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Types of fiscal regime in hydrocarbon exploration and production

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Review scientific paper

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Abstract

The choice of the right fiscal regime represents the main object of the energy policy concerning hydrocarbon exploration and production for the state government. For the operator and service companies it represents the terms and conditions for practical conducting of the process in whole. This paper analyse aspects of agreements used in the petroleum industry. Elements of agreement, regardless of regime, have been described together with their advantages and disadvantages. Due to the fact that the fiscal regime has to be chosen to attract companies willing to invest in exploration and production, it represents a relevant part of the business strategy and also a base for the decision making process during start up. It has to minimize the risk for the both parties involved and maximize the state's share during the exploitation phase. For the companies, it has to be attractive enough to balance risks during the exploration phase with profits gained during the exploitation phase. The aim of this paper is to show the existing fiscal systems in the petroleum industry and to analyze the process for concluding a contract regarding the exploration and production of hydrocarbons. An overview of different business practices in the oil and gas industry with a detailed breakdown of the contract terms between the parties involved have been described in the paper. The aim of this paper is to show the different possibilities of financial regimes which could help during the negotiation process for conducting hydrocarbon exploration and production for everyone involved.

Keywords

fiscal regime, oil and gas business, production sharing agreement (PSA), services contract

1. Introduction

A complex interdisciplinary process followed by economic analysis precedes exploration and production of hydrocarbons. Each year, a large number of countries around the world offer their blocks for oil and gas exploration. Usually, some of them present a new business model or a new fiscal regime concerning hydrocarbon exploration and production. Tax systems are continuously being reviewed in some countries and introduced to producers or importers. National hydrocarbon exploration and production is being conducted under a certain fiscal regime. Fiscal regime provides terms and conditions of conducting business during the complete integrated process from exploration activities to production and trading. The fiscal systems are intended for both state and operator companies. Fiscal regimes currently used in oil and gas business worldwide could be concessionary and contractual. Contractual regimes are divided into production sharing agreements and service contracts.

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The term fiscal regime represents the set of laws and regulations that the government of a host country is determined by the distribution of economic gains obtained during the exploration and hydrocarbon production. The fiscal regime defines relation and activities between the government and the oil company, or the partnership companies to reduce the economic risks and to share the capital investments cost **(e.g., Johnston, 1994, Križ, 2015)**.

Fiscal regimes currently used in oil and gas business worldwide could be concessionary and contractual **(Križ, 2015)** Contractual regimes could be conducted as production sharing agreements and service contracts. It is important to emphasize that there are many different fiscal systems with the same goal, to provide a greater income from hydrocarbon production with minimal risks. Incompatibility of the fiscal system is the result of a large number of valid contracts and different conditions of certain activities that are influenced by political and economic parameters.

There is a high degree of uncertainty in the calculation of economic or technological parameters associated with some exploitation fields. It is necessary for each

