

Oil and Gas, Natural Resources, and Energy Journal

Volume 6 | Number 1

August 2020

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Eduardo Guedes Pereira

Cătălin-Gabriel Stănescu

Wan Mohd Zulhafiz

Felipe Rodrigues Caldas Feres

Waniss Almashri Otman

See next page for additional authors

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Recommended Citation

Eduardo Guedes Pereira, Cătălin-Gabriel Stănescu, Wan Mohd Zulhafiz, Felipe Rodrigues Caldas Feres, Waniss Almashri Otman, Yanal Abul Failat & Aaron Koenck, *Host Granting Instrument Models: Why Do They Matter and for Whom*, 6 OIL & GAS, NAT. RESOURCES & ENERGY J. 23 (2020), <https://digitalcommons.law.ou.edu/onej/vol6/iss1/3>

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Host Granting Instrument Models: Why Do They Matter and for Whom

Authors

Eduardo Guedes Pereira, Cătălin-Gabriel Stănescu, Wan Mohd Zulhafiz, Felipe Rodrigues Caldas Feres, Waniss Almashri Otman, Yanal Abul Failat, and Aaron Koenck

ONE J

Oil and Gas, Natural Resources, and Energy Journal

VOLUME 6

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HOST GRANTING INSTRUMENT MODELS: WHY DO THEY MATTER AND FOR WHOM

EDUARDO GUEDES PEREIRA,^{*} CĂTĂLIN-GABRIEL STĂNESCU,^{**} WAN MOHD
ZULHAFIZ,^{***} FELIPE RODRIGUES CALDAS FERES,^{****} WANISS ALMASHRI
OTMAN,^{*****} YANAL ABUL FAILAT,^{*****} AARON KOENCK^{*****}.

* Eduardo G Pereira is a professor of natural resources and energy law as a full-time scholar at the Siberian Federal University and part-time, adjunct and/or visiting scholar in a number of leading academic institutions around the world. He has been active in the oil and gas industry for more than ten years and is an international expert on joint operating agreements. His experience in this area – both academic and practical – is extensive. He has practical experience in over 40 jurisdictions covering America, Europe, Africa and Asia. Dr. Pereira concluded his doctoral thesis on oil and gas joint ventures at the University of Aberdeen. He conducted postdoctoral research at Oxford Institute for Energy Studies (University of Oxford, UK) and another postdoctoral research at the Scandinavian Institute of Maritime Law (University of Oslo, Norway). He is also a managing editor for the African Journal on Energy, Natural Resources and Environmental Law and an associate editor of OGEL. He is also the author and editor of several leading oil and gas textbooks. Further information about his profile and publications can be found at: www.eduardogpereira.com and his email is egp.portugal@gmail.com

** Catalin Gabriel Stanescu is assistant professor at the Faculty of Law, University of Copenhagen, where he directs and teaches among others the ‘International Energy Law and Sustainability’ course and visiting scholar in ‘Energy Law and Contracts’ at the University of Szeged (Hungary) and Babes Bolyai University (Romania). He has practical experience in the oil and gas industry having worked as in-house counsel for the Romanian subsidiaries of two multinational oil and gas companies. Dr. Stanescu concluded his doctoral thesis in International Business Law at the Central European University. He conducted postdoctoral research in long-term energy contracts at University of Copenhagen and at the Centre for Energy, Petroleum and Mineral Law and Policy (University of Dundee). He is also the author and editor of several energy related publications. Email: Catalin-Gabriel.Stanescu@outlook.com

*** Dr. Wan Zulhafiz is an Assistant Professor at Ahmad Ibrahim Kulliyah of Laws and a Deputy Legal Adviser at Office of the Legal Adviser of International Islamic University Malaysia (IIUM). Dr. Wan Zulhafiz graduated with a Ph.D. in Law from the University of Aberdeen in 2016 for his thesis entitled, “Unbalanced Indemnities: A Comparative Analysis of Risk Allocation in Oilfield Service Contracts in Malaysia, the U.K. and, U.S.A”, making him among the first academicians specialised in oil and gas law in Malaysia. Previously, he has been a corporate lawyer before joining academia with research interests in energy law, corporate law and commercial contracting. Dr. Wan Zulhafiz has been an avid researcher, publishing papers in journals, international conferences, and popular media.

**** Felipe Feres is a partner at leading Brazilian firm Mattos Filho Advogados, based in Rio de Janeiro, Brazil, and has been advising clients on projects and transactions in the petroleum, natural gas and biofuels industries for over 15 years. He specializes on transactional, contractual and regulatory work covering all segments of these industries, from upstream to downstream. He worked as a foreign associate at the law firm of DLA Piper LLP (US) and is a member of the New York State Bar Association. Felipe is the current Chairman of the Petroleum, Natural Gas and Biofuels Committee of the Rio de Janeiro Section of the Brazilian Bar Association (OAB/RJ), with term of office for 2019/2021.

***** Waniss Almashri Otman is a petroleum economist and analyst, who specialises in the area of risk and uncertainty analysis. He holds a PhD in risk analysis of investment in the upstream oil and gas sector (Aberdeen University, Scotland) in 2005, as well as related Degrees; MSc (Petroleum Engineering), LLM (International Law and Diplomacy), MSc (Petroleum Economics and Engineering), and BSc (Petroleum Engineering). This perspective has strengthened his background in areas of risk and uncertainty analysis of the petroleum industry. He has practical experience in the oil and gas industry, as an executive positions, advisor and as a consultant to NOCs and IOCs. During his career in the oil and gas industry, he have successfully dealt with a wide spectrum of legal, commercial, and operational challenges. He has contributed immensely to the African petroleum industry through several published textbooks and numerous papers for professional journals as well presentations in world forums and to regional institutions. He is also an associate editor of OGEL and Country Analyst for the PRIX Index on Political Risk and Oil Exports, PRIX – Oslo.

***** Yanal is a company and commercial lawyer advising clients internationally on corporate and commercial operations, M&A, regulatory matters, and dispute resolution. Yanal principally advises mining and oil and gas companies globally on contentious and non-contentious matters including corporate governance, mergers and acquisitions, joint ventures, licensing and regulation, and petroleum contracts across the entire supply chain (upstream, midstream, and downstream). He has cross-border experience in major corporate transactions and projects across Europe, Middle East, Russia, and South East Asia and has an interest in national and international space law. Yanal also advises clients on a wide range of corporate and commercial transactions, including start-ups, franchising, reorganisations, joint ventures, private equity and venture capital, distribution and agency contracts and corporate governance. His litigation record includes representing international energy companies, manufacturers, service providers, and individuals in commercial disputes and the effective enforcement of judgments and awards.

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***** Aaron Koenck received his Juris Doctorate and Graduate Diploma in Comparative Law at the Louisiana State University Law Center, 2019. He was also a visiting student at Trinity College Dublin's School of Law in 2018 and is currently an LLM Candidate in Energy, Environment, and Natural Resources at the University of Houston.

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Introduction

Host Government Instruments (“HGIs”) aim to regulate and manage exploration and production activities (“E&P” or “Upstream”), between the resource owner (typically the State) and oil and gas company or a consortium of oil and gas companies (typically International Oil Companies (“IOCs”)).¹ Although there are different types of HGIs, it is necessary for

1. For further information about HGIs see: Anthony Jennings, *Oil and Gas Exploration Contracts* (2nd edn Sweet & Maxwell, London 2008), Anthony Jennings (ed), *Oil and Gas Production Contracts* (Sweet & Maxwell, London 2008), Bernard G. Taverne, *An Introduction to the Regulation of the Petroleum Industry: Law, Contracts and Conventions* (Graham & Trotman, London 1994), Bernard. G. Taverne, *Co-Operative Agreements in the Extractive Petroleum Industry* (Kluwer Law International, Hague 1996), Bernard. G. Taverne, *Petroleum, Industry and Governments: A study of the Involvement of Industry and Governments in the Production and Use of Petroleum* (2nd edn Kluwer Law International, Alphen aan den Rijn 2008), Eduardo G. Pereira (ed.), *The Encyclopaedia of Oil and Gas Law, Volume One: Upstream* (2nd edn Globe Law and Business 2020), Eduardo G. Pereira, Kim Talus (eds.), *Upstream Law and Regulation: A Global Guide Volume 1 – Africa and the Americas* (2nd edn Globe Law and Business 2017), Eduardo G. Pereira, Kim Talus (eds.), *Upstream Law and Regulation: A Global Guide Volume 2 – Europe, Middle East, Asia and Australia* (2nd edn. Globe Law and Business 2017), Chris Thorpe, *Fundamentals of Upstream Petroleum Agreements* (CP Thorpe, UK 2008), Claude Duval and others, *International Petroleum and Exploration Agreements: Legal, Economic & Policy Aspects* (2nd edn Barrows, New York 2009), Daniel Jonhston, *International Exploration Economics, Risk, and Contract Analysis* (PenWell, Tulsa 2003), Daniel Johnston, *International Petroleum Fiscal Systems and production sharing contracts* (Penwell, Oklahoma 1994), Ernest E. Smith and others, *International Petroleum Transactions* (3rd edn RMMLF, Westminster 2010), Greg Gordon, John Paterson (eds), *Oil and Gas Law: Current Practice and Emerging Trends* (DUP, Dundee 2007), Henry Cattan, *The Evolution of Oil Concessions in the Middle East and North Africa* (Oceana, New York 1967), Kirsten Bindemann, *Production Sharing Agreements: An Economic Analysis* (Oxford Institute for Energy Studies, Oxford 1999), Khong Cho Oon, *The Politics of Oil in Indonesia: Foreign Company-Host Governments Relations* (CUP, Cambridge 2009), Martyn R. David, *Upstream Oil and Gas Agreements* (Sweet and Maxwell, London 1996), Muhammed Mazeel, *Petroleum Fiscal Systems and Contracts* (Diplomica Verlag, 2010 Hamburg), P.H. Frankel, *Essentials of Petroleum: A key to Oil Economics* (2nd Frank Cass, London 1976), Raymond F. Mikesell, *Petroleum Company Operations & Agreements in the Developing Countries* (Resources for the Future, Washington 1984), Tengku Nathan Machand, *The Indonesian Production Sharing Contract: An Investor Perspective* (Kluwer Law International, Hague 2000), Terence Daintith, Geoffrey Willoughby (eds), Adrian Hill, *United Kingdom Oil & Gas Law* (3rd edn Sweet & Maxwell, London 2009), Thomas E.

the terms and conditions of each HGI to manage the expectations of investors and guarantee suitable protection for any investments, while achieving the main objectives of the relevant host nation which might vary from country-to-country (e.g. energy security, economic development, local employment, etc).²

Despite many global variations of HGIs, there are – broadly speaking – two main approaches that Host Governments (“HG”) can adopt to allow third parties to explore and/or exploit their petroleum resources. These are a *legislation-based* approach (via license-granting) and a *contract-based* approach.³ Nevertheless, both approaches combine contractual arrangement and regulations.⁴

This paper focuses on the HGIs falling into the contract-based category, defined as,

[a]rrangements between foreign investors and host countries for the development of natural resources have carried many names:

Ward, *Negotiations for Oil Concessions in Bahrain, El Hasa (Saudi Arabia), The Neutral Zone, Qatar and Kuwait* (Ardles, New York 1965), Thomas W. Walde (ed.) & George K. Ndi (ed.), *International Oil and Gas Investments, Moving Eastward?* (Graham & Trotman/Martinus Nijhoff, London 1994), A. Konoplianiuk, ‘PSA Debate: Getting rid of rival’ [2003] OGEL, A. Konoplianiuk, ‘The fight against PSA in Russia, Who is to Benefit and why not the State?’ (2003) 3 OGEL 1, Aida Avanesian ‘Buy-back - the main mode of contracting in petroleum projects in Iran’ (2009) 5 I.E.L.R. 167-170, Ian Rutledge, ‘The Sakhalin II PSA – a Production ‘Non-Sharing’ Agreement, Analysis of Revenue Distribution’ (2004) SERIS, Jacinta Jackson, Peter Roberts, ‘The Iranian buyback concession: the principle and the prospects’ (2001) 7 I.E.L.T.R. 159-161, Paul Stevens, ‘National Oil Companies and International Oil Companies in the Middle East: Under the Shadow of Government and the Resource Nationalism Cycle’ (2008) 1 Journal of World Energy Law & Business 5;

2. Kim Talus, Scott Looper and Steven Otilar, ‘Lex Petrolea and the Internationalization of Petroleum Agreements: Focus on Host Government Contracts’ (2012) 5 The Journal of World Energy Law & Business 181.

