an annual fee, which is determined by the concession decision. A concession fee for the economic use of maritime domain consists of the fixed and variable part, the amount of which is determined based on economic justification, i.e. profitability of the economic use of maritime good, as evidenced by the economic feasibility study. [23] (Art 28).

The right to conduct port operations, the use of existing substructures and superstructures, and the construction of new structures and other superstructures and substructures are also acquired based on a concession [23] (Art 66).

Types of concessions are [23] (Art 66):

1. a concession for conducting port operations, which does not exclusively require the use of existing or construction of new structures and other substructure and superstructure facilities in the port area,
2. a concession for conducting other economic activities that do not exclusively require the use of existing or construction of new structures and other substructure and superstructure facilities in the port area,
3. a concession for conducting port operations, which requires the use of existing and/or construction of new structures and other substructure and superstructure facilities in the port area,
4. a concession for conducting other economic activities that require the use of existing or construction of new structures and other substructure and superstructure facilities in the port area.

A concession for conducting port operations, use of existing substructures and superstructures and construction of new structures and other substructure and superstructure facilities is granted for 99 years. Concessions referred to in items 1 and 2 are granted by the Port Authority, upon the request of the concession applicant, for 10 years. Concessions referred to in items 3 and 4 are granted by the Port Authority based on a public tender, for 99 years. Prior consent of the Government of the Republic of Croatia is required for the concession which is granted for the period from 30 to 50 years, while consent of the Croatian Parliament is required for the concession which is granted for the period longer than 50 years. In determining the length of the period for which the concession is granted, the criteria set out in Article 20 of the MDSPA are considered, taking into account that the term is not shorter than necessary for the depreciation of the value of the planned investments in the port area.

The Port Authority must check the execution of the plan and the annual operational work program of the concessionaire at least once per year. The concessionaire must enable the Port Authority and other competent authorities to check the execution of the plan and the annual operational work program of the concessionaire [23] (Art 71).

2.3 Regulation on the Procedure of Maritime Domain Concession Granting

This Regulation provides the procedure for granting concession on maritime domain for economic use and special use of maritime domain, a special purpose port, a procedure for granting concession in ports open to public traffic, and defines the criteria for determining the level of the concession fee and the criteria for the evaluation of tenders [19] (Art 1).

Should the average exchange rate of the Croatian National Bank for HRK change during the concession contract in relation to EURO (+/- 3%), the amount of the fixed part of the concession fee shall also be adjusted in line with the change of the exchange rate [19] (Art 3).

2.3.1 Criteria for establishing the amount of the concession fee

The Regulation defines the criteria for determining the amount of the concession fee. An example of the criteria for industrial ports is presented below [19] (Art 16):

B.2. Industrial ports

B.2.1. The fixed part of the concession fee

The starting amount of the fixed part of the concession fee is calculated according to the occupied m², and according to the following starting prices:

Existing and built industrial ports	4 kn/m ²
Industrial ports that had not been built on (new)	2 kn/m ²

B.2.2. The variable part of the concession fee

Starting amount for the bid amount of the variable part of the concession fee amounts to 2% of the bidder's income.

2.3.2 Content of a tender

A public tender offer must contain documents [19] (Art 18):

1. Evidence of the tenderer's capacity;
2. Offered amount of fixed and percentage of the variable part of a concession fee;
3. Economic feasibility study prepared according to the content and form of the documentation for public tendering. The total amount of the investment planned in the economic feasibility study is considered as a fixed asset investment;
4. Commercial bank tender and performance guarantee;
5. Letter of intent from the commercial bank that it will issue a guarantee for good completion of the obligations under the concession contract;
6. Certificate of the competent authority for issuing the location permit, showing that the intervention presented in the conceptual design is planned by the spatial planning documents;
7. Conceptual design of the project in the area of the maritime domain made by an authorized designer in accordance with the spatial planning documents and according to the economic feasibility study.