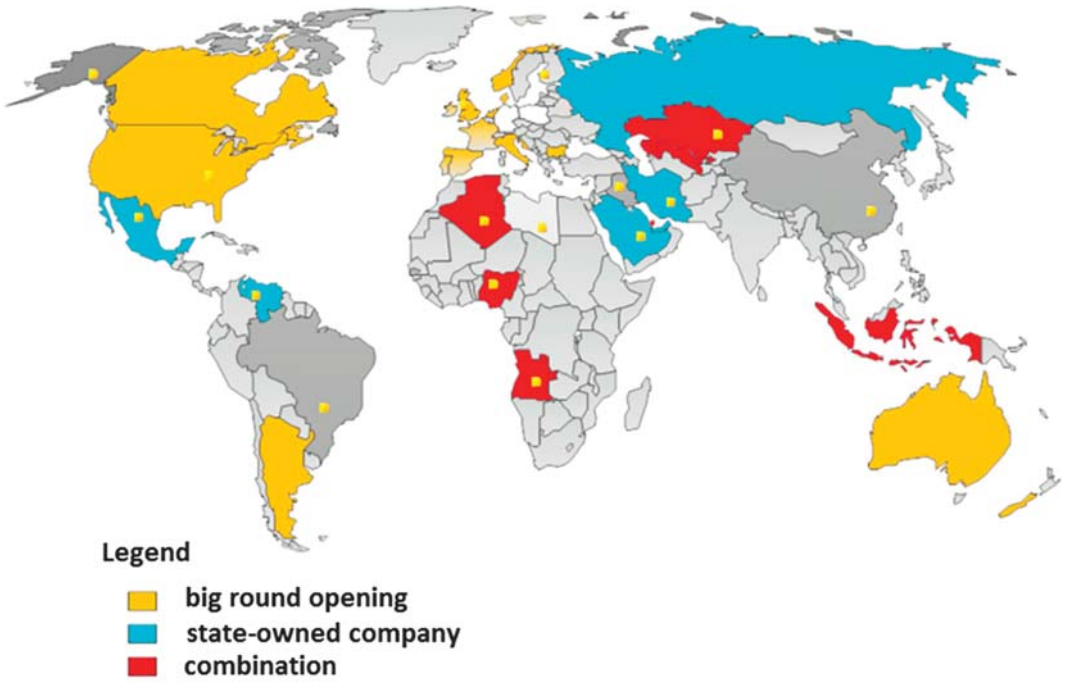

Figure 1. Fiscal system distribution in the world

project to have calculated income and expenses and profit or loss of the specific project. For the analysis, it is necessary that future production is forecasted with the most important geological parameters. Predicted production curves can be significantly changed depending on technology investments **(e.g., Kaiser, 2004)**.

2. Classification of the fiscal systems

National governments, during the preparation for offering exploration blocks, can choose between three hydrocarbon exploitation possibilities:

- Establishing a state-owned company for exploration and production, and keeping most of the revenue for themselves. Examples of this system can be found in Saudi Arabia, Mexico, Venezuela and Iran;
- Bid round opening for arising international oil companies. The highest bidder shall be entitled to exploration in a given area, and the profit is divided according to the type of contract. Examples of this kind of system are seen in the United States, the United Kingdom and Canada. The Republic of Croatia recently belongs to this group as well;
- The third option is usually reserved for developing countries, which are extremely rich in hydrocarbon reserves. This system combines the two previous cases but a national company participates in the project as a partner. Countries like Indonesia, Nigeria, Kazakhstan and Uzbekistan represent this system.

The main purpose of the contract is to define the type of profit sharing. The government also sets different critical standards related to the contractors as a standard part of the contract **(Palantir, 2015).** Acceptable impact on the environment and safety measurements during exploration and production (abbr. E&P) activities are defined within these standards. The task of the government representatives is to strictly follow the law and protect public interests. On the other hand, the government should create a positive climate for investors in order to achieve economic growth and create additional values. The standardized agreements exist over decades, but on the other hand the frequent changes in laws and standards in the world show that the process is still ongoing in some countries like in Croatia. The national government is constantly "learning" to balance the two opposing sides: investors and national interest. Figure 1 shows the world map of the fiscal systems with the associated legend.

Another issue that contract deals with is the potential threat of corruption as well. During the bidding process, there is always the possibility of abuse because of the enormous investment costs and associated profit gains. In the process of bidding competition, which is usually closed for the public, there are frequent cases of corruption. The World Bank in its comprehensive study The Many Faces of Corruption has tracked the vulnerability of corruption at different industrial sector levels. The petroleum sector has been described as attractive to corruption especially in petroleum rich countries with 20.8 as an average annual hydrocarbon revenue as a percent of GDP and more than 67.2 % of hydrocarbon exports. The study ranks countries by a Corruption Perception Index (CPI) ranging from a score of 10 (the lowest perceived corruption) to 1 (the highest perceived corruption). For example Iraq, Sudan, Chad, Equatorial Guin-