3. It is worth noting that, broadly speaking, “license based petroleum legislation has been, in recent times, almost exclusively adopted in western countries, i.e. in countries with a developed economy and an advanced, sophisticated legal system, all of which happen to be member states of the Organisation for Economic and Development (OECD). In non-western countries, i.e. countries with a developing or emerging economy, the present day petroleum legislation is based on and centered around state participation in combination with a contract of work, the latter almost exclusively in the form of the production sharing contract” Taverne, B. 2013, *Petroleum, Industry and Governments*. Wolters Kluwer. p.157.

4. Omowumi O Iledare, ‘Analyzing the Impact of Petroleum Fiscal Arrangements and Contract Terms on Petroleum E&P Economics and the Host Government Take’, *Nigeria Annual International Conference and Exhibition* (Society of Petroleum Engineers 2004).

“concession agreement,” “economic development agreement,” “service contract,” “work contract,” “joint venture contract,” “production-sharing agreement,” and, most recently, “participation agreement.” Occasionally, within particular countries, the distinctions in terminology are significant in differentiating various forms of arrangements. In other instances, varying terminologies relate to agreements of essentially the same nature. In other cases, the same terminology has been utilised in one country for agreements which are, in substance, quite different from each other.⁵

In general, the contractual approach of HGI is grouped into three main categories: firstly, concession agreements, secondly, production-sharing contracts (“PSCs”) and thirdly, service contracts.⁶ Although these three categories are the most common forms available in the oil and gas industry they might not exist in their pure form as some features of each form could be combined in a hybrid model or two or more HGIs could exist in the same host country in different or same areas. In addition, although they will not be covered by this paper, one should note that in certain specific and less common cases a fifth and sixth options could exist via joint venture agreement and as reconnaissance/study agreement. The former is a fairly unusual model for an HGI but it is far more commonly used between oil and gas companies to share their costs and risks in a given HGI.⁷ The former (joint venture agreement) is rarely adopted in the modern days (i.e. Qatar). This is why it will only be briefly mentioned in our Appendix for “historical” reasons. The latter will not be covered in this paper nor Appendix as they deal with preliminary form of agreements which could lead to a HGI.

In any case, HGs and IOCs might prefer a particular type of HGI. There is a perception that the HG or the IOCs might be more protected with one type as opposed to another.⁸ Quite often HGs modify their legal system to

5. David N Smith and Louis T Wells, ‘Mineral Agreements in Developing Countries: Structures and Substance’ (1975) 69 *American Journal of International Law* 560.

6. See note 1. Kirsten Bindemann, *Production-Sharing Agreements: An Economic Analysis* (OIES 1999) 9.

7. *Ibid.*

8. For more information see Eduardo G. Pereira, Damilola S. Olawuyi (eds.), *Practical Considerations to Negotiate an Enforceable Joint Operating Agreement Under Civil Law Jurisdictions* (Kluwer International Law 2020), Eduardo G. Pereira, *Joint Operating Agreements: Risk Control for the Non-Operator* (Globe Law and Business 2nd edn. 2018), Eduardo G. Pereira, Wan M. Z. Wan Zahari (eds), *Joint Operating Agreement*

incorporate a new type of HGI or implement new features to an existing HGI.

This paper aims to explore the following questions: (1) what are the key differences between contract based HGIs? (2) Does it matter what type of HGI the HGs offer and if so, is there a better one? (3) Why HGIs keep changing and can stabilization truly be achieved?

In order to answer the research questions, the article is structured as follows. Section 1 briefly defines the three types of contractual HGIs. Sections 2 through 4 describe in greater detail the similarities and differences between HGIs in regard to ownership of resources, HGs' intervention and control and fiscal term. Section 5 reviews the pursuit of stabilization of HGIs. Section 6 provides a discussion and answers the research questions, followed by the paper's conclusions.

The paper draws on the most common forms of HGI and the experience of a variety of jurisdictions (including but not limited to the United Kingdom, Norway, Denmark, Brazil, Malaysia, Indonesia, Iran, Kuwait and Saudi Arabia, among others). Nevertheless, the paper does not purport to be specific to any specific jurisdiction, thus examples are solely used to illustrate the various points and general principles.

1. Defining Host Governmental Instruments

Before the article engages in the discussion of the advantages and disadvantages arising from the type of HGI chosen, it is useful to first define and identify the characteristics of each instrument. However, it is not the main goal of this paper to overview such preliminary information in detail even though it might be useful information. For this reason, further details and examples about these HGIs can be found on appendix A of this paper as well as on relevant footnotes.⁹

As previously mentioned, HGIs could be divided between two types of systems. Regulatory and contractual based systems. Regulatory-based systems are the HGIs developed via regulations and are typically less flexible for negotiation. Two examples are licenses and public leases. Contractual based systems are the HGIs developed via contracts and they tend to allow more flexibility for negotiations. Some examples include the concession agreement, production sharing agreement, and service contracts. Nevertheless, some HGIs might exhibit a duality between contractual and

(JOA): *Applicability and Enforceability of Default Provisions* (RMMLF 2018). Eduardo G. Pereira (ed.), *Understanding Joint Operating Agreements* (Intersentia 2016).

9. Smith and others (n 1).

regulatory nature, such as in the UK or the joint venture agreement used in Qatar.¹⁰

In a nutshell, the main characteristics between the most common contractual-based HGI are:

Elements	Concession	Production Sharing Contracts (PSC)	Services Contracts	
			Pure Service	Risk Service
Risk	The investor takes all financial and technical risks.	The investor takes all financial and technical risks.	All financial and technical risks are taken by HG.	The investor takes all financial and technical risks.
Resources	The HG tends to own all the reserves in the country. However, investor tends to own all production and pay "taxes".	The HG owns all the reserves in the country. However, investor tends to receive a share of the production and is reimbursed some costs but might pay "taxes".	The HG owns all the reserves and production in the country. Investor might be paid in fee and/or in kind and is reimbursed some costs but might be subject to "tax".	The HG owns all the reserves and production in the country. Investor might be paid in fee and/or in kind and reimbursed some costs but might be subject to tax. Nevertheless, the investor should have a "premium" or higher fee in comparison to a pure service contract due to the additional risks.

2. Ownership of Resources

Notwithstanding the HGI model used, the HG will usually have ownership of the oil and gas resources before their extraction (with the

10. In some jurisdictions a joint venture with a government entity is required to develop resources. This is not a common approach adopted by host governments but rather between oil and gas companies in order to share the risks and costs agreed in a relevant HGI. However, there are some exceptions like Qatar still persist but it was adopted more widely in the past decades in the MENA region. Qatar has been trending away from production sharing agreements to joint ventures. The North Oil Company is a joint venture with the NOC, Qatar Petroleum, and Total developing and producing one of the largest and most complex oil fields in the world, the Al-Shaheen Field. Mahmmod S., *Oil and Gas Regulation in Qatar: Overview*, Thompson Reuters: Practical Law.

exception of those countries where the ownership of the mineral resources lies with the owner of the land or in the case of historical concessions).¹¹ The critical point for the HGIs is the precise moment of the transfer of ownership of the resources to the IOCs.

Generally, in the **concession model**, the property in oil and gas is transferred immediately to the IOC upon production (e.g., at the wellhead) or in another moment defined by the parties. Under the concessionary system, the oil and gas companies are usually given right over a particular area, including access to potential reserves contained in the field and any related production.¹² In exchange for these rights, the concessionaire is obliged to pay the government the royalties and/or taxes.¹³

Under the **PSC**, the production is owned by the HG, and the IOC's share is transferred to it at a point determined by the parties (e.g., an export or measurement point).¹⁴ However, the precise share allocation depends on the agreed terms of the relevant PSC.

For **Service Contracts**, there is no mandatory transfer of ownership of the produced resources. The compensation of the IOC may be part of the production, and in such a case this would be at a designated point for transfer. Alternatively, the IOC may be entitled to purchase the oil at a discounted price (here, there would also be a specific point determined for the transfer, or a specific fee and reimbursed costs might be paid by the IOC for a certain amount of production).¹⁵ This would depend on how the compensation for the IOC is set under each service contract.

PSCs and Service Contracts are similar, but not identical; the main distinction is that Service Contracts reimburse IOCs in cash rather than in kind.¹⁶ Moreover, Service Contracts provide compensation for the contractor either on a fixed-fee basis at defined periods (with possibilities

11. N. BRET-ROUZAUT & J.P. FAVENNEC, OIL AND GAS EXPLORATION AND PRODUCTION: RESERVES, COSTS, CONTRACTS (Editions Technip, 2011), p 171. Also *Estudos de Alternativas Regulatórias, Institucionais e Financeiras para a Exploração e Produção de Petróleo e Gás Natural e para o Desenvolvimento Industrial da Cadeia Produtiva de Petróleo e Gás Natural no Brasil*, available at www.bndes.gov.br/SiteBNDES/export/sites/default/bndes_pt/.../RelConsol-2de6.pdf (accessed on October 2019).

12. *Ibid.*

13. BRET-ROUZAUT & FAVENNEC, 2011, p 174.

14. *Id.* at 174-175.

15. Abbas Ghandi and CY Cynthia Lin, 'Oil and Gas Service Contracts around the World: A Review' [2014] Energy Strategy Reviews.

16. Rex J Zedalis, *Claims Against Iraqi Oil and Gas: Legal Considerations and Lessons Learned* (Cambridge University Press 2010) 189.

of incremental fees), or upon completion plus some cost recovery in certain instances.¹⁷

Regardless of the ownership of the resources, under normal circumstances in the PSC and concession systems, the IOCs may book the reserves in their accounting system. This is relevant for IOCs as it represents one of the financial indicators that investors and shareholders examine to verify the economic status of the company.¹⁸ The IOCs cannot normally book reserves under a Service Contract because mere contractors as a service provider have no ownership over reserves or production. However, an exception might be made for RSC where the IOCs take certain risks and therefore might have some ownership rights.

Regarding the ownership of goods, equipment and data, there are four types of ownership: (i) host government property; (ii) property of the IOCs, but transferred to host government upon termination of HGIs; (iii) shared property between IOC and Host Government; and (iv) property of the IOCs.¹⁹

While ownership issues may not be directly linked to the HGI model, the type implemented creates different operating environments that lead to ownership questions. For example, under **concession models** the IOCs would usually take ownership of goods, equipment and data.²⁰ However, the ownership of the data (e.g. seismic data) acquired might be more restricted as it is more likely to be the property of the host government.²¹ It is important to note however, that IOCs often keep their intellectual property under any HGI.²²

17. See fn. 67 above, p.

18. Oil companies must tell investors how much oil they have access to, because this is a key indicator of their ability to maintain production and therefore revenues. Companies generally prefer Concession systems because this system allows the company to list all reserves in its books. In a PSC, it can list only the barrels it keeps. Thus if a company agrees to give the Government 70 percent of the oil from a field, it can book only the remaining 30 percent.

19. *Estudos de Alternativas Regulatórias, Institucionais e Financeiras para a Exploração e Produção de Petróleo e Gás Natural e para o Desenvolvimento Industrial da Cadeia Produtiva de Petróleo e Gás Natural no Brasil*, available at www.bndes.gov.br/SiteBNDES/export/sites/default/bndes_pt/.../RelConsol-2de6.pdf (accessed on 10th October 2019).

20. Ghandi and Lin (n 15).

21. A Timothy Martin and J Jay Park, 'Global Petroleum Industry Model Contracts Revisited: Higher, Faster, Stronger' (2010) 3 *The Journal of World Energy Law & Business* 4.