2.3.3 Bid evaluation procedure

The received bids are evaluated according to defined criteria. It should be noted that the bid evaluation criteria for all maritime domain concessions have changed three times already. Following the original Regulation of 2004, changes were made in 2012 and in 2017, which shows the uncertainty facing the participants in the concession granting process, that is, the hesitation of the legislator.

A. Concessions on maritime domain [19] (Art 21):

The evaluation of bids for all concessions on the maritime domain is done according to the defined criteria:

- offered amount of the fixed part of the concession fee 30%
- offered amount of the variable part of the concession fee 30%
- offered amount of the total capital investment according to the economic feasibility study 40%

B. Concessions for special purpose ports [19] (Art 21):

The evaluation of bids for special purpose ports, other than sports and fishing ports, is carried out in compliance with point A of this article.

The evaluation of bids for sports and fishing ports is carried out according to the following criteria:

- offered amount of the fixed part of the concession fee 25%
- offered amount of the variable part of the concession fee 25%
- offered amount of the total capital investment according to the economic feasibility study 20%
- amount of the investment in environment protection (within total investments) 30%

2.3.4 Concessions in ports open for public transport

The decision on the public invitation to tender for concessions to conduct port activities and other economic activities requiring the use of existing and/or construction of new structures and other substructure and superstructure facilities in the port area is made by the governing council of the concession grantor. The decision on the public procurement of concession bids must be based on the development plans of the grantor, the needs for technical and technological processes in the port, indicators of the circulation of port traffic and the stated needs of the users of the port. The decision on public invitation to tender for concessions may also be taken after an initiative addressed to the concession grantor, which has been expressed in writing by a legal or natural person registered for performing trades. [19] (Art 31).

Evaluation of bids is carried out according to the following criteria [19] (Art 35):

- offered amount of the fixed part of the concession fee 15%
- offered amount of the variable part of the concession fee 15%
- offered amount of the total capital investment according to the economic feasibility study, which includes the technical and technological equipment for carrying out the plan 40%
- the number of planned workplaces and workers' expertise 10%
- port capacity utilization and impact on the growth of port traffic 20%

Exceptionally, during the decision-making process about the public tender, the grantor's governing council can decide on different or additional criteria and the manner of evaluation.

Starting amount of the concession fee is set by the concession grantor, taking into consideration [19] (Art 38):

- the type of operations and the number of concessions granted for the same type of operations,
- the scope and quality of the investments planned and their impact on port development,
- utilization of port capacities,
- environmental protection measures.

The concession fee is determined in two parts, namely [19] (Art 39):

- fixed part to be paid for the total number of square meters of the port area,
- variable part to be paid depending on the scope of operations, the importance of the operations for technical and technological integrity of the port, and the impact on the port traffic.

The fixed part of the fee is paid by January 31 for the current year, and the variable part according to the concession contract provisions.

3 Economic Feasibility Study for Granting a Concession

Feasibility study for granting a concession is elaborated in detail in point 2.1.1., and the value of a concession, i.e. its estimate, which is the constituent part of the study, in point 2.1.2. It is necessary to make a distinction between a Feasibility study for granting a concession, which is to be made by the concession grantor, independently or with the assistance of external experts, and an Economic feasibility study for granting a concession, which is to be made by the concession applicant.

The content of an economic feasibility study was defined in the first version of the Regulation on the Procedure of Granting a Concession on the Maritime Domain [19], but in the Regulation on amending the Regulation (NN 83/12) the definition was changed, which is why the newest Regulation does not state the content of the economic feasibility study. Presently, it can only be recommended what the stated study should contain. The following sets out the elements of an economic feasibility study of granting a concession, according to Article 18 of the Regulation, which is not in force any more:

- the existing condition of the site for which the concession is requested,
- investment plan elaborated in detail for the entire duration of the concession,
- the amount of the planned investment in environmental protection,
- the amount of the total investment planned,
- sources of investment financing (own resources, loans),
- estimation of project profitability (income – expenses),
- statement of the tenderer on technical equipment and personnel, and organizational capabilities for the realization of the concession,
- letter of intent of the issuer (bank) on issuing performance guarantees to the bidder, related to investments, according to the investment plan from the economic feasibility study made by the bidder.