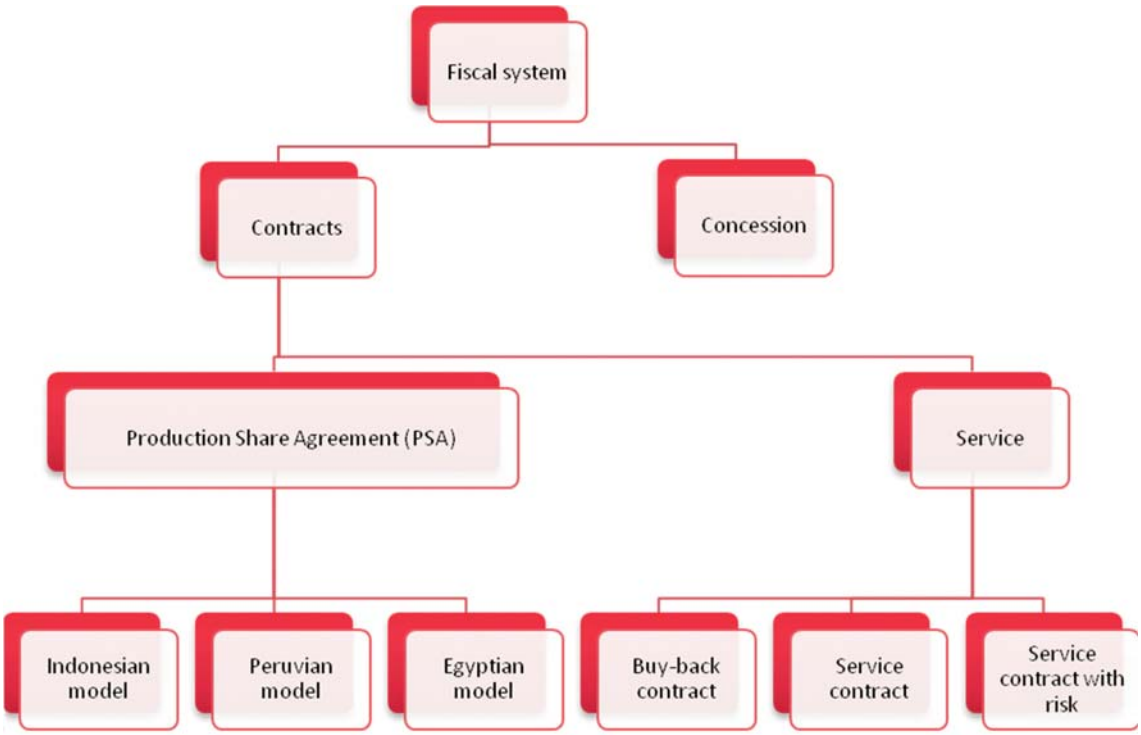

Figure 2. Fiscal system comparison (Radon, 2008)

ea, Turkmenistan, Nigeria, Venezuela, Angola, Indonesia, Azerbaijan, Russia, Kazakhstan, Libya and Iran have a CPI below 3, Oman, Bahrain, Qatar and UAE have a CPI between 5 and 6 Norway's CPI is 8.8. The corruption identified in the exploration phase is connected to awards and negotiations of the exploration and production rights, approvals and permitting of exploration operations and oversight of any relinquishment or extension of exploration rights. Policy formulation, laws, contracts, fiscal terms, licensing, contract awards, permits and approvals are recognized as the main parameters that are vulnerable to corruption during the exploration phase. The study also determines warning signs of corruption for these elements and recommends the appropriate response **(IBRD, 2007)**.

As it was previously stated, the type of contract varies from country to country. Frequently, there is a big difference in the agreements within a state due to long duration of contracts and changes in terms, or different types of reservoirs, as is the case with unconventional reservoirs lately. Nevertheless, they all have two main common objectives: how to share profits and how to calculate costs. Most often, neither company nor the host government know what the exact costs of exploration and development will be, and whether the price in the future or the amount of recoverable reserves will justify these costs. Therefore, project managers are given incentives for reaching good risk-neutral decisions and for taking the appropriate risks in order to gain higher net present value regardless of the outcome. Different tools for calculating risks have been developed **(Leach 2010)**. One of the first steps in the whole process is on the government who has to bring the laws and regulations concerning the exploration fiscal system. The chosen system will then be used in the process of negotiation and acquisition. Each system has its advantages and disadvantages that are discussed later.

Fiscal systems generally can be divided into contract and concession (see Figure 2). Both of them obligate the investor to cover all costs and risks. Higher risks usually bring a larger production share to the company. The main difference between the concession and contractual systems is related to the ownership of natural resources.

In the concession system, the hydrocarbon ownership belongs to the investor at the wellhead. At the sale point, the government charges fees and taxes to the investor. The ownership of the equipment and installations transfers to the state upon expiration or termination of the concession. Investors are responsible for decommissioning which is very cost intensive. In the Production Sharing Agreements (abbr. PSA), the contractor owns only part of the production, and the place of delivery is often different from the place of production. The government owns all fixed equipment and installations from the moment of commissioning. Unlike concessions, the government or national oil company is responsible for abonnement.

Table 1 shows the main features and elements common to all fiscal systems, and shows the diversity of individual elements depending on the type of fiscal system. Table 2 shows the main and essential difference between the concession and contractual systems.