22. Lauren E Godshall, 'Making Space for Indigenous Intellectual Property Rights under Current International Environmental Law' (2002) 15 *Geo. Int'l Env'tl. L. Rev.* 497.

In contrast, in **PSCs**, the property of the equipment and infrastructure installed by the IOCs are usually transferred to the host government (except for leased goods in some jurisdictions).²³ A debate often occurs on PSCs or RSC about the precise timing of this transfer of ownership. Should this transfer take place at the time of the cost recovery, or should it occur at the end of the contract? Usually, it is going to be the former unless the contract terminates earlier since the IOC is less likely to retain ownership acquired in relation to the project in a PSC system. This system does not encourage IOCs to acquire goods or property until they know that there is enough production to offset these costs.

Finally, in **service contracts**, the HG or its NOC is usually the operator of the field, and the IOCs are similar to service providers. Therefore, the host government owns the goods, equipment and data related to such contracts.

3. Host Government Intervention and Control

When deciding its E&P legal framework, a HG takes into accounts both economic and tax benefits, but also social and political pressures. The latter play a significant role in this decision, especially in developing countries.²⁴ The following sub-headings are going to explore different layers of HG intervention and control over oil and gas resources.

3.1. Intervention and Control from a HG Perspective

One of the critical issues is the level of intervention and control desired by the HG.²⁵ For example, under the concession system, the State provides an instrument to make a legal arrangement with the concessionaire to develop oil and gas resources of the State. The instrument lays down the terms and conditions of the said arrangement, as well as rights and duties between the concessionaire and States under both public and private laws.²⁶ The HG will grant exclusive rights to a concessionaire for hydrocarbon E&P in a given area over a specified period. Upon signing the agreement, the concessionaire has the right to conduct exploration and, if successful in

23. Smith and others (n 1).

24. Daniel Johnston, *International Petroleum Fiscal Systems and Production Sharing Contracts* (PennWell Books 1994) 5–6.

25. Daniel Johnston, *International Exploration Economics, Risk, and Contract Analysis* (PennWell Books 2003) 3.

26. Kenneth S Carlston, 'Concession Agreements and Nationalization' (1958) 52 *American Journal of International Law* 260.

making a commercial discovery, to develop it.²⁷ Typically the concessionaire also has the right to take ownership of the oil and gas produced and to dispose of such production without restriction.

In short, the main characteristic of the concession system is the latitude of “freedom” given for the investor to explore and develop oil and gas resources even though more restrictions and control could be imposed in this type of HGI.²⁸

3.1.1. Field Development Monitorization, National Market Quotas & State Participation

Although the modern concession might entail more discretion to oil and gas companies, it is not a “free pass” as it once was common under older concessions. The HGs have learned that retaining certain controls over their resources is in their best interest. For example, a HG often approves a field development plan before any production phase. Additionally, it can secure higher participation over the field production by either requesting the fiscal consideration to be paid in kind, or by establishing a domestic market obligation to secure supplies of oil and gas production for its nation, although the investor might consider national obligations negatively when deciding to enter a country.²⁹ This scenario could be seen in the Malaysian regime where the oil and gas companies had been previously operating under a concession system during British protectorate.³⁰ Post-independence, Malaysia inherited and continued using the same concession system. Nevertheless, after the 1973 oil embargo, the oil-producing countries of the world realised the importance of monitoring and having closer control over their petroleum resources.³¹ In Malaysia, it led to the legislation of the Petroleum Development Act (PDA) in 1974 and the formation of a NOC to ensure that the nation’s petroleum resources could be developed in line with

27. Rovicky Dwi Putrohari and others, ‘PSC Term and Conditions and Its Implementation in South East Asia Region’ [2007] Proceedings Indonesian Petroleum Association, Thirty-First Annual Convention and Exhibition, May 2007 PSC.

28. Smith and others (n 1).

29. Nutavoot Pongsiri, ‘Partnerships in Oil and Gas Production-Sharing Contracts’ (2004) 17 *Int. J. Public Sector Mgmt.* 431, 432.

30. Wan Mohd Zulhafiz Wan Zahari, ‘Kisah Hak Minyak, Gas Sarawak’ *Utusan Online* (2018); Wan Mohd Zulhafiz Wan Zahari, ‘Minyak Dan Gas Di Sarawak: Menurut Kaca Mata Sejarah Dan Undang-Undang’ *Malaysian Digest* (2018).

31. Mohamad Kamal Hamdan and others, ‘Enhanced Oil Recovery in Malaysia: Making It a Reality’, *SPE Asia Pacific Oil and Gas Conference and Exhibition* (SPE 2005). Hamdan and others.

the desires and wishes of the nation and a new HGI was put in place as described on Appendix A.³²

The participation of a NOC could also influence whether the HG should choose a more interventionist model.³³ In relation to this, the NOC's majority or preferential participation could be mandated with access to strategic areas, pre-emption rights, and carried interest or there could be a more open market approach where the IOC and the NOC compete for the same acreage on a level playing field.³⁴

For example, in Brazil, an issue arose as to the importance of implementing a "new" petroleum regime to develop the Pre-Salt area.³⁵ This change arose from political motivations and the objectives to increase government take and control of the operations, which are directly related to the rationale behind the PSC system.³⁶ It is possible to suggest that the creation of the Pré-Sal Petróleo S.A. (PPSA), as the "manager" of the local PSC regime, and the PSC system itself, has a clear political motivation, as supported by several authors,³⁷ such as John Gault:

"The primary difference between a well-designed PSC and a well-designed tax and royalty system is not economic but political: the PSC gives the appearance that the host country NOC remains the owner of the reserves in the ground until they are produced. I have always assumed that this appearance was

32. Wan Zulhafiz, 'Unfair Contract Terms Act 1977: Does It Provide a Good Model in Regulating Risk Allocation Provisions in Oilfield Contracts in Malaysia?' (2015) 8 *International Journal of Trade and Global Markets* 3, 5.

33. Robert L Pirog, 'The Role of National Oil Companies in the International Oil Market' (Congressional Research Service, Library of Congress 2007) 5; Silvana Tordo, *National Oil Companies and Value Creation* (World Bank Publications 2011).

34. Marilu Hastings, 'A New Operational Paradigm for Oil Operations in Sensitive Environments: An Analysis of Social Pressure, Corporate Capabilities and Competitive Advantage' (1999) 8 *Business Strategy and the Environment* 267.

35. The 'pre-salt area' is described in the Federal Law No 12.351/2010 ("Pre-salt Law") and subject to a production sharing regime.

36. Eduardo G. Pereira, "Governmental Participation in Upstream Projects: The Brazilian Pre-Salt Case," *UEF Energy Law Review* (2016) 1.

37. Johnston has the same perspective as he states that 'At first PSCs and concessionary systems appear to be quite different. They have major symbolic and philosophical differences, but these serve more of a political function than anything else.' Daniel Johnston, *International Petroleum Fiscal Systems and production sharing contracts* (Penwell, Oklahoma 1994), p. 39. In addition, Bindemann suggests in his conclusion that "In that sense it can be argued that a PSA is a political rather than an economic contract." Kirsten Bindemann, *Production Sharing Agreements: An Economic Analysis* (Oxford Institute for Energy Studies, Oxford 1999), p. 88.

the primary reason why some host governments introduced PSCs in the first place.”³⁸

Although most developing countries face popular claims to protect national resources and feel uncomfortable delegating proprietary rights to an IOC, this, in theory, should not apply to the current Brazilian scenario as the state monopoly was relaxed in 1995 and was working reasonably well for over ten years.³⁹ However, sustained political stability is hard to achieve in any country, and the changes within the Brazilian upstream sector seem to be a regressive measure towards national restriction of private and foreign investment.⁴⁰ Nevertheless, it is important to highlight that some of the restrictions of the PSA regime (e.g. operatorship) have been made more flexible due to the financial crises and scandals suffered by Petrobras.⁴¹ Further details about the evolution of the Brazilian HGI can be found on Appendix A.

It is also important to bear in mind that state participation from an HG point of view can vary due to certain aspects such as, total state control of the activity under Service Contracts, shared control in a PSC between the NOC and the IOCs or the sole regulation and audit of activities under the concession agreement.⁴² For instance, while the HG is usually the most participative under Service Contracts, theoretically it also assumes higher risks under this type of agreement.⁴³ Therefore, the HG is unlikely to use this system for exploration activities, as it would prefer to use a Risk Service Contract where risks are delegated to the investor.⁴⁴ In these agreements, the government contracts with an IOC to conduct a specific technical service regarding the exploitation of petroleum resources within a

38. J Gault, ‘Crude Designs: The Rip-Off of Iraq’s Oil Wealth-A Comment’ (2007) 5 *Oil, Gas & Energy Law Journal* (OGEL). The author uses the term ‘agreement’ instead of ‘contract’. We have replaced it in the acronym for consistency reasons.

39. Fabrício Germano Alves and Yanko Marcius de Alencar Xavier, ‘The Evolution of Brazilian Oil, Gas and Biofuel Industry Regulations’, *Energy Law in Brazil* (Springer 2015) 33–56.

40. *Ibid.*

41. See Federal Decree no. 9.041/2017.

42. Abbas Ghandi and CY Cynthia Lin, ‘Oil and Gas Service Contracts around the World: A Review’ (2014) 3 *Energy Starergy Rev.* 63.

43. Christopher Hood, ‘The Risk Game and the Blame Game’ (2002) 37 *Government and opposition* 15.

44. Eugene F Fama, ‘Contract Costs and Financing Decisions’ [1990] *Journal of Business* S71.

stipulated period, while retaining the ownership, control, risk, and reward.⁴⁵ In this sense, a Service Contract could have a “pure” nature (without risks) or a “hybrid” nature (with risks) and becoming similar to a PSC.⁴⁶

At the same time, it should be noted that the role of the NOC varies from country to country. It could possess regulatory or commercial roles and sometimes both.⁴⁷ In some instances, the NOC might have more “power and control” than the actual government. This was the case in Mexico and Brazil during their “monopoly” period due to their regulatory powers, expertise and financial resources.⁴⁸ In other cases, the NOC might have a purely commercial role, in which it could be involved from the exploration stage or after finding and developing a commercial discovery.⁴⁹ Such involvement could be exercised via regulatory and compulsory procedures, or voluntarily by the decision of the relevant investors.⁵⁰

Even under the arrangement of PSCs, the level of intervention depends on the actual contractual structure, including the position of the NOC, i.e. whether an NOC will operate the project, or whether it is focused on learning from the IOCs during the exploration phase of the PSC or even if the NOC will join later in the development stage whenever the exploratory risks were mitigated.⁵¹ The E&P activities in a PSC are conducted in a manner similar to those covered by the concession system or Risk Service Contract with the risks and costs being borne by the investor.

3.1.3 Control and Intervention in Concession Agreements

Regarding controlling mechanisms, under the Concession (including other types of tax regime systems like lease and license), the main role of the HG is to enact rules and principles guiding the E&P activities of the IOCs. However, in some cases a NOC might participate in “partnership”

45. Roderick Paisley, ‘Aspects of Land Law Relative to the Transportation of Oil and Gas in Scotland’ in Greg Gordon, Emre Usenmez and John Paterson (eds), *Oil and Gas Law: Current Practice and Emerging Trends* (Dundee University Press 2011) 50.

46. Andon J Blake and Mark C Roberts, ‘Comparing Petroleum Fiscal Regimes under Oil Price Uncertainty’ (2006) 31 *Resources Policy* 95.

47. Leslie E Grayson, *National Oil Companies* (Wiley Chichester 1981) 5.

48. Smith and others (n 1).

49. Wan M Zulhafiz, ‘Perception of Contractual Risk Allocation in the Oil and Gas Contracts in Malaysia’ (2018) 11 *International Journal of Trade and Global Markets* 127.

50. Jacqueline Lang Weaver and David F Asmus, ‘Unitizing Oil and Gas Fields around the World: A Comparative Analysis of National Laws and Private Contracts’ (2006) 28 *Hous. J. Int’l L.* 3.