For the expert evaluating body to gain a better understanding of the quality of the bid submitted by the concession applicant, the study should preferably contain the data on profit before tax, increased by the amortization in the previous year, the income from ordinary activities in

the previous year, and the mention of bidder's experience in operations for which the concession was requested, as well as the number of new workplaces.

4 Determining Real Value of the Concession Fee

The concession procedure in the Republic of Croatia is very complex and requires the application of several laws and regulations, which are not always harmonized. It is demanding towards the concession grantor and the concessionaire. The example of Italy, which does not have a concessions act, but solves issues of granting concessions by special regulation according to the types of concessions, demonstrates that Croatia could resolve the issue more transparently and simply [6].

In this paper, the focus of the analysis is on economic indicators, i.e. the assessment of the value of a concession and the assessment of the value of a concession fee. Due to the complexity of the concession granting procedure, it is often not possible to determine the estimated values with certainty. Considering that concessions are mostly awarded over long periods, the possibility of error is even greater.

The CA defines how the concession grantor should prepare a feasibility study for granting a concession, the important part of which is the determination of the value of the concession. The CA of 2012 defines the estimated value of a concession [21] (Art 11) more precisely, that is, differently than in the most recent CA of 2017 [22] (Art 20). That might have been adequate if there was a desire to simplify and shorten the law, which would be easier to enforce. However, the new CA has 106 articles, while the old CA of 2012 had only 65, even though it was based on a very elaborate European regulation, preceded by systematic research [20].

A more precise definition of the calculation of the estimated value of a concession under the CA of 2012 is: The estimated value of a concession for the economic use of a common good or other good is calculated as the estimated revenue that the concessionaire, acting with the care of a good businessman, will derive from the concession contract for the duration of the concession, less the estimated amount of the concession fee, and discounted to net present value at a discount rate determined by the concession grantor, that reflects current market estimates of the time value of money and the risks specific to the investment related to the subject of a concession.

The above definition shows that the value of the concession is in relation to the concession fee, i.e. the estimated value of the concession is the result of the difference between the total income of the concessionaire and the concession fee, which is additionally being discounted. It is concluded that, even though the amount of a concession fee will be determined at the conclusion of the contract, it has to be estimated in the process of preparing the feasibility study for granting a concession. However, the esti-

mate from the feasibility study for granting a concession is very important, as it will be compared to the value of the concession fee proposed by the concessionaire, and it will be stated in the economic feasibility study for granting a concession. The insight into the complexity of the procedure is obtained after adding precise minimum values of concession fees, which have to be calculated basis on the criteria of the Regulation on the Procedure of Granting a Concession on Maritime Domain.

The greatest uncertainty in the precise assessment of the value of a concession fee is contained in the need to determine this value over a long period, from 10, 20 to 99 years. An analysis of several feasibility studies for granting a concession [14, 15, 17] demonstrates that in most studies, the concessionaire's revenue and expenditure indicators are projected unchanged after the fifth year of the concession period because they are difficult to predict. However, this results in an unrealistic estimated value of a concession and the value of a concession fee.

In some studies [16] the estimated revenue and expenses of the concessionaire increase by a certain equal annual percentage, but even with this procedure, the real value of the concession fee cannot be determined since the market seldom behaves in such a uniform manner.

Studies are made by experts who conduct studies on behalf of the concession grantor, according to legislation and defined rules and procedures. The results of such studies are unreliable because contractors are required to make accurate estimates that are strongly influenced by economic, political, fiscal, social, climate, demographic and other changes. For such long-term periods, these estimates cannot be accurately determined and calculated, even with the help of discount rates, various indices and other economic instruments. In addition, the inability to forecast the occurrence of potential economic crises in the long term must also be taken into account.