Table 1. The main characteristics of the fiscal systems (Tordo, 2007)

The main features of concession and contractual systems	
Concession system	**Production Share Agreement (PSA)**
Three components: fees, costs and taxes.	Four components: fees, cost recovery, production share, taxes.
Fee - a percentage of the total revenue, determined by a variable scale depending on the amount of production and the oil price.	Fee - opposed to the concession system, fee is not mandatory and generally is much lower.
Costs - defined by the contract.	Costs - contractor takes part of the production costs for compensation, the contract is determined by the maximum limit. The rest of the production is shared between the state and investors, mostly based on variable scale.
Taxes - define the corporate tax, which is effected by the country or special oil tax is applied. In the case of fees and expenses exceeding the total income, tax is not charged.	Taxes - corporate tax can be applied (not necessarily), there is a possibility of payment by government or national oil companies on behalf of the investors.

Table 2. The main differences between the concession and contractual systems (Tordo, 2007)

The main differences between concession and contractual systems		
	Concession system	**Production Share Agreement (PSA)**
Ownership of mineral sources	State	State
Pick-up location (change of the ownership)	Wellhead	Export point
The company's part	Total production minus fee	The cost plus profit
The percentage of part	Typically 90%	Between 50% and 60%
The ownership of the equipment and facilities	Company	State
Management and control	Usually poor control by the authorities	Higher state control and participation in decisions
State participation	Lower participation	Higher participation
Joining of the blocks	Lower probability	Higher probability

Table 3 shows division of revenue between investors and states under a typical concession contract, while Table 4 shows the cash flow at the end-of production in the case of income of 20 USD/bbl.

Table 3. Typical concession contract (Križ, 2015)

Investor (income) units or %		**State (income) Units or %**
	Total income **100 units**	
	Fee for the State 15%	**15**
	Net income 85	
25	Cost recovery 25%	
	Taxable income 100-15-25=**60**	
- 18	Tax to investor 30%	**18**
42 (tax to investor)	Net income after tax	33 (15+18)
67% (25+42)	Distribution of total income	**33%**
42%	Oil profit	
56%	Profit share	**44%**

Table 4. Cash flow at the end of production (Križ, 2015)

	1 Barrel – Total income 20.00 USD/bbl	
Investor share		Government share
	Fee 10%	2.00 USD
	Net income 18.00 USD	
5.65 USD (assumed cost)	Cost recovery	
4.94 USD	Profit share 40/60 %	7.41 USD
- 1.48 USD	Taxes on income 30%	1.48 USD
3.46 USD	Distribution of cash flow	10.89 USD
24% 3.46/(20,00-5.65)	Profit share	76% 10.89/(20.00-5.65)

3. Elements of the contract regarding government position

The contract elements will be further analysed according to the associated advantages and disadvantages for the government and are valid for concessions and for contractual systems.

3.1. Royalties

Royalties are a commonly used method of revenue taken by the government. Royalties are based on the volume of hydrocarbon production and exports. Royalties are an attractive solution for the government because they ensure a constant income as soon as production starts. Since the royalties are related to the production or sale, their amount can be easily and accurately calculated. High levels of royalties can discourage investors and prevent to invest on time. Therefore, a variable scale is often applied based on the level of oil production and oil prices **(Waelde, 1996).**

3.2. Ringfencing

Ringfencing means a clear delineation of taxable units, i.e. the area of certain projects and contract **(Tordo, 2007).** When the ringfencing is applied, the income of a project cannot be used to cover losses of other projects. This means that all costs of the project must meet revenue generated in the area that covers the project. Some countries allow research costs to exceed the boundaries of blocks. The goal of ringfencing is the protection of current income tax and to some extent, equalization rules for exploration and development by treating new and existing investors equally. The disadvantage is the lack of incentives for exploration and further investment. The government can be found in the position to give subsidies for failed exploration.

3.3. Corporate income tax

In some countries, the petroleum industry is classified under the standard of corporate income tax although the country can make an exception and use a higher tax rate to achieve a higher royalty. More and more countries accept the progressive tax rate to ensure distribution of additional profit in case of high profitability of the project. This is achieved by using a graduated tax rate that is tied to the price of crude oil, production volume, the amount of sales, etc. Corporate taxes are clearly defined and control is quite simple and already pre-determined, which facilitates administration.

3.4. Tax on rental resources

Tax on rental resources is a type of additional income tax that is linked directly to the profitability of the project and applied after achieving certain goals. When the objective is achieved, a relatively high tax rate is applied. This project provides a grace period on the taxes payment for the period until the return of the investment costs. Then the additional shares in profit are increased on the government's side. The main advantage is neutrality of the tax. It will not be charged unless the profitability of the project is achieved and the government will provide its share as additional earnings. The main disadvantage is the lack of earnings for the government in the case of marginally successful projects. The role of administration is critical in its assessing and collecting.