51. Smith and others (n 1).

with such companies, like in Brazil or Norway.⁵² However, the concession system could be combined with firm regulatory control consisting of a range of checks and balances and a variety of host governmental approvals (e.g. Norway).⁵³

Developed countries do not seek a complete ownership of oil and gas resources. This is why they tend to use a concession regime or a “variation” of it (i.e. leases in the United States, licenses in the United Kingdom).⁵⁴ Developing nations tend to use a more interventionist approach to secure the ownership of their resources (such as the PSC models) either to better understand how the E&P phase actually works and to gain know-how and expertise, or as a result of political or nationalist feelings concerning ownership of discovered resources in line with the UN General Assembly Resolution 1803 on Permanent Sovereignty over Natural Resources.⁵⁵ Exceptions generated by nationalistic feelings due occur in developed countries, as in the case of the Danish Sole Concession granted to Maersk.

The choice is also impacted by historical factors. The regime used in the past tends to become more consolidated and firmly established within a country’s legal framework, thus limiting the use of diverse models, except in cases of “unstable” political environment which might encourage the creation of a new regime like the example from the PSC system in Brazil.⁵⁶ In turn, IOCs will mainly use the economic feasibility and returns from any HGI applied by the host country to decide whether it is worth investing, regardless of whether it is a Service Contract, Concession or PSC or something else.⁵⁷ The main concern for IOCs is whether the contract

52. *Estudos de Alternativas Regulatórias, Institucionais e Financeiras para a Exploração e Produção de Petróleo e Gás Natural e para o Desenvolvimento Industrial da Cadeia Produtiva de Petróleo e Gás Natural no Brasil*, available at www.bndes.gov.br/SiteBNDES/export/sites/default/bndes_pt/.../RelConsol-2de6.pdf (accessed on 10th October 2018).

53. Efstathios Mavridis, ‘Types of Contracts Used in the Upstream Oil Industry and Related Issues.’ (International Hellenic University 2018) <<https://repository.ihu.edu.gr/xmlui/handle/11544/29102>>.

54. Eduardo Pereira and Kim Talus, ‘Upstream Regulation: An Introduction’ [2013] University of Eastern Finland Legal Studies Research Paper.

55. Resolution 1803 (XVII) on the “Permanent Sovereignty over Natural Resources” of 14 December 1962; accessible from : http://legal.un.org/avl/ha/ga_1803/ga_1803.html (accessed on October 2018).

56. Smith and others (n 1).

57. Peter D Cameron, ‘Stabilisation in Investment Contracts and Changes of Rules in Host Countries: Tools for Oil & Gas Investors’ [2006] Association of International Petroleum Negotiators.

provides adequate returns to justify the risk and required investments.⁵⁸ However, there are a number of risks that a IOC should consider prior to engaging in any upstream investment (i.e. geology, infrastructure, political, legal and tax system, etc).⁵⁹ These risks certainly include the level of intervention of a given host government, and the IOCs will have to decide if they are willing to accept such risks or they invest in another country.⁶⁰

Further, the nature of the PSCs (including Concession and Risk Service Contracts) is that they are “risk contracts” where the investor ventures into oil and gas exploration related investments against the possibility of oil and gas availability.⁶¹ If oil or gas is not found in commercial terms, then IOCs lose their investment. Otherwise, IOCs are granted a share of oil and gas produced as specified in the contract in case of commercial success.⁶² Some could argue that PSCs (including Concession and Risk Service Contracts) might not be appropriate for granting rights to oil and gas reserves that carry “insufficient” risks.⁶³ Gulf countries with high production levels, extensive reserves and low operating costs (from reserves mostly located onshore or in shallow waters) do not normally award a contract with private IOCs and even in conditions where they do, they do not use PSCs.⁶⁴ For example, Saudi Arabia, Kuwait, Iran and the United Arab Emirates tend to pay IOCs an agreed compensation for oil exploration and development rather than a share of the oil and gas.⁶⁵ Nevertheless, it is relevant to note that certain prolific oil and gas reserves are being produced from the US under a lease type of HGI with relatively low risk and it seems to be suitable for all relevant stakeholders.⁶⁶

In Iraq, misalignment has arisen over whether the Kurdish Regional Government (“KRG”) has authority to enter into international oil and gas

58. Cameron (n 57).

59. Wan M Zulhafiz, ‘On the Contractual Risk Allocation in Oil and Gas Projects’ [2017] *The Law Review* 168.

60. Cameron (n 57).

61. Tengku Nathan Machmud, *The Indonesian Production Sharing Contract: An Investor’s Perspective* (Kluwer Law International 2000) 37.

62. Machmud (n 61).

63. Machmud (n 61).

64. Dunia Chalabi, ‘Perspective Investment in the Middle East/North Africa Region’, *OECD, Istanbul* (2004).

65. Gawdat Bahgat, *Energy Security: An Interdisciplinary Approach* (John Wiley & Sons 2011) 79; Abdul Hadi Al-Hassani, ‘Iraqi Oil and Gas Law: Between Theory and Facts’ [2007] *I.J.E.R* (in Arabic) 60, 63.

66. Smith and others (n 1).

agreements, such as PSCs, which have received widespread criticism.⁶⁷ In Iraq, onshore production costs only a few US dollars per barrel and it might be argued that there is an insufficient geological risk to justify the use of PSCs in a number of areas with proven reserves.⁶⁸ Iraqi fields hold high production levels and a low operating cost, which is more common with onshore than offshore reserves as they are larger and geologically less complicated.⁶⁹ Iraqi fields and reservoirs have been specified, determined and assessed.⁷⁰ This is even more evident when considering the geological structures with no exploratory wells since the possibility of success to find oil or gas in these structures is among the highest in the world and has been given a percentage success rate of 70–80 percent.⁷¹ However, Iraq and other countries in this region pose other types of risks, ranging from political stability to security, which the IOCs should consider before signing any HGI.⁷²

In countries with vast reserves, Service Contracts tend to be the preferred option.⁷³ The main reason is to comply with constitutional and statutory restraints on foreign ownership of oil and gas.⁷⁴ In Iraq, apart from the PSCs concluded by the KRG, the Ministry of Oil limits licensing auctions to service contracts.⁷⁵

In short, the relevant stakeholders usually search for a balance between risk and reward. IOCs analyse a large variety of risks (e.g. geological, technical, environmental, financial, political, security, legal) in order to understand what best aligns with their desired financial metrics and corporate profile.

67. See fn. 67 above, p.

68. Smith and others (n 1).

69. Ibid.

70. US Congress, *Congressional Record*, V. 153, Pt.10, May 22, 2007 to June 5, 2007 (Government Printing Office, 2010), 13679.

71. See fn. 67 above, p.

72. Greg Muttitt, *Crude Designs: The Rip-off of Iraq's Oil Wealth* (Platform 2005) 5.

73. See fn. 61 above, p.66.

74. Smith and others (n 1).

75. US Energy Information Administration, "Iraq" (EIA April 2013), p.12 available at: www.eia.gov/countries/analysisbriefs/Iraq/iraq.pdf [Accessed on 22 April 2013]; Christopher Blanchard, "Iraq: Oil and Gas: Legislation, Revenue Sharing and US Policy" (2009) 7-5700 CRS 1, available at <http://www.fas.org/sgp/crs/mideast/RL34064.pdf> [Accessed December 9, 2019].

4. Fiscal terms

An efficient fiscal system should be designed to encourage IOCs to extensively explore the HG's sedimentary basins and develop both small and marginal fields as well as highly profitable fields, to maximise oil and gas recovery and prevent premature field abandonment.⁷⁶ In designing any fiscal regime, the government should endeavour to keep a balance between its primary objective of maximising its "share" of the project's economic rent⁷⁷ and the IOC's need for a commercially viable investment. An efficient fiscal system should not be like a zero-sum game in which there is a winner or loser, but a positive-sum-game or a win-win game in which both the HG and IOC benefit, where the level of investment and rewards are inextricably linked.⁷⁸ Long-term stability and simplicity in interpretation are also essential requirements.

In theory, both HGs and IOCs share the same goal in an HGI, which is to obtain the highest possible return from a specific project. However, while host governments attempt to obtain higher values as "government take" from the revenues obtained from upstream activities, IOCs seek the most advantageous regimes globally, balancing risks and opportunities.

Thus, the fiscal terms are, undoubtedly, one of the most relevant aspects of HGIs. As per a International Monetary Fund's working paper, "[t]he central fiscal issue is ensuring a 'reasonable' government share in the rents often arising in the EIs".⁷⁹ Rents are "the excess of revenues over all costs of production, including those of discovery and development, as well as the normal return to capital".⁸⁰ Even though a tax of 100 percent on these rents would not necessarily render upstream activities unprofitable, as the standard rate to capital would grant a certain return, there would be no incentives for IOCs to invest in exploration, development and production.⁸¹

76. Alexander G Kemp and Waniss A Otman, 'The Petroleum Development Investment Risks and Returns in Libya: A Monte Carlo Study of the Current Contractual Terms (EPSA IV)' [2004] NORTH SEA STUDY OCCASIONAL PAPERS.

77. Kemp defines economic rent as 'returns accruing to a factor of production more than its transfer earnings. Alexander G Kemp, *Petroleum Rent Collection around the World* (IRPP 1987) 5.

78. LE H Leuch, 'Petroleum Exploration Production Agreements and Taxation' [2001] IFP, France.

79. Carlo Cottarelli, 'Fiscal Regimes for Extractive Industries: Design and Implementation' [2012] International Monetary Fund 67.

80. Cottarelli (n 79).

81. Tordo (n 33).

In this sense, the issue for HGs is finding how much economic rent they can derive from HGIs, while at the same time providing sufficient incentives for IOCs to invest.⁸² Moreover, HGs compete internationally against each other for the investments of IOCs,⁸³ this being more challenging for developing countries.⁸⁴ Thus, HGs try neither to establish a fiscal regime that is too burdensome on IOCs, as it would probably lead to IOCs investing in other countries, nor to offer too generous conditions in detriment of its public interest.⁸⁵

It is also important to consider that an effective fiscal regime must consider and be consistent with actual conditions of the relevant country (including relevant risks and resources).⁸⁶ For example, the Indonesian government, through its Regulation No 8 of 2017, mandated that for all new PSCs, a “gross split” mechanism will determine the allocation of production from petroleum operations between the State and the contractor without a cost recovery system.⁸⁷ In this case, the contractors will be allocated a potentially higher percentage share of gross production in exchange for the removal of the cost recovery system.⁸⁸

The driver for this fundamental change was primarily the prevailing low oil price scenario. This meant that in 2016 the Indonesian Government’s share of oil and gas revenues was reduced by \$13.9 billion, which it had paid for its oil and gas cost recovery obligations, ‘significantly more than the \$12.86 billion in non-tax revenues’⁸⁹ realized from the oil and gas sector in the country.⁹⁰

82. Smith and others (n 1).

83. Tordo (n 33).

84. Tordo (n 33).

85. Tordo (n 33).

86. Smith and others (n 1).

87. “Under a “gross split” PSC, gross production will be allocated between the State, and the Contractor based solely on production splits, without involving an operational cost recovery mechanism. On this basis, the contractor’s entitlement to production for each lifting period, and the resulting revenues will be determined based solely on its gross split percentage, which is determined on a pre-tax basis.” Ashurst, ‘Indonesia Abandons Cost Recovery Mechanism for New Production Sharing Contracts’ (2017) <<https://www.ashurst.com/en/news-and-insights/legal-updates/indonesia-abandons-cost-recovery-mechanism/>> accessed 10 October 2019.

88. MJ Giranza and A Bergman, ‘Indonesia’s New Gross Split PSC: Is It More Superior Than the Previous Standard PSC’ (2018) 6 *Journal of Economics, Business and Management*.