Recession is an economic crisis, which can be defined as a slowdown in a country's economic activity accompanied by a simultaneous worsening of the general economic climate (drop in real income, rising unemployment, low utilization of production capacity...) [9]. Croatia, like many other European countries, has gone through two such successive economic crises in the last ten years. The first was related to a financial disturbance that originated in America and moved to Europe, and the second crisis, based on a similar disorder, came from Greece. These external shocks caused a significant decrease in Croatia's production and employment. Real GDP dropped by 7.4 percent in 2009 and by another 1.7 percent in 2010. Production dropped significantly again in 2012, by 2.2 percent, and negative growth of 1.1 percent was recorded in 2013. An additional decline in production by 0.5 percent was recorded in 2014, and the total drop in real GDP in the period from 2008 to 2014 was 12.6 percent [8].

Chart 1 shows how the recession affects the real demand, which is very important for the realization of posi-

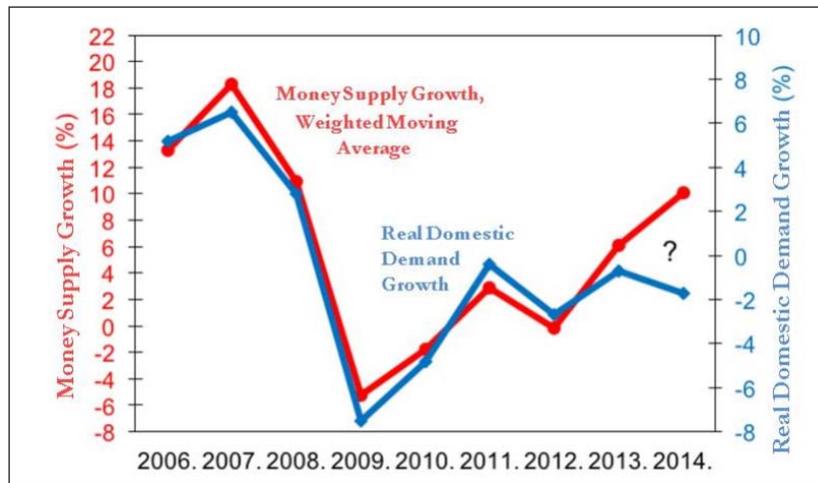


Chart 1 Growth in money supply and real domestic demand in Croatia 2006 – 2014

Source: Oračić, D.: Croatia during the past two recessions, 2017

tive business results of concession beneficiaries. More specifically, Chart 1 shows the statistical relationship between the growth of money supply and the growth of real demand in Croatia from 2006 to 2014. A large decline in real domestic demand is visible in 2009, as a result of a decline in money supply in the same year and a slowdown in its growth in the previous year.

The imprecision in the estimation of economic indicators can also be explained by the economic policy uncertainty index reflecting the problem of identifying possible future outcomes and their likelihood or simply fear of the unknown [4]. Uncertainty was introduced as a term in economics at the beginning of the twentieth century [7], and today many authors warn about the impact of uncertainty on economic activity [1, 3]. The Economic Policy Uncertainty (EPU) index was introduced by Baker, Bloom

and Davis in 2011 [2]. The index is based on three pillars: the first base of the index is an archive of news articles on economic uncertainty from the top ten US daily newspapers, the second base is determined by the number of tax provisions that expire in the next ten years, and the third base of the EPU index is a measure of disagreement in forecasts from a survey of professional forecasters. In Croatia, Sorić and Lolić have tried to quantify the Croatian version of the media uncertainty index and verify if it is characterized by the same effects as the one from the US [12].