3.5. Import and export duties

The import duties are applied to all the material and equipment imported into the country. Throughout history, these measures were designed to protect domestic production. Some states have restrictions, and have issued a list of materials and equipment which are enabled to be imported without payment of custom fees **(Tordo, 2007)**. Import duties are a source of income from the very beginning of exploration. The list of materials increases administration and time for project development. When the equipment was originally imported for one project it could be used for another, but it often causes problems.

3.6. Taxes on land

The tax on land is paid annually, depending on the size of the rented area. Different amounts are charged for exploration and production areas. The purpose of this tax is to force investors not to lease space without exploration or some of the activities in this area. Also, they are acceptable and provide income during all phases of the life of a project. They are also fixed and simple to charge and monitor.

3.7. Bonuses

With larger bonuses given to the government in the initial phase of commercial discovery, the risk is higher for investors. The high bonuses often are balanced with lower fees and taxes, share of a production and/or the government share. Bonuses are easy to administer because they are fixed and usually a one-time occurrence. They are also an early source of revenue for the government. The disadvantage of bonuses is the susceptibility to external factors such as the political situation, the reputation of the investor, etc. High bonuses are often the reason for withdrawal of investors from considering the project at all.

3.8. Government participation

Many production share agreements include the term, which ensures the government or national oil company participation in the project. The government's participation may be in various forms. One form is the percentage of shares (working interest) where the government asks for the same conditions that the partners have in the joint venture. The most common case is where the investor has the costs of exploration, and the government has the option of entering into a project with a certain share in the moment of discovery. Increasing the percentage of a share, the impact of government decisions related to development and production increases as well. In most of these projects, the government is paying only production

costs to the investors. Depending on the contract, there is a possibility when the investor has the right to seek compensation for prior costs in case the government joins in on the project. The government entering in on the project decreases profits for investors, but the larger government share means the smaller other fiscal fees.

3.9. Limit cost recovery

Many contracts stipulate a production limit that can be used for cost recovery. After deducting fees, the remaining income is used to offset the costs. If costs are over the limit, the difference is transferred to the next period. Most of the contract has no time limit on transfer costs. The share production agreements limit is between 35% and 50%. There is also the Egyptian model - if you are reimbursed under restrictions, the rest of the oil intended for expenses belong to the government as in Egypt and Syria **(Tordo, 2007).** Cost recovery limit provides state income from production in each accounting period. It takes an efficient and professional administration for proper control of costs (risk of "gold-plating"). The low percentage of limitations is very restrictive for investors, especially for the development of marginal fields.

3.10. Profit share by hydrocarbon

In the production share agreements, profit is the income that remains after deducting fees and expenses. In most cases, the shares variable scale depends on a number of the mentioned factors. Profit sharing is variable during the project and is a frequent subject of negotiations, depending on the period. The variable scale allows the government to use the same form of contracts and to meet different projects without any legislative framework changes. At the same time, a variable scale allows the investor to develop marginal fields, especially if it is tied to the rate of return because it will provide an additional load in case of unprofitable production.

3.11. Environmental taxes and duties

The public increase pressure on governments around the world with increasing environmental awareness and require the supervision over the operations of investors. In most cases, early production opens funds for the decommissioning that will be used for finishing the project after the end of production. The payment of environmental taxes and drawing up insurance policies to compensate for the damage of possible environmental pollution is normal. Costs incurred in environmental protection are considered operating expenses and they are tax-deductible. Depending on the contract, the costs resulting from the repair of damage caused to the environment are not subject to tax deduction. Direct taxation of the costs of remedying the damage is the best way of controlling investors. However, the implementation of direct taxation is complex and requires additional administrative costs.

3.12. Liabilities to the local community

These obligations could include a quota of local employees, covering the costs of their training and the purchase of domestic goods and the inclusion of indigenous companies for repair services, etc. The aim of the training is the transfer of knowledge (know-how). A number of public employees are referred to the education and practical training in the sectors of the company's investors. Sometimes this process has the dual role of control at the same time. Usually these costs are recoverable and tax exempt. Local government obligations are to achieve transfer of technology and know-how to increase employment and domestic industry strengthen. This advantage can be a disadvantage in case of unrealistic demands where overload investors have high expenditures. Relationships with the local employees must be defined for upon work completion.

3.13. Variable scale

The only alternative to a fixed percentage value of compensation, costs, profits and bonuses is variable scale related to the level of production shown as the R - factor. Table 5 presents specific examples related to the production scale (Indonesia), and the R - factor is shown in Table 6 also given below (Azerbaijan).

