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COMPARATIVE ANALYSIS OF GROSS PRODUCTION SHARING CONTRACTS (GPSC) AND CLASSICAL PRODUCTION SHARING CONTRACTS (PSC)

Author: Mansurov Obid Zaynidinovich

ABSTRACT

This thesis analyzes the legal and economic aspects of Gross Production Sharing Contracts (GPSC) used in Iraq. Compared to classical Production Sharing Contracts (PSC), the GPSC model has several distinctive features: a rigid cost recovery cap, centralized state control, and often a fixed remuneration system. The practical aspects of the model are illustrated using the example of the Halfaya field. Furthermore, a comparative analysis of both models under identical conditions is presented, demonstrating that the GPSC model is primarily suitable for high-risk countries, while the classical PSC is preferable for stable countries (including Uzbekistan).

Keywords: Gross Production Sharing Contract, GPSC, PSC, Iraq, Halfaya, cost recovery cap, fixed fee, investment, risk.

INTRODUCTION

Despite possessing some of the world's largest oil reserves, Iraq's contractual and legal framework is complex and unique. In the post-2003 period, Iraq introduced a distinctive model – Gross Production Sharing Contracts (GPSC) – which differs from classical Production Sharing Contracts. This model was primarily developed to protect state interests and strictly control the activities of foreign operators.



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The purpose of this thesis is to analyze the key features of the GPSC model, its differences from the classical PSC model, its practical application using the Halfaya field as an example, and to highlight the advantages and disadvantages of both models from a comparative perspective.

MAIN PART

1. The Essence of the Classical Production Sharing Contract (PSC)

The classical Production Sharing Contract (PSC) is widely used in international practice and is based on the following fundamental principles:

- **Resource Ownership:** The state (through the NOC) retains ownership of the resource.
- **Financing:** A foreign operator (or consortium) finances exploration and production.
- **Cost Recovery:** A portion of the produced product (cost oil) is allocated to recover the operator's costs.
- **Profit Sharing:** The remaining product (profit oil) is divided between the state and the operator in an agreed ratio.

The core idea of the classical PSC model is: **risk is with the operator, the resource is with the state, and income is divided according to a formula.**

2. Features of the Gross Production Sharing Contract (GPSC)

The GPSC (Gross Production Sharing Contract) is an "enhanced" and stricter version of the classical PSC, primarily used in Iraq. Its main distinguishing features are as follows:

2.1. Calculation Based on Gross Production Volume

In a classical PSC, product sharing occurs after costs have been recovered. In a GPSC:



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- Formulas are often linked to gross production volume;
- Or cost recovery is strictly limited (cost recovery cap).
This allows the state to receive its share more quickly and earlier.

2.2. Rigid Cost Recovery Cap

In the GPSC model, cost recovery is limited to a specified percentage of the extracted product (e.g., 30-50%). Unrecovered costs in a given period are carried forward to subsequent periods. This measure:

- Slows down the operator's cash flow;
- Extends the investment payback period.

2.3. Centralized Role of the State

Under a GPSC:

- The National Oil Company (NOC) acts as an active participant;
- Decisions on the development plan are centralized.

This reduces the operator's independence and increases bureaucracy.

2.4. Fixed Remuneration System

In many Iraqi GPSCs:

- The operator's income consists of a fixed fee per barrel of oil extracted;
- There is no profit oil share as in a classical PSC.

This feature fundamentally distinguishes GPSC from classical PSC and brings it closer, in practice, to a service contract.

3. Case Study of the Halfaya Field: GPSC Analysis

The Halfaya field is a classic example of the GPSC model.



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Parameter	Description
Operator	Consortium (CNPC - 50%, TotalEnergies 25%, Petronas 25%)
State Partner	Missan Oil Company
Operator Income	Fixed fee per barrel extracted (\approx \$1.4)
Oil Reserves in Field	4.1 billion barrels

The practice of this model shows that:

- The operator does not receive additional profit even if oil prices rise sharply;
- The operator's income is stable but limited;
- The main risk is operational, not market risk.

4. Comparative Analysis of GPSC and PSC (on a Common Example)

For the comparative analysis, the following common conditions were assumed for both models:

Indicator	Value
Oil Price	\$100/barrel
Operator's Cost	\$40/barrel
Cost Recovery Cap (for GPSC)	50%
Profit Oil Split	70% State / 30% Operator
Remuneration Fee (for GPSC)	\$1.4/barrel



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4.1. Calculation for the GPSC Model

Step	Calculation	Result
1. Total Revenue	100	\$100
2. Cost Recovery (cap 50% = \$50)	Actual cost \$40	\$40 (fully recovered)
3. Remaining Funds	$100 - 40 = \$60$	\$60
4. Operator's Service Fee	1.4	\$1.4
5. Funds Remaining for State	$60 - 1.4 = \$58.6$	\$58.6
6. Operator Total Receives	$40 + 1.4$	\$41.4
7. State Receives	58.6	\$58.6

4.2. Calculation for the Classical PSC Model

Step	Calculation	Result
1. Total Revenue	100	\$100
2. Cost Recovery (unlimited)	Actual cost \$40	\$40 (fully recovered)
3. Profit Oil	$100 - 40 = \$60$	\$60
4. State Share (70%)	$60 \times 70\% = \$42$	\$42
5. Operator Share (30%)	$60 \times 30\% = \$18$	\$18
6. Operator Total Receives	$40 + 18$	\$58
7. State Receives	42	\$42



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4.3. Comparative Table

Indicator	GPSC	Classical PSC
Oil Price	\$100	\$100
Operator's Cost	\$40	\$40
Operator's Total Income	\$41.4	\$58
State Revenue	\$58.6	\$42
State Share	~59%	42%
Operator Profit	\$1.4 (fixed)	\$18
Operator Profit at High Oil Prices	Unchanged	Increases
Operator Risk at Low Oil Prices	Low	High

CONCLUSION

Aspect	GPSC	Classical PSC
For the State	High revenue, protected from price fluctuations	Moderate revenue, revenue increases with price rises
For the Investor	Low profit, safe, revenue stable	High profit, high risk
Where is it most applicable?	High-risk countries (Iraq, Nigeria)	Stable countries (Uzbekistan, Malaysia, Azerbaijan)
Technology Transfer	Low (due to limited investor incentive)	High (advanced technology needed for high profit)
Investment Attractiveness	Low	High



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Main Conclusions:

- **GPSC** is primarily suitable for high-risk countries (characterized by political instability and security issues).
 - **Classical PSC** is suitable for stable countries (Uzbekistan, Malaysia, Azerbaijan).
- Why is GPSC not suitable for Uzbekistan?**
1. Political and economic risk in Uzbekistan is low.
 2. Under GPSC, the investor's profit is limited, this reducing the incentive to bring advanced technologies.
 3. Uzbekistan's gas fields are developed over 20-30 years; capping the operator's income for such a long period is not advisable.
 4. Uzbekistan's main source of revenue is gas (not oil), and gas prices are relatively lower and more stable compared to oil.

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