One example of uncertainty is shown in Chart 2, which shows four extreme increases in fiscal uncertainty. The first occurred at the end of 2002, with the adoption of several special tax laws (on tobacco, passenger cars, petroleum products, luxury products, etc.). The second relates to

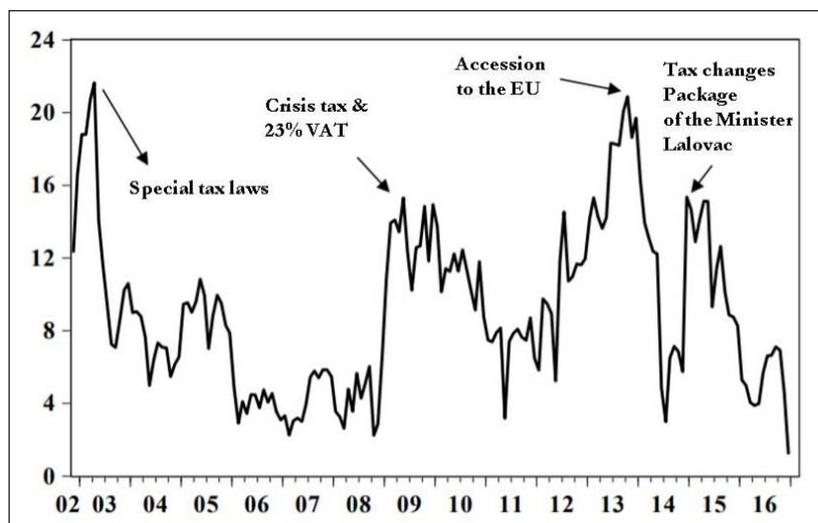


Chart 2 Fiscal uncertainty indicator

Source: Sorić, P., Lolić, I.: Economic uncertainty and its impact on the Croatian economy, 2017 [12]

the introduction of the so-called crisis tax and the increase of the general VAT rate from 22% to 23%. The third and largest increase in uncertainty occurred in 2013, when, in addition to aligning domestic fiscal legislation with EU regulations, a number of changes to the VAT, income tax and corporate income tax laws and regulations were introduced. The fourth increase of January 2015 is related to the tax changes package of the then Minister of Finance Boris Lalovac (amendments to laws and regulations related to VAT, income tax, taxation of games of chance, real estate sales tax and consumption tax).

When making long-term economic forecasts, it is impossible to take into account all the factors that affect the uncertainty of estimates, and it is therefore good that the legislator predicted this type of uncertainty, allowing Article 57 of the CA [22] to enable corrections to the value of concession fees. However, for these adjustments to be made, it is necessary to indicate this possibility in the concession contract, that is, if this option is not stated, it is not possible to make subsequent changes in the values of the concession fee.

The previous analysis has shown that flat-rate estimates, which cannot provide reliable indicators, are used when assessing the value of a concession fee for concessions with a duration longer than five years. Accordingly, the multi-year economic indicators are subject to a high level of uncertainty. For this reason, any concession contract with a duration of more than five years should be reviewed for significant changes in economic indicators. Such a check, i.e. the preparation of an additional financial elaborate, would result in more realistic and accurate indicators, as a basis for a possible change in the value of the concession fee.

Another important element of a concession fee is the relationship between the fixed and the variable part of the fee. The absolute value of the variable part, which is determined as a percentage of the concessionaire's revenue, changes according to the generated revenue. Therefore, this part of the concession fee is exempted from the risk of economic uncertainty, i.e. it will monitor market opportunities in the concession area during the concession period. The fixed part of a concession fee is, however, subject to a critical review because it is determined at the beginning of the concession period as a fixed value which, in the long term, does not reflect market reality. A conclusion can be derived that the percentage of the variable part of a concession fee should be higher than the fixed part, thus reducing the risk of the unrealistic value of a concession fee.

In Croatia, it is risky to try to collect much of a concession fee from the variable part due to frequent attempts by the concessionaires to diminish the generated revenue [5]. It is the task of the concession grantor to minimize this risk by closer monitoring of the concessionaire's operations, as well as by complying with legal provisions that enable the termination of a concession in the event of improper payment of a concession fee.