Table 5. Variable scale depending on daily production. Case study of Indonesia (Križ, 2015)

Daily production (m^3/d)	National company (%)	Investor (%)
0 – 8 000	61,54	38,46
8 001 – 24 000	71,15	28,85
> 24 000	80,77	19,23

"R" factor is not calculated by the rate of production, but is determined by the relationship of profits and costs.

$$R = \frac{Total\ profit}{Total\ cost}$$

If the profit is equal to the cost, R=1.

Table 6. Variable scale depending on the R-factor. Case study of Azerbaijan (Križ, 2015)

R - factor	National company (%)	Foreign company (%)
R < 1,5	50	50
1,5 < R < 2	60	40
2 < R < 2,25	62.5	37.5
2,25 < R < 2,5	65	35
2,5 < R < 2,75	70	30
2,75 < R < 3	75	25
3 < R < 3,25	80	20
3,25 < R < 3,5	85	15
R > 3,5	90	10

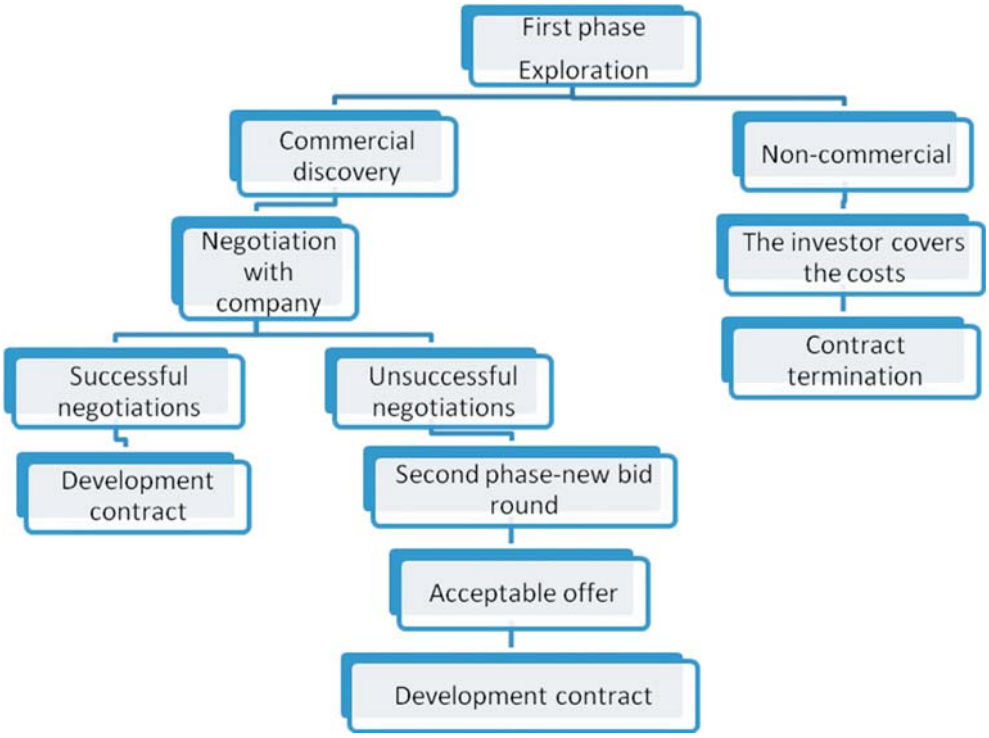

Figure 3. The buy - back contract (Bindemann, 1999)

More commonly, scale is connected with the "R" factor since the poorly defined threshold production cannot make a profit for investors even in the most favourable case of production share or the lowest level of production.

4. Service contracts

Service contracts are the least common form of business in the oil and gas industry. Iran, Saudi Arabia, Venezuela and Kuwait are the countries at the top of the list of the world's largest oil reserves, which apply only service contracts. Since Iran is the first country which started to implement these agreements, Iran's return - payable (buy - back) contract will be treated as an example of service contracts divided into three types:

- Pure service contracts;
- Service contract with the risk;
- Buy - back service contract.

The pure service agreement considers a contract due to foreign company does business with the national company or government for a predetermined fee, which includes the cost of the investors. In the pure service contract, there are risk services and the aforementioned return -buy - back service contract. The service contract with the risk is in fact a contract to be signed for the second phase, i.e. development phase where the investor compensation depends on the success of discovery. In 1995 the first buy - back contract was signed with the French company Total as a response to Western sanctions. This contract materialized Iranian distrust of foreign investors and significantly reduced the share of profits by foreign companies and introduced even stronger control operations.