89. Ashurst (n 87).

90. Ashurst (n 87).

The new gross split regime represents a significant change in the fiscal terms of Indonesian PSCs.⁹¹ The Regulation demonstrates the willingness of the Indonesian Government, in a low crude price scenario, to share more of the downside of lower oil prices in order to encourage continued investment in Indonesia, during challenging periods in the oil price cycle. Apparently,

the absence of cost recovery in gross split PSCs will mean that the State's entitlement to oil and gas in the early years of production under a gross split PSC will be higher. As a result, contractors may need to wait longer to recover their investment costs under gross split PSCs. This changes the dynamics of a contractor's investment and potentially increases their investment and funding risk. Contractors will likely place increased emphasis on reserves and production forecasts when making their investment decisions and may seek to mitigate their cost exposure where there is more uncertainty in terms of investment recovery (e.g. when agreeing on firm work commitments).⁹²

It will be interesting to see if similar changes to the traditional PSC take place in other jurisdictions as Indonesia was a pioneer HG to adopt and promote PSC standards for the past decades. These proposed changes could eliminate the inefficiency or potential corruption in the PSC system because the cost recovery tends to be a contentious topic for both the Investor and HGs.⁹³ The investor is not keen to conduct any activity that is not going to be allowed under the cost recovery system. The HG is keen to reject anything that is not strictly under the cost recovery system or eventually removing the wrongful incentives to keep costs high and reduce the said profit split.⁹⁴ Nevertheless, it might be challenging to implement such changes on existing contracts as it would require complicated re-negotiations, or it might end up in potential disputes concerning the stability of the agreements in place.

The choice of fiscal regimes may be divided into two legislation-based approaches via license-granting or the concession system (both commonly

91. Giranza and Bergman (n 88).

92. Ashurst (n 87).

93. MJ Giranza and A Betrgmann, 'Indonesia's New Gross Split PSC: Is It More Superior Than the Previous Standard PSC?' (2018) 6 *Journal of Economics, Business and Management*.

94. *Ibid.*

referred to as a “tax and royalties” system) and those systems that are based on PSCs and service contracts.⁹⁵ In the tax and royalties system, the compensation received by the host government relies mostly on royalties and/or income taxes on the IOC profits.⁹⁶ This is, theoretically, a simpler system than the contractual system based on PSCs and service contracts, even though a number of HGIs adopt both systems.⁹⁷ Nevertheless, some countries abolished royalties from their fiscal system due to their regressive nature (e.g. the UK and Norway) and focused on a fiscal system based on profit.⁹⁸

The compensation system based on PSCs and service contracts will depend on whether the chosen HGI is a PSC or a service contract. In the PSC, the HG receives its share of the production (as profit oil); in the Service Contracts, the HG receives all revenues less the fees paid to the IOCs and eventually some costs.⁹⁹ In both contracts, the IOCs might be subject to the payment of income tax, even though in some cases, the NOCs pay such taxes on behalf of the IOCs or the taxes are subject to reimbursement.¹⁰⁰

Regarding the PSC system and some Service Contracts, there is a discussion over which costs are recoverable and how such costs are reimbursed. The definition of the recoverable costs (e.g. exploration, development, production) and any necessary approvals for a cost to be integrated into the balance to be recovered are crucial for the economic appraisal of a PSC. Modern PSCs have also established monthly or annual limitations to the amount of cost oil as a percentage of the total production, delaying or even hindering the recovery of costs and investments.¹⁰¹

95. ‘Fiscal Terms for Upstream Projects - An Overview’ Center for Energy Economics, Bureau of Economic Geology, Jackson School of Geosciences – The University of Texas at Austin 1 <<https://docplayer.net/23918429-Fiscal-terms-for-upstream-projects-an-overview.html>>.

96. Johnston, *International Petroleum Fiscal Systems and Production Sharing Contracts* (n 24).

97. ‘Fiscal Terms for Upstream Projects - An Overview’ (n 93) 1.

98. Johnston, *International Petroleum Fiscal Systems and Production Sharing Contracts* (n 24).

99. *Estudos de Alternativas Regulatórias, Institucionais e Financeiras para a Exploração e Produção de Petróleo e Gás Natural e para o Desenvolvimento Industrial da Cadeia Produtiva de Petróleo e Gás Natural no Brasil*, available at www.bndes.gov.br/SiteBNDES/export/sites/default/bndes_pt/.../RelConsol-2de6.pdf (accessed on the 10th of October 2019).

100. Smith and others (n 1).

101. PwC, ‘Oil and Gas in Indonesia’ (2014) 74 <https://www.pwc.com/id/en/publications/assets/oil_and_gas_guide_2014.pdf> accessed 29 September 2019.

Although the concession system does not offer a direct cost recovery system it might implement a similar approach with depreciation, tax allowances and deductions (e.g. Norway) but with higher control to the HG as regulations might be more easily changed than contractual terms.

There is a possibility for “ring-fencing”, where the host government limits (or expands) the taxable entities.¹⁰² Usually, cost recovery must be carried strictly on a field basis – in other words, if the costs are incurred in one field, they must be recovered from the same field.¹⁰³ That being the case, IOCs with multiple fields cannot derive cost recovery throughout their different areas.¹⁰⁴ Ring-fencing can also apply in relation to taxes and ensures that income from one project/area cannot be offset against another, to avoid “opportunistic behaviour” from IOCs.¹⁰⁵ This might also apply if IOCs have operations in both the upstream and downstream and cannot offset losses and income from one sector to another.¹⁰⁶ A tax and royalties regime might be less strict about ring-fencing as it is the case in the UK and Norway, which may result in tax losses for the HG, but may attract more investment in mature areas.¹⁰⁷

Regarding the Service Contract regime, one may wonder if the service will be based on ‘risk’ or ‘without risk’ system. In the first case, the RSC will be reasonably similar to the PSC structure as there should be risk, cost recovery and a “premium” to the investor in case it manages to find and develop a field. In the second case, the HG will take full control of ownership and risks related to the enterprise. Therefore, the investor will only receive a fee and maybe costs as compensation for their work.

102. Dongkun Luo and Na Yan, ‘Assessment of Fiscal Terms of International Petroleum Contracts’ (2010) 37 *Petroleum exploration and development* 756.

103. Kirsten Bindemann, ‘Production-Sharing Agreements: An Economic Analysis’ (Oxford Institute for Energy Studies 1999).

104. *Ibid.*

105. Philip Daniel, ‘Fiscal Regimes, Petroleum Contracts, and Natural Gas’, *Asia-Pacific Natural Resource Taxation Conference in Jakarta* (2015) <<https://www.imf.org/external/np/seminars/eng/2015/natrestax/pdf/daniel.pdf>> accessed 29 September 2019.

106. Silvana Tordo, *Fiscal Systems for Hydrocarbons: Design Issues* (The World Bank 2007).

107. Smith and others (n 7); ‘Norway - Income Tax - KPMG Global’ <<https://home.kpmg/xx/en/home/insights/2011/12/norway-income-tax.html>> accessed 29 September 2019.

Regardless of the different regimes described above, when setting up the fiscal regime, the host government has to hand a wide variety of tax and non-tax tools which may be applied to different HGI models, such as:¹⁰⁸

- royalties;
- profit oil;
- “ring-fencing”;
- corporate income tax;
- resource rent tax;
- windfall tax;
- import and export duties;
- value-added tax;
- bonuses (e.g. exploration or discovery bonuses);
- state participation;
- environmental taxes;
- foreign exchange controls;
- performance bonds; and
- local content obligations.

Different taxes or obligations have their advantages and disadvantages for the host governments and may affect positively or negatively the investment decisions to be taken by IOCs. If the country has significant proven reserves and a stable government, then it will have stronger leverage in negotiating fiscal terms and still be able to attract investments.¹⁰⁹

The above basic fiscal concepts are well-understood, but in a modern context, very flexible, and the old saying “one cannot judge a book by its cover” frequently applies.¹¹⁰ For example, some PSCs have a royalty clause which is common for a concession system.¹¹¹ The trend is for countries to “copy” titles and structure, but “tweak” the economics and other provisions to suit particular HG needs¹¹².

Consequently, the HG must aim to create a fiscal system which can work effectively regardless of the price of oil and gas, so that HGIs will not have

108. Tordo (n 106).

109. Sunley, Emil M., Thomas Baunsgaard and Dominique Simard, ‘Revenue from the Oil and Gas Sector: Issues and Country Experience’, *IMF conference on fiscal policy formulation and implementation in oil producing countries* (2002) <<http://siteresources.worldbank.org/INTTPA/Resources/SunleyPaper.pdf>> accessed 29 September 2019.

110. Smith and others (n 1).

111. Smith and others (n 1).

112. Tytanic Chris and McDaniel Mark, ‘Host Government Contracts, Types of Contracts, Fiscal Systems’ (*Devon Energy Corporation*, 2007) <www.devonenergy.com> accessed in March 2019.

to adjust the system each time the reference prices change, thereby creating more confusion and legal uncertainties and driving investors away. At the same time, the host government must be able to manage whatever system it opts for effectively. For example, in a PSC or RSC, the host government should have human resources available to verify and approve the costs recovery mechanisms promptly and with careful consideration.¹¹³ If they are not capable of doing so, then delay in reimbursement costs could impact the project by discouraging IOCs from investing, or might end up approving costs without proper diligence.¹¹⁴ Alternatively, the relevant HG might increase their man-power, in order to gain such capabilities, or even outsource such tasks, but they should pay attention to the additional cost involved.

For an IOC, its choice is largely based on achieving its internal rate of return justifying a particular investment.¹¹⁵ The IOC will also be interested in repatriating profits to its shareholders in home countries, whether such a system leads to a minimum number of front-end loaded non-profit-sensitive taxes, and if the host government has a transparent, predictable and stable policy environment, based on the best industry standards and practice.¹¹⁶ In addition, the existence of international treaties between the relevant stakeholders (i.e. investors home country and HG), such as the Energy Charter Treaty (ECT), a Bilateral Investment Treaty (BIT) or a Double Taxation Treaty (DTT) might encourage foreign investments.

Thus, the differences between a PSC, a concession or service models are determined by the factors mentioned above. Each HG will attempt to develop a regime that is attractive to the IOCs, while at the same time ensuring their share. Nevertheless, this is not always the case as some HGs end up establishing an aggressive fiscal system (e.g. Libyan production license rounds under EPSA IV terms end up with 95% of government take and some companies were bidding for it.)¹¹⁷

As stated earlier, IOCs might face the most significant disadvantages in the Service Contracts, where they only receive a fee and/or costs for the services provided to NOCs or HGs, and are unable to book reserves or

113. Peter D Cameron and Michael C Stanley, *Oil, Gas, and Mining - A Sourcebook for Understanding the Extractive Industries* (World Bank Group 2017) 159.

114. *Ibid.*

115. *Ibid.*

116. Daniel Johnston, 'Impressive Libya Licensing Round Contained Tough Terms, No Surprises' (2005) 103 *Oil & gas journal* 29.

117. Johnston, 'Impressive Libya Licensing Round Contained Tough Terms, No Surprises' (n 114).

receive the production as compensation for the investment made.¹¹⁸ IOCs would routinely avoid being in such a position, except, perhaps, for purposes of fostering a future relationship with the HGs and NOCs, or if the HGs offer attractive terms for such HGI.¹¹⁹

After reviewing the risks and the tax system, the IOC will also weigh the opportunities in the country reviewed against other opportunities available worldwide, given that any company can only have a limited amount of investments at the same time.¹²⁰ In this sense, creating joint ventures is an essential tool for IOCs to diversify their risks and portfolio.