Reducing the share of the fixed part of a concession fee in the total value of a concession fee also reduces the pressure on the concessionaire, related to Article 39 of the Regulation on the Procedure of Granting a Concession on the Maritime Domain [19], which specifies that the fixed part of the fee shall be paid until January 31 for the current year. In most cases, this type of payment is inappropriate because the concessionaire is required to pay a full-year concession (fixed part) in advance, before earning revenue, thereby placing him in the position of having to take out bank loans to pay for this expense. The same article specifies that the variable part of a concession fee is paid following the provisions of a concession contract, so it would be advisable to leave the payment of the fixed part of a concession fee to the provisions of a concession contract.

5 Conclusion

Due to the complexity of the concession procedure, is often not possible to assess the value of a concession and the value of a concession fee with certainty. It is necessary to estimate the amount of a concession fee as early as during the process of preparing a feasibility study, and most of the feasibility studies forecast income and expense indicators in set amounts after five years, because it is difficult to define them. This results in an unrealistic estimate of the value of a concession and the value of a concession fee.

The legislator envisaged this type of uncertainty, allowing, by Article 57 of the CA [22], adjustments of the value of a concession fee. However, this possibility should be stated in the concession contract.

The paper proves that any concession contract, with a duration of more than five years, should be reviewed in terms of significant changes in economic indicators. Such a review would result in more realistic and accurate indicators, as a basis for a possible change of the value of the concession fee.

In this regard, after a certain period, it would be necessary to reassess the fixed part of a concession fee, since it was determined at the beginning of the concession period, and in the long term does not reflect the market reality. Therefore, the percentage of the variable part of a concession fee should be higher than the fixed part, thus reducing the risk of the unrealistic value of a concession fee.

The paper also points out that the grantor should, by more strict supervision of the concessionaire's business, enable the entire amount of the variable part of a concession fee to be collected without interruption, and the legislator, on the other hand, should allow the concessionaire to pay the fixed part of a concession fee in more instalments, thereby facilitating its business operations.

It is concluded that these changes would enable more accurate, transparent and efficient business outcomes, both during the concession granting procedure and during the entire period of the concession relationship between the concession grantor and the concessionaire.