The first phase after the signing of the contract is exploration. If the discovery is not feasible, a foreign investor covers all costs, and the contract is terminated. If the discovery is profitable, a new contract (risk service) for field development is signed. However, successful exploration to a foreign investor does not guarantee a new contract. Usually a right of first negotiation is guaranteed. If the negotiations with a foreign company after successful exploration are unsuccessful, the costs are returned to the investor and paid according to an amount agreed upon in advance **(Bindemann, 1999)**. Foreign companies entering in the buy - back contract must pay for the all exploration costs. In case of discovery and willingness to continue with the production, the total amount of oil or gas is given to the Iranian National Oil Company (INOC). INOC after the sale of oil and gas returns cost to the investor and the cost of pre-agreed percentage of profits. Buy - back contract is considered to be only the first stage. It is characterized by a relatively short duration, between 5 and 7 years. If it comes to the production phase, contracts with risk are more similar to agreements with the share of production, with profits by agreement. The biggest problem for investors is just the "omnipotence" of the government and INOC because of the low probability of failure. However, all the major international companies are still operating or have operated with Iran **(Gandhi & Lin, 2011)** and **(Mikesell 2016)**. Figure 3 shows an example of the buy

- back contract. A buy-back contract begins with exploration and leads to a development contract. During the process, different outcomes are possible like a development contract or contract termination. In the case of unsuccessful negotiation, investors will not always be refunded for exploration costs, depending on the government and the investor's standpoint.

5. Conclusion

One of the most important parts of hydrocarbon management is to ensure favourable exploitation of the fiscal regime as much as possible that will attract investors, but also provide financial compensation for the state, its industry and the local community. Regardless of the type of the fiscal regime, the main components must be precisely defined without the possibility of dual interpretation of the contract. It is necessary to provide realistic and objective goals, as well as the neutrality of government in decision-making. Fiscal regimes and conditions of the contract are determined by the market and it is necessary to ensure flexibility in case of any market changes. This is necessary for making conditions to avoid losses for any of the parties involved. "Risk management during exploration is a consistent process for accurate quantification of forecasts and opinions to be used in an economic model for decision support. The successful implementation requires both management and technical commitment. The process quantifies the probability and resource range estimates for each project using an organized method based on the statistics and the principles of the petroleum system" (MacKay, 2003). Analyses of risk adjusted values (RAV) and optimum working interest (OWI) provide a possibility to rationalize and predict exploration decision – making process and opportunity quantification. Companies are currently using RAV to quantify risk aversion although this technique is not a new one but it provides good guidance for determining the strategic direction of the company (Moore, 2005). Therefore, one of the main challenges of fiscal policy is distribution of the risk during exploration and production and the possibility of changing risk attitude. The state must ensure the rational use of mineral resources in compliance with the contract, with an emphasis on environmental concerns. The investor must take into account the social component of explored areas and also has to take care of people's lives, state property and environment protection.

Flexibility is the main foundation of a successful contract. Therefore, the duty of the government is to ensure an independent body that will oversee the operations of investors. In the complex oil and gas business quantity of production, hydrocarbon price or rate of investment return, are not decisive parameters. It is necessary to take into consideration the public opinion, political developments, the investment climate and other factors that may be crucial.

If all these conditions have been met for both sides, it is essential that the preservation of these conditions over the life of the contract is ensured. Considering the contracts defined for a longer period, usually 30 years, it is necessary to have an objective control over operations and legislation. Considering the geopolitical context of different political conflicts with petroleum issues beyond the scope and its impact on the economy, the oil business today is very complex. Therefore, the fiscal regime of a contract is only one of many parameters that define the oil business. An important factor, often crucial for the exploitation of hydrocarbons, is environmental protection and sustainable development, as well as security of energy supply.

In the case of Croatia, the Croatian Government proposed the PSA model by the Law on hydrocarbon exploration and production from 2013. The practical application of the procedure was applied through the Agency for Hydrocarbons. An international bid for exploration started in 2014, but it was postponed due to political instability resulting from two government elections. On shore contracts were concluded in June 2016. The final results could be expected in a few years time. During the future period, it is necessary that Croatia defines strict rules concerning hydrocarbon exploration and production independently with no political influence of certain political parties. This could attract potential investors since there are no realistic expectations for higher volumes of new hydrocarbons in place without a longer time of exploration phase for example. In addition, some other contractual provisions could be changed to attract a higher number of interested investors like administration fees, production hurdle fees, reporting and auditing requirements, etc. Even though it is not expected, it could be possible to make changes in the tax system to stimulate interest in marginal profit fields (especially deep offshore fields, small fields and unconventional fields). At the end, the Republic of Croatia is responsible for conducting procedures for establishing legal exploration and production of hydrocarbons and it is also responsible in attracting investors. A business as usual scenario in hydrocarbon exploration in Croatia (as it was done in previous few years without exploration activities) is not satisfactory for parties involved in hydrocarbon exploration and production. The Croatian petroleum sector needs huge investments, otherwise natural depletion will result in its termination.