It is possible to attune almost any HGI to the desired fiscal system. For example, a concession arrangement could adopt a “cost recovery system” through depreciation, allowances and tax exemptions.¹²¹ A concession system could request royalty in kind or a domestic market obligation to retain production.¹²² An RSC could allow some ownership rights and a method to book reserves. A profit sharing agreement could remove the cost recovery system. All systems could have State participation and some direct or indirect taxation.¹²³ Nevertheless, as discussed earlier, it might be easier to implement certain HGIs and to create their intended fiscal structures than it is others in different legal systems.¹²⁴

From the IOC’s perspective, it is essential to mention the opportunity of being the “first mover” – i.e., the IOCs which receive the first HGIs in any given country would, in theory, benefit from the terms received upon discovery of oil and gas as they would take more risks.¹²⁵ This principle is based on the idea that any host government will tend to grant HGIs with less favourable conditions to IOCs as their awareness of the reserves

118. Ghandi and Lin (n 15).

119. Smith and others (n 1).

120. Smith and others (n 1).

121. Bariture Nyoor, Adeogun Oyebimpe and Omowumi O Iledare, ‘The Impact of the Proposed Petroleum Industry Fiscal Bill PIFB, 2018 Tax Scheme on the Economics of Oil Production in Nigeria’, *SPE Nigeria Annual International Conference and Exhibition* (Society of Petroleum Engineers 2019).

122. Smith and others (n 1).

123. Jorge Martinez-Vazquez, Violeta Vulovic and Yongzheng Liu, ‘Direct versus Indirect Taxation: Trends, Theory and Economic Significance’ [2011] *The Elgar Guide to Tax Systems*, Edward Elgar Publishing 37.

124. Smith and others (n 1).

125. Sherif Wadood, ‘The Role of Independents in the Oil and Gas Industry’, *SPE Annual Technical Conference and Exhibition* (Society of Petroleum Engineers 2006).

available in their countries increases (i.e. lesser risks in comparison to the first mover).¹²⁶

This would represent a disadvantage for a new coming IOC.¹²⁷ However, as they would be aware that other IOCs have already made discoveries in a particular country (thus reducing the exploratory risk) and that they can operate there (reducing the operational, marketing and infrastructure risks), the newcomers can assess whether the less favourable terms are in accordance with their risk evaluation, and make their investment decision accordingly.¹²⁸ Political and legal risks are challenging to mitigate fully; this is why it is crucial for an investor to understand the stability of the country awarding the HGI and the implications of a potential direct or indirect expropriation.¹²⁹

Therefore, the form that the fiscal system takes relies on how a HG wishes to receive compensation in exchange for granting to IOCs the possibility to explore and produce the oil and gas resources in that country.¹³⁰ As we have noted above, there are multiple combinations possible, and each will have its advantages and disadvantages – including whether a system is easier to manage but less flexible to adjust according to the development of the reserves. A theoretically ideal model may be too complicated to manage, especially for HGs that may have limited human resources to deal with such complexities.¹³¹

5. The Pursuit of Stability and the Ever-Changing Host Governmental Agreement

Given the long-term character of oil and gas petroleum agreements, IOCs are exposed to significant political risks.¹³² Throughout the existence of an HGI, governments, generations, and society change. This may lead to changes in the existent regulatory framework, the public perception

126. Wadood (n 125).

127. Wadood (n 125).

128. Smith and others (n 1).

129. Mehmet Ögütçü, 'The Game Changers in World Energy: Geopolitical Implications' (2013) 12 *Turkish Policy Quarterly*.

130. Abdulaziz Al- Attar and Osamah Alomair, 'Evaluation of Upstream Petroleum Agreements and Exploration and Production Costs' (2005) 29 *OPEC review* 243.

131. Tordo (n 106).

132. T. HUNTER, *REGULATION OF THE UPSTREAM PETROLEUM SECTOR: A COMPARATIVE STUDY OF LICENSING AND CONCESSION SYSTEMS* (Edward Elgar Publishing Limited, 2015), p. 4. Also: PETER D. CAMERON, *INTERNATIONAL ENERGY INVESTMENT LAW, THE PURSUIT OF STABILITY* (Peter D. Cameron ed., Oxford University Press, Oxford, 2010), p. 4.

regarding the presence of foreign investment or different expectations regarding the fate or outcome of the HGI itself.¹³³ At the same time, advances in technology as well as increased awareness regarding industry practices risks of pollution, or changes in market prices that affect State revenues may play a more important part in public policies addressing environmental concerns and sustainable practices. These are factors with an adverse impact on the original terms of the HGI and the envisioned outcomes of the agreement, which might lead certain HGs to request renegotiations, unilateral amendments of the initial terms or even the complete repudiation of the HGI by way of expropriation or nationalization. Therefore, the pursuit of stability remains one of the top priorities¹³⁴ of the petroleum industry engaged in foreign-based operations.

There are several forms of stabilization clauses implemented in HGIs. Each serves a unique purpose and strikes a certain balance of stability. Some common versions include:

A freezing clause: This provides that laws applicable to operations specified in the HGI should be those laws and regulations that were in force at the time the contract was signed. Simply, it means that the contractors are guaranteed that they will not be subject to significant changes in governing legislation and future laws will not affect the HGI.

Typically, freezing clause covers tax policy changes and therefore profitability of the project for the parties, especially in relation to newly introduced tax instruments that may adversely affect the financial circumstances of the parties.

Example: The Contractor shall be subject to the provisions of this Contract as well as to all laws and regulations duly enacted by the Granting Authority and which are not incompatible or conflicting with the Convention and/or this Agreement. It is also agreed that no new regulations, modifications or interpretation which could be conflicting or incompatible with the provisions of this Agreement and/or the Convention shall be applicable. – 1989 Tunisian Model Production Sharing Contract, Article 24.1

An equilibrium clause (also known as “hardship” provision) protects investors from laws and regulations adopted after the execution of the HGI by requiring the host government to indemnify the investors from and against the costs of complying with the new laws and regulations.

133. CAMERON, 2010, p. 4.

134. *Id.* at 7.

Depending on the negotiating strength of the investors and the host government's desire or need for the project and the investors' investment, these clauses may be full or limited.¹³⁵

Example: Where present or future laws or regulations of Turkmenistan or any requirements imposed on Contractor or its subcontractors by any Turkmen authorities contain any provisions not expressly provided for under this Agreement and the implementation of which adversely affects Contractor's net economic benefits hereunder, the Parties shall introduce the necessary amendments to this Agreement to ensure that Contractor obtains the economic results anticipated under the terms and conditions of this Agreement. – 1997 Model Production Sharing Agreement for Petroleum Exploration and Production in Turkmenistan

An intangibility clause provides that the HG cannot unilaterally modify or terminate the HGI. Instead of freezing the law, it simply says that the laws of the state that would effect the terms of the contract do not apply to that contract.

Example: The Government of Libya will take all steps necessary to ensure that the Company enjoys all the rights conferred by this Concession. The contractual rights expressly created by this concession shall not be altered except by mutual consent of the parties. [...]

This Concession shall throughout the period of its validity be construed in accordance with the Petroleum Law and the Regulations in force on the date of execution [...]. Any amendment to or repeal of such Regulations shall not affect the contractual rights of the Company without its consent. – From Concession agreements Texaco signed with Libya Between 1955 and 1966.

The 'Hybrid' clause includes both freezing clause and intangibility clause. Its aim is to protect parties against destabilization and unilateral

135. Economic Equilibrium Clause (*Thomson Reuters Practical Law TM*) <<https://is.gd/pH4mj4>> accessed 25 November 2019.

actions.¹³⁶ With these common forms and examples in mind we will dive into a deeper analysis of stability clause implementation.

5.1. The Usual Suspect – The Host Government

Generally, host States are presented and perceived as the main culprit¹³⁷ in the amendment of HGI motivated by their insatiable greed.¹³⁸ Peter Cameron states that the long-term stability of concessions is affected by two aspects. On the one hand, is an opportunistic behaviour of the state that will constantly attempt to reduce the value of the project.¹³⁹ On the other hand, are the HG's attempts to capitalize on gains determined by sudden shifts in market behaviour (e.g. a significant increase of prices, which lead to significant gains for the company, but not for the state).¹⁴⁰ Cameron argues such behaviour generates a lack of trust from the investors' side and creates periodic instability, which justifies the investors' pursuit of stability. As tools for changes caused by host States, Cameron refers to "a combination of regulatory and negotiation"¹⁴¹ and "nationalization."¹⁴²

However, the aforementioned might not be a holistic perception of this matter. Host States are also interested in stable long-term relationships just as much as investors and can suffer when investors engage in unsustainable maximization of profit, opportunistic behaviour,¹⁴³ or when economic

136. Mario Mansour & Dr Carole Nakhle. 'Fiscal Stabilization in Oil and Gas Contracts: Evidence and Implications' (2016) Oxford Institute for Energy Studies.

137. There are authors referring to default and certain expropriations as '*sovereign theft*', suggesting that states' behavior are even criminal in nature. Virginia Haufler, *The Natural Resources Trap: Private Investment without Public Commitment* – Edited by William Hogan and Federico Sturzenegger § 29 (Malden, USA, 2012), p. 69. However, expropriation itself could be performed in accordance with the relevant jurisdiction and international laws as well.

138. "The driver behind the increase in taxes is the perceived failure of the existing terms to generate a higher share of the additional revenue for the government." CAMERON, 2010, p. 10.

139. *Id.* at 5. Also: Haufler, 2012, p. 52.

140. On the likeliness of renegotiations regarding profitable wells - Haufler, 2012, p. 58.

141. CAMERON, 2010, pp. 8-10.

142. *Id.* at 10-13.

143. Both parties of an oil and gas concession stand to profit when a commercial discovery is exploited. However, many companies engage in exploration operations only to diversify their resource pool and are not interested in commercial exploitation right away. Market prices may also act as a deterrent to commercial exploitation. However, such business decisions affect the state revenues and expectation for return from the discovery made.

situations¹⁴⁴ disrupts the functioning of the petroleum agreement. The potential insolvency or economic hardship of the concessionaire/contractor may lead to suspension or cessation of operations and to possible retenders, which is detrimental to both states and their citizens. Renegotiations and requests for an increase of state support might happen whenever they are “deemed necessary” to maintain the viability of a project (at least from one party perspective), which indicates that flexibility is necessary for ensuring the proper functioning of a long-term agreement.¹⁴⁵

However, although co-interested in the stability of the agreement, States might enjoy less rights and possibilities to enforce it in certain instances (especially if the HG agrees to such conditions). The most blatant example is the fact that under the ECT, States cannot directly bring a claim against the investors for breach of the latter's obligations.¹⁴⁶ This right is reserved solely to investors.

At the same time, Cameron's point of view appears to be contradicted by the very data offered to support it. As Cameron puts it, “a higher state share of revenue [...] has *occasionally*, been agreed with investors, *in exchange for extensions* to existing contract periods. These negotiations can be instigated by either government or company”¹⁴⁷ (emphasis added). The wording is telling and nuances the overall image of the rapacious host state and so does empirical data. Host States face risks as well. During the financial crisis or during periods of massive drops in prices, investors faced default or even bankruptcy.¹⁴⁸ In many of these cases, it was the IOC that sought a new agreement with a State. History recorded instances when IOCs amended unilaterally their own rules, thus affecting the outcome of

144. Where concession holders fail to recoup investment or to make a profit on the investment due to market conditions, they usually push for changes in the concession's terms – modification of revenues, taxes, prices, etc, thus asking for state's support. The alternative is a disruption in provided services, which would require a retender and a replacement of concessionaire, which is not in the interest of the state or of the stakeholders. As such renegotiations are often a “necessary evil” in ensuring the continuation of the economic viability of a project. Nicholas Miranda, *Concession Agreements: From Private Contract to Public Policy*, 117 THE YALE LAW JOURNAL (2007), pp 525-526.

145. Haufler, 2012, p. 58.

146. Art 26 of the ECT, available online at <http://www.energycharter.org/fileadmin/DocumentsMedia/Legal/ECTC-en.pdf>, last visited 02.06.2017. Art 26 of ECT speaks only of the possibility of the Investor to submit a dispute for resolution, without allowing the Contracting Party to submit a dispute for resolution against the Investor.

147. CAMERON, 2010, p. 8.

148. *Id.* at 50.

the concession in what regards the rights of the host State.¹⁴⁹ Finally, the data points out that rarely have there been situations where the HG sought and obtained a modification of a HGI, without giving something in return.