References

- [1] Bachmann, R., Elstner, S. i Sims, E. R.: *Uncertainty and Economic Activity: Evidence from Business Survey Data*, American Economic Journal: Macroeconomics, 5(2), 2013, pp. 217-249. doi: 10.1257/mac.5.2.217
- [2] Baker, S., Bloom, N. i Davis, S. J.: *Measuring Economic Policy Uncertainty*, University of Chicago, Booth School of Business, 2011, <https://faculty.chicagobooth.edu/steven.davis/pdf/PolicyUncertainty.pdf>
- [3] Bloom, N.: *The impact of uncertainty shocks*, Econometrica – Journal Of The Econometric Society, 77(3), 2009, pp. 623-685. doi: abs/10.3982/ECTA6248
- [4] Čižmešija, M., Lolić, I., Sorić, P.: *Economic policy uncertainty index and economic activity: what causes what?*, Croatian Operational Research Review, Vol. 8(2), CROORS, 2017, pp. 563-575. <https://hrcak.srce.hr/ojs/index.php/crorr/article/view/4561>
- [5] Izvješće o obavljenoj reviziji učinkovitosti – Upravljanje pomorskim dobrom na području Primorsko-goranske županije, RH Državni ured za reviziju Područni ured Rijeka, 2017.
- [6] Jugović, A., Schiozzi, D.: *Comparative analysis of concessions on maritime domain in ports of regional significance in Croatia and Italy*, Pomorstvo, Vol. 27(2), Pomorski fakultet u Rijeci, Rijeka, 2013, pp. 299-312.
- [7] Knight, F. H.: *Risk, Uncertainty, and Profit*, Hart, Schaffner & Marx, Houghton Mifflin, Boston MA, 1921.
- [8] Oračić, D.: *Hrvatska tijekom prošle dvije recesije*, Ekonomski lab, ARHIVANALITIKA D.O.O., Zagreb, 2017, <https://arhivanalitika.hr/blog/hrvatska-tijekom-prosle-dvije-recesije/#>
- [9] Poslovni dnevnik, <http://www.poslovni.hr/leksikon/recesija-1875>
- [10] Romac, A.: *Rječnik latinskih pravnih izraza – Vademecum iuridicum*, 2. dopunjeno i prerađeno izdanje, Informator, Zagreb, 1992.
- [11] Seršić, V.: *Koncesije na pomorskom dobru*, Novi Informator, Zagreb, 2011.
- [12] Sorić, P., Lolić, I.: *Economic uncertainty and its impact on the Croatian economy*, Public Sector Economics, Vol. 41(4), Institut za javne financije, Zagreb, 2017, pp. 443-477.
- [13] Staničić, F., Bogović, M.: *Koncesije na pomorskom dobru – odnos Zakona o koncesijama i Zakona o pomorskom dobru i morskim lukama*, Pravni vjesnik: časopis za pravne i društvene znanosti Pravnog fakulteta Sveučilišta J.J. Strossmayera u Osijeku, Vol. 33(1), Osijek, 2017, pp. 73-103.
- [14] Studija opravdanosti davanja koncesije na pomorskom dobru u svrhu gospodarskog korištenja plaže Zrće (Grad Novalja) s procjenom vrijednosti koncesije, Contractor: Razvojna agencija Ličko-senjske županije – LIRA; Client: Ličko-senjska županija Upravni odjel za gospodarstvo, 2016, https://www.novalja.hr/db/db_dir/news/extra_dir/24012017343e/studija_opravdanosti_davanja_koncesije_-zrce.pdf
- [15] Studija opravdanosti davanja koncesije na pomorskom dobru u svrhu gospodarskog korištenja postojeće brodogradilišne luke „Tehnomont – Pula“, Contractor: Centar za ulaganja EURO KONZALTING d.o.o., Pula; Client: Grad Pula, 2019, https://www.pula.hr/site_media/media/filer_public/59/43/59430f8e-40fc-413f-bced-29d0eac0698a/studija_gospodarske_opravdanosti_koncesije_na_pomorskom_dobru.pdf
- [16] Studija opravdanosti davanja koncesije za gospodarsko korištenje pomorskog dobra luke posebne namjene, Marine Poreč, Grad Poreč, Contractor: P.M.C. d.o.o. Rijeka; Client: Grad Poreč, 2018, [www.porec.hr > download > Studija opravdanosti 17.10.2018](http://www.porec.hr/download/Studija_opravdanosti_17.10.2018).
- [17] Studija opravdanosti davanja koncesije za obavljanje gospodarske djelatnosti pružanja usluga putnicima uz korištenje i održavanje objekata lučke suprastrukture – zgrade pomorsko-putničkog terminala sa pripadajućom suprastrukturom te usluga organizacije i naplate parkiranja na području luke otvorene za javni promet osobitoga (međunarodnoga) gospodarskog interesa za Republiku Hrvatsku – Luka Gaženica, Zadar, Contractor: Pomorski fakultet u Rijeci; Client: Lučka uprava Zadar, 2017, http://www.port-authority-zadar.hr/download/studija_oprav_lu_zadar.pdf
- [18] Šikić, M., Staničić, F.: *Pravna narav ugovora o koncesiji*, Zbornik radova Pravnog fakulteta u Splitu, Vol. 4(2), Split, 2011, pp. 419-441.
- [19] Uredba o postupku davanja koncesije na pomorskom dobru Narodne novine, broj 23/2004, 101/2004, 39/2006, 63/2008, 125/2010, 102/2011, 83/2012 i 10/2017.
- [20] Vojković, G.: *Novi pravni okvir koncesija u Republici Hrvatskoj*, Zbornik radova Pravnog fakulteta u Splitu, Vol. 51 (1), Split, 2014, pp. 131-149.
- [21] Zakon o koncesijama, Narodne novine 143/12.
- [22] Zakon o koncesijama, Narodne novine 69/17.
- [23] Zakon o pomorskom dobru i morskim lukama Narodne novine, broj 158/2003, 141/2006, 38/2009, 56/2016 i 98/2019.