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SAŽETAK

Vrste fiskalnih sustava u istraživanju i pridobivanju ugljikovodika

Istraživanje i eksploatacija ugljikovodika u svakoj se državi provodi prema usvojenomu fiskalnom sustavu eksploatacije. Fiskalni sustavi određuju uvjete poslovanja tijekom cjelokupnoga integriranog procesa od istraživanja do eksploatacije i trgovine te su namijenjeni ravnomjerno i državnim tijelima koja su zadužena za eksploataciju i kompanijama operatorima. Trenutačno se u naftnome i plinskome poslovanju primjenjuju koncesijski i ugovorni fiskalni sustavi. Ugovorni sustavi dijele se na ugovore o podjeli proizvodnje te na servisne ugovore. Izbor fiskalnoga sustava eksploatacije glavni je cilj energetske politike prema eksploataciji ugljikovodika za državu, dok je on za kompanije operatore i za servisne kompanije način vođenja poslovanja. U radu su detaljno obrađeni navedeni fiskalni sustavi s primjerima uvjeta ugovora. Elementi ugovora, neovisno o sustavu, analizirani su s njihovim prednostima i nedostatcima. Fiskalni sustavi moraju biti odabrani tako da privlače kompanije koje žele investirati. Također, njihova je dužnost da maksimalno smanje rizike za sve uključene strane, ali da maksimiziraju dobit države tijekom faze iskorištavanja ugljikovodika. Za kompanije fiskalni sustavi moraju biti atraktivni kako bi balansirali rizike tijekom istražne faze s dobitima koje je moguće ostvariti tijekom faze iskorištavanja. Uspješan i zadovoljavajući sustav (i za državu i za ulagača) mora privući ulagača i ponuditi mu prihvatljive uvjete, dok, s druge strane, mora donijeti odgovarajuću korist matičnoj državi, njezinoj industriji i lokalnomu stanovništvu uz poštovanje zakona i čuvanje okoliša. Bez obzira na to koji je fiskalni sustav na snazi, glavni elementi moraju biti koncizni i jasni te ne smije biti prostora za dvojako tumačenje ugovora. Potrebno je osigurati realne i objektivne ciljeve te neutralnost vlasti u donošenju odluka. Fiskalni sustavi i uvjeti ugovora određeni su tržištem te je nužno osigurati potrebnu fleksibilnost u slučaju promjena na tržištu kako ne bi došlo do gubitaka za bilo koju od ugovornih strana. Stoga je jedan od glavnih izazova fiskalne politike ravnomjerna raspodjela rizika, odnosno potrebna je što manja divergencija u razmišljanju vlade i ulagača. Država mora promišljati više kako osigurati racionalno iskorištavanje mineralnih sirovina uz poštovanje ugovora s naglaskom na brigu o okolišu. Ulagač ne smije pored vlastite dobiti zanemariti socijalnu komponentu područja na kojemu posluje te također mora skrbiti o životu ljudi, stanju imovine i zaštiti okoliša. Fleksibilnost je glavni temelj uspješnoga ugovora, pa je dužnost države osigurati neovisno državno tijelo koje će nadzirati poslovanje ulagača. S obzirom na dugotrajnost samih ugovora navedeno tijelo mora osluškivati i promjene na tržištu te znati pravilno i pravovremeno reagirati bez obzira na političke opcije trenutačno na vlasti. Odabir fiskalnoga sustava također je potrebno provoditi uz sagledavanje šireg geopolitičkog konteksta različitih političkih i vojnih sukoba koji u pozadini imaju interese vezane uz eksploataciju i trgovinu ugljikovodicima te njihovih utjecaja na cijene ugljikovodika i gospodarstvo u cjelini. Fiskalni sustavi i vrste ugovora opisani u ovome radu samo su jedan segment naftno-plinskoga poslovanja, no izrazito bitan s obzirom na to da utječu na stabilizaciju poslovanja na nesigurnome tržištu.

Ključne riječi
fiskalni sustavi, naftno i plinsko poslovanje, ugovori o podjeli proizvodnje, servisni ugovori, koncesije