Cameron compiles a table with countries that amended their fiscal terms during 2002-2008 containing *only* those whose changes were deemed detrimental to investor's economic interests. The table reveals that most developed and democratic countries resort to same tactics employed by developing, high risk ones. Hence, next to States such as Argentina, Kazakhstan, Nigeria, Russia, or Venezuela, one finds Canada (Alberta and Newfoundland), the US (Alaska), the UK, Italy and Australia.¹⁵⁰

Although he presents it as a significant risk, Cameron also nuances the practical effects of nationalization: "although much of the political rhetoric refers to nationalization, *the outcome is more of a result of new negotiations, with many investors remaining in the country.*"¹⁵¹ Our analysis reveals that Iran is the only country that unilaterally annulled a concession and immediately negotiated another (1933) and threatened nationalization (1951) in order to obtain more favourable terms. Otherwise, Middle Eastern countries resorted to concerted nationalizations only in 1970's, when the decision had more to do with the geopolitical climate, than with pure economic interests. Our data confirms that where HGs perceive that contractual benefits are satisfactory (economic balance), the relationship with the IOC is stable.

Otherwise, empirical evidence suggests that a high level of volatility is among the characteristics of HGI, notwithstanding the name of the HG. As time passes and governments' experience improves, peoples' expectations change, concession agreements change as well. The only thing that differs is the method. Hence, stability is in fact temporary, everywhere around the globe. As data suggests, in most of the developed countries, total stability in long term contracts is outright rejected (Norway, the UK, or the US). It plays more of a preventive or deterrent role than it is an achievement. Two questions arise. Is it possible to speak of stability in the context of HGIs? Should there even be stability in HGIs? If one considers the wording of bilateral investment treaties or of multilateral treaties such as the ECT, the

149. This is notable in historic concessions in the middle east where at the time of granting, the granting sovereign had little authority with less sophisticated laws and generally a lack of any laws addressing petroleum operations nor any government controls or capabilities. Smith, *From Concessions to Services Contracts*, 5 *Tulsa Law Review*, Vol. 27 [1991], Iss. 4, Art. 3.

150. *Id.* at 10-11.

151. *Id.* at 12.

answer appears to be affirmative. However, the practical reality presents itself to be different.

5.2. *Are Petroleum Agreements Stable?*

Given the lack of experience of certain government negotiators and the might of the companies seeking concession, the terms offered were grossly unfair at the beginning of the 20th century.¹⁵² As knowledge and bargaining power of HGs increased, the initial terms of the concessions have been subsequently amended on numerous occasions. In fact, history indicates that traditional concessions were a continuous renegotiation process, parties seeking either more equitable terms or to maintain their acquired rights. The history of petroleum agreements and regulation in developed countries does not seem to differ. Developed countries' governments' behaviour is similar to that of the Middle Eastern States that lacked both legislation and experience in dealing with oil and gas investors in the past.

There is a significant amount of literature about attempts to make long-term contracts in the oil and gas sector more stable. The reason the topic generates so much interest is that despite all efforts, HGIs cannot sit still. However, while everyone seems to notice the problem and propose solutions, very few focus on the inherent volatile nature of long-term agreements. At the same time, very little attention is given to the double standard applicable to different categories of States. For instance, following a classification of UNCTAD, Cameron distinguishes between transitional economies (CEE, Central Asia, and Balkan States) and developed countries (so called market states, such as Western Europe and the US), although, as it will be shown, empirical evidence seems to contradict the idea that HGIs are more stable in developed countries.

5.2.2. *A Double Standard?*

While there might be systemic differences between them, one cannot overlook the fact that "a significant number of HGs around the world do not offer a specific stabilization clause or any contract-based equivalent"¹⁵³ or, the more striking observation, that "this is the default situation among market states."¹⁵⁴ In other words, the same developed States making an

153. CAMERON, 2010, p 15.

154. *Id.* at 15-16. "Governments in the market states reject pleas for fiscal stability on the grounds that they cannot bind a future government to policies of the current administration since this would infringe sovereign rights and is almost certainly impossible in the context of their domestic legal traditions." (p. 16). See also footnote 18 where it is mentioned that "to

issue of stability in transitional countries do not see any problem with the lack of stability within their own borders.¹⁵⁵

One explanation for the obvious double standard lies in the "historical and cultural context", meaning that "in a number of developing or transitional states, the Rule of Law is either not firmly entrenched or does not operate in the way an investor from a market state would expect."¹⁵⁶ As much as one would like to indulge this possible Western superiority complex, it makes no difference, for the loss caused by unilateral change is pecuniary, notwithstanding location. Developed States are simply more able to impose their will than developing ones. The best evidence is that despite high political risk, and the numerous changes or amendments in the Middle East concessions, foreign investors remained in the area simply because there was (still) a lot of profit to make.

Two other, rather unconvincing, explanations concern: 1) the developing countries' dependency on the revenues generated by their oil and gas reserves and 2) the developed States' dependency on oil and gas imports. The former allegedly makes them more prone to change and opportunistic behaviour, but does not explain why the developed States, with diverse sources of revenue, behave in the same way. The latter makes stability a top priority for developed countries, however, does not explain why these States' governments do not offer stable long-term deals to investors within their own borders. At the same time, it fails to consider the disruptions in service provision or revenue collection, like those cause by the Iranian nationalization of 1951.

5.3. *Topical Analysis*

In this section we use a matrix of analysis in order to support with empirical evidence the fact that although an important aspect in negotiations and discourse regarding petroleum agreements, stabilization remains more of a myth, notwithstanding the type of HGI in place. In this regard we use both historical concessions in the Middle East – representing developing States – and the modern type of concession (license regimes) – representing developed Western countries.

encourage compliance with its policies, the market state is able to use its discretionary powers over license allocation."

155. On the myth of stability in the US see: Lise Johnson & Oleksandr Volkov, *Investor-state contracts, host-state, commitments, and the myth of stability in international law*, 24 AMERICAN REVIEW OF INTERNATIONAL ARBITRATION (2013)

156. CAMERON, 2010, p. 17.

A matrix of analysis regarding concession agreements is a challenging task, for several reasons. Primarily, there is no tested matrix yet. Secondly, there are significant idiosyncratic differences between the chosen groups of countries. When historical concessions were introduced in the Middle East, there was neither petroleum, nor tax legislation in place. The legal framework governing operations was limited to the concession agreement itself. These agreements were of obviously contractual nature, which might explain the constant process of renegotiation employed to redefine the relationship. Absent or underdeveloped regulation in the host countries together with the lack of balance between the benefits obtained by the parties involved may have been the causes for the lack of stability. As Middle Eastern governments learned the rules of the game and started developing a legal framework, the changes were bound to affect the existing concessions, with unforeseen results. Western jurisdictions appear to have taken the opposite route, by designing a legal framework and only afterwards entering concession agreements or granting licenses for operations. This might explain the apparent stability of the regime and of the concessions in place. However, evidence suggests that regulatory changes affected existing (granted) concessions (licenses), which means that both groups share comparable similarities. Therefore, the proposed matrix goes beyond systemic differences. Thirdly, mechanical descriptions of either agreements or legislations in place would not offer viable answers, and focus must be maintained on policy considerations and aims.

We identified six topics for the analysis of HGI from the perspective of stabilization. These topics are: (1) amendments of the governing legal framework (by renegotiation or legislator intervention); (2) amendments of the tax or fiscal regime; (3) unilateral changes or termination; (4) nationalization; (5) State participation; and (6) reduction of concession's area.

It must be stated here that the article is not of the opinion that an analysis based on these common elements will automatically answer or solve all dilemmas regarding the issue of stabilization. Other circumstances still need to be considered, such as: a) the actual wording of contracts or licenses, b) the existence of regulatory bodies and the powers granted to them, c) constitutional considerations, treaties entered and ratified, memberships in international organizations, d) regulatory capture, and e) the incidence of corruption. However, they do offer answers with respect to fundamental concerns of parties involved in HGI and reveal that, despite systemic differences, their aims are fundamentally the same and addressed in similar

manners. As such, the analysis shows that the issue of stabilization transcends legal systems and remains largely unattainable.

Country	Iran	Iraq	Kuwait	Saudi Arabia	Denmark	Norway	The UK
Type of HGI	Concession	Concession	Concession	Concession	Concession (License)	License	License
State Participation	No ¹⁵⁷	No ¹⁵⁸	No	No	Yes	Yes ¹⁵⁹	Yes*
Renegotiation	Yes	Yes	Yes	Yes	Yes	Yes	Yes

157. The Persian Government was denied participation in the D'Arcy Concession both in management and in equity. MIKDASHI, 196634

158. The Iraqi Government requested native participation from the first concession granted in 1925. However, the foreign companies opposed it and Iraq held no equity until the 1970s nationalizations

159. Petroleum operations were only possible based on a concession issued by the state, with the state company (Statoil) getting a share in each of them. HUNTER, 2015, pp. 144-145

Unilateral amendments/ Termination	Yes ¹⁶⁰	Yes ¹⁶¹	No	No ¹⁶²	Yes ¹⁶³	Yes	Yes ¹⁶⁴
Fiscal/Tax Amendment	Yes ¹⁶⁵	Yes ¹⁶⁶	Yes ¹⁶⁷	Yes ¹⁶⁸	Yes	Yes	Yes ¹⁶⁹

160. The D'Arcy Concession was unilaterally canceled in 1932 and replaced by a new concession agreement in 1933. However, both parties appear to have wanted a new agreement and there was no punitive action. The sole truly unilateral move made by the Iranians, was the nationalization of 1951, which is addressed separately.

161. Following failed negotiations regarding the relinquishment of concession areas, in 1961 the Iraqi government passed a law by which it reduced the concessionaire's acreage to the fields operated at that moment. Hence, via law, the government unilaterally modified the terms of the concession agreement, reducing the concession area from 16,000 square miles to 740 square miles only (a reduction of 99.5%). MIKDASHI, 1966, p. 208.

162. The decision of the Saudi government to enter into an agreement with Onassis to create a national tanker company, in order to increase its revenues from oil exports, may be considered an attempt to unilaterally amend the terms of the 1933 concession agreement. The deal, concluded in 1954, was disputed by the company, which alleged a breach of the 1933 concession that gave them the right to use their own transport, thus severely cutting the possibility of Saudi oil exports. The dispute was referred to arbitration and, in 1963, the tribunal held that the Onassis deal violated the concession agreement and emphasized that the 'stabilization clause' was binding on the host state https://www.trans-lex.org/260800/_aramco-award-ilr-1963-at-117-et-seq/, page 197, last visited on 23.05.2017.). Saudi's compliance with the arbitral award meant that the attempt to unilaterally amend the concession agreement's terms and regain their legislative sovereignty had suffered a bitter defeat, despite an obvious national interest thereof.

163. In 1980 Denmark invited concessionaires to negotiations, based on the aggravated energy situation, requiring among others an increase in exploration operations, a relinquishment of 50% of all areas by 1982 and relinquishment of all non-producing areas by 1985 as well as the right to purchase 50% of the produced oil at preferential discounted prices. Since no agreement could be reached, the government's proposal was submitted to the Parliament to be turned into law, which basically resulted in expropriation. T. DAINITH, *THE LEGAL CHARACTER OF PETROLEUM LICENCES: A COMPARATIVE STUDY* (University of Dundee, Centre for Petroleum and Mineral Law Studies, 1981), ADDENDUM (following p. 175).

164. In 1975, the legislative decided to amend all licenses' terms by new legislation.

165. As history has it, D'Arcy would have wanted to pay revenues of only 10% but in the end 16% was accepted as a "quid pro quo for complete fiscal exemption" (MIKDASHI, 1966, pp. 12-14). The Persian government became unsatisfied with the unclear and arbitrary amounts it received as a result of the concession (there is evidence of significant deliberate royalty evasion and lack of transparency and unfair practices in accounting), which led to a

renegotiation and the adoption of an "interpretative agreement" in 1920, establishing a new method of computing the government's revenues that further depleted the government's earnings (*id.* at 35-39). Merely a decade later, in an attempt to raise its receipts from the exploitation of its natural resources, Persia enacted an income tax law to which the concessionaire refused to submit (*id.* at 40). In 1933, a new concession agreement was signed with APOC which linked royalties to tonnage giving also the Persian government a share in the company's dividends. Additional financial terms ensured a minimum annual payment of 750,000 GBP (*id.* at 77). After the short-lived nationalization of 1951, Iran entered into a new concession agreement with a Consortium of companies in 1954. The new concession provided the Iranian government with a bigger share of the profits – 60% instead of 50%, stemming from the fact that large portions of the exported oil went to non-affiliates, at significant discounts, which were not eligible for tax deductions. However, although the Consortium endeavored to observe the agreement, the government and the national oil company still had their grievances, regarding an increase in volume of production, profit margins of refineries or the unilateral modification of the posted price by the Consortium, having adverse effects on their income. *Id.* at 223-224.

166. The 1925 concession agreement contained a complete fiscal exemption (*id.* at 67). However, the Iraqi government seemed to have been more aware than their Persian counterparts in 1901, for they wanted royalties to be based on a sliding scale, varying directly with the company's profits and included from the outset a provision stating that changes in royalty rates were to be made once every ten years (*id.* at 68). In 1931 there were already disputes regarding the payment of royalties, due to British renunciation of the gold standard and depreciation of the GBP. Negotiations were resumed in 1949 due to the devaluation of the GBP which led to another amendment of the agreement in 1950. Only four months later, the 50-50 method of payment was introduced in Saudi Arabia, which immediately determined the Iraqi government to solicit and obtain a similar treatment in 1952 (*id.* at 152). In 1957 Iraq started disputing the amortization costs and deductible expenses of the company, which diminished the profits and the government's share. An agreement thereof was reached in 1961 (*id.* at 199). At the same time the government tried to renegotiate the overall financial terms based on a provision of the 1952 agreement, however, in 1962 the company refused to amend them stating that the circumstances mentioned in the agreement were not met. *Id.* at 205.

167. The concession's financial terms were amended in 1951, after several years of negotiations. Additional payments were introduced in the same year as a result of the Kuwait Income Tax Regulations (*id.* at , p. 153). A subsequent amendment occurred in 1955, given that both US and British tax departments disputed the income tax imposed by the Kuwait government. As a result, a gradual income tax was introduced and applied on all companies making business in Kuwait (*id.* at 216). Nonetheless, Kuwait received also a 25 million GBP as a price for the amendment. 1955 was also the year when the discounts on posted prices started being reduced, with two follow ups in 1961 and 1964. *Id.* at 216.

168. Disputes concerning method of payment occurred in Saudi Arabia in 1948, when an agreement was entered settling at the dollar price of a gold sovereign for situations where the US and Saudi prices were divergent *id.* at 121). Delays caused by the war led to an extension of 6 year of the initial term, while the company also obtained a 2 year 10% discount on payments made in dollars (*id.* at 121). Financial negotiations were resumed in late 1940s as Saudi Arabia challenged the right of the US government to tax profits arising from the

Nationalization	Yes ¹⁷⁰	Yes	Yes	Yes	No	No	Yes
Relinquishment	Yes ¹⁷¹	Yes ¹⁷²	No	Yes ¹⁷³	Yes ¹⁷⁴	Yes	Yes

exploitation of Saudi natural resources and attempted to amend the financial terms of the 1933 concession. In 1950, a retroactive agreement was reached. Moreover, the Saudis introduced an income tax law and managed to impose a "supplementary tax" ensuring that payments to the government reached 50% of the net operating revenue of the company (id. at 148-149. Also: BERNARD TAVERNE, AN INTRODUCTION TO THE REGULATION OF THE PETROLEUM INDUSTRY: LAWS, CONTRACTS, AND CONVENTIONS (Graham & Trotman, 1994), p. 42). In return, the company gained several monetary advantages (MIKDASHI, 1966, p. 150). Just one year later, the Saudi government raised the question of applicability of foreign tax to its share of the profits. As a result, in 1952 the 1950 agreement was revised to provide for a split of profits before payment of US taxes (id. at 150). Soon after, disputes regarding discounts in price offered to company affiliates, resulted in a settlement of 70 million USD (id. at 186). Since the government still felt it does not have a say in determining deductible expenses for income tax calculations, a new agreement was signed in 1963, giving the right to the government to refuse deductions. Id. at 185.

169. The UK's take on petroleum operations is a combination of licensing fees, area rental fees and various taxes, including corporation tax, supplementary charge to corporation tax and, for fields developed before 1993 a petroleum revenue tax. The alleged purpose is maximizing the state's income without affecting ongoing investments in mature areas or frontier areas. The corporation tax is currently at 30%, while the supplementary charge that tried to capture excess profit during a period of high prices was initially set at 10% but reached 32% in 2011. Another review of oil and gas fiscal terms was scheduled for 2015. The often increases were perceived as nothing more than blatant "cash grabs" by a government struggling with the effects of the financial crisis. HUNTER, 2015, p. 117. Yet, there is no evidence of legal challenge or lack of compliance with the state's opportunistic behavior.

170. In 1948, Iran renegotiated the 1933 concession financial terms, which resulted in the 1950 "supplemental agreement" that preserved the basic method of calculation, but raised the rates. However, the Parliament refused to ratify the agreement. As news of better terms offered to neighboring countries emerged, Iran started discussing the potential nationalization of the oil industry. In reply, the concession holder offered to negotiate a new agreement regarding the equal division of production profits. It was too late. In 1951, the Parliament voted for nationalization. MIKDASHI, 1966, pp.154-155.

171. The initial concession covered an area of 500,000 square miles (almost 4/5 of Persia's territory). In 1933, upon signing of the new concession, Iran sought and obtained a reduction of the concession area to 100,000 square miles, at the company's choice.

Stabilization Clauses	No	No	No	Yes	No**	No	No
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* UK state participation decreased in the recent years and the state does not partake anymore in HGI.

** A stabilization clause was negotiated and inserted in the extension of the concession granted to Moller, however this did not preclude the Danish state from amending its tax system.

172. The initial surface was of 196 square miles, but a first renegotiation in 1929 extended it to an exclusive area of 35,125 square miles (MIKDASHI, 1966, p. 71.). Another 75 years concession was granted to an independent oil group in 1932 over an area of 41,302 square miles on far more favorable terms to the Iraqi government. Notwithstanding the governmental attempt to encourage competition, Iraq Petroleum Company managed to secure control over the new concession in 1937 and in 1938, via another associate, gained an additional 75 years concession over another 87,236 square miles, thus covering the entirety of the country (id. at 73. Also: TAVERNE, 1994, p. 34.). Subsequent negotiations ensued in 1961 regarding the relinquishment of vast concession areas. The company offered to relinquish 75% of the area at one and a further 15% over the next 7 years, an offer that was rejected by the Iraqis and led to a suspension of both negotiations and drilling operations. As a result, the Iraqi government then passed a law restricting the concession area of IPC to the fields operated at that moment.

173. In the 1948 agreement it was stated that by 1960 Aramco will relinquish 140,413 square miles in the exclusive area and 135,200 square miles in the preferential area (. In 1950, the company agreed to a complete relinquishment of its preferential area and a gradual relinquishment of its exclusive area that was reduced to 105,000 square miles. MIKDASHI, 1966, p. 193.

174. In 1976, the parties of the Danish sole concession reached an agreement by which, among others, a schedule for gradual relinquishment of areas was established and state interests in building a pipeline was acknowledged. Only 3 years later, the Danish government was asking the concessionaires to agree on a much faster program of relinquishment. In 1980, it invited the concessionaires to new (and specific) negotiations, based on the aggravated energy situation, requiring among others an increase in exploration operations, a relinquishment of 50% of all areas by 1982 and relinquishment of all non-producing areas by 1985 as well as the right to purchase 50% of the produced oil at preferential discounted prices. Since no agreement could be reached, the government's proposal was submitted to the Parliament to be turned into law, which would have resulted in expropriation. Because of governmental pressures the agreement was modified in 1981 in a radical manner so that by 1986 the concessionaires relinquished all their Danish territories and retained only their North Sea producing fields. Out of these, 25% were relinquished in 2000 and 25% were relinquished in 2005. DAINTITH, 1981, p. 173 and the following.

The topical analysis proves that despite systemic differences, aims and policies of host States do not differ. Legal and contractual principles do not stand in the way of parties seeking out better terms on their agreement. Despite their terms and governing principles, HGIs appear to be more volatile than stable.

Historical concession agreements concluded in the Middle East were characterized by (very) long-term duration and high level of volatility. The contracting relationship has been a continuous renegotiation during which the conflicting interests of the parties involved sought a better balance and a (more) equitable distribution of wealth generated by the exploitation of the host state's natural resources. The political risk was deemed high, however, so were the returns of the oil and gas industry active in the area. HGs also benefitted. As time went by, it was also observed a development in the attitude of the government, seeking less income in a short period of time and trying to answer more the aspiration of the population as major stakeholders.¹⁷⁵

It should not be inferred from the aforementioned examples that the constant negotiation and amendment of terms is only provoked by the HG who are not interested in stable business relationships. Evidence shows that in many occasions the companies themselves asked for changes in terms. At the same time, governments do not usually gain from volatility, for their main objective remains to insure a stable revenue source to their budgets.¹⁷⁶ Iran's loss of revenues due to the unilateral cancellation of the concession makes a perfect example.

The volatility of the concession agreements is linked with the ever-changing circumstances of the global oil market, the volatility of the price, changes in companies' business policies or practices, importing states' laws, competition with other host countries, desire to gain control over a 'public service' or 'national security' aspects, wide spread of information and standardization of terms, and experience in negotiation. The wide number of factors influencing the existing agreements, combined with their long-term duration simply does not add up to stability. The answer to the question whether concession agreements should be stable at all is addressed in the conclusion.

175. MIKDASHI, 1966, p. 237.

176. *Id.* at 239. Data indicates that as long as the oil prices remained at a convenient level or increased, states were satisfied with their revenues and the computing methods used to calculate their share. The reverse caused an opposite reaction and led to new negotiations.

6. Discussion

HGIs contain different levels of control and rights in the Upstream sector. Due to recent developments in the sector, certain hybrids and crossbreeds have been created where a mixture of a concession/license is present in a PSC or vice-versa or in an RSC.¹⁷⁷ There is much proof of this in the model contracts developed by both international organisations and various national governments.¹⁷⁸

Table 1: Comparison of Concession, PSC and Service Contract Terms

Elements	Concession	Production Sharing Contracts (PSC)	Services Contracts	
			Pure Service	Risk Service
Risk	The investor takes all financial and technical risks.	All financial and technical risks are taken by the investor. Usually applied in high-risk areas with limited hydrocarbon developments.	All financial and technical risks are taken by HG. It is usually granted in a low-risk area with the high potential of hydrocarbon resources.	The investor takes all financial and technical risks. Usually applied in high-risk areas with limited hydrocarbon developments.
Control	The HG tends to have limited control in the management over petroleum operations.	The HG tends to have higher control in the management over petroleum operations.	The HG tends to have total control in the management over petroleum operations.	The HG tends to have total control in the management over petroleum operations.
Ownership	The HG tend to own all the reserves in the country.	The HG owns all the reserves in the country.	The HG owns all the reserves and production in the country.	The HG owns all the reserves and production in the country.

177. Tade Oyewunmi, 'Natural Gas Exploration and Production in Nigeria and Mozambique: Legal and Contractual Issues' [2015] OGEL 1 (2015).

178. Oyewunmi (n 177).

Production Split	Contractor tends to own all production.	The contractor usually receives its share from the production.	The contractor has no rights over the discovered and produced oil and/or gas resources.	The contractor has no right over the discovered and produced oil and gas resources.
Marketing	Each party is free to do their marketing of the oil/gas produced. However, in some jurisdictions, royalties can be paid in kind and/or domestic market obligations can be secured at an agreed price.	Each party is free to do their marketing of the oil/gas produced. However, in some jurisdictions, domestic market obligations can be secured at the agreed price.	Marketing of the oil/gas produced under the control of HG.	Marketing of the oil/gas produced under the control of HG.
Fiscal System	HG collected rents, royalty and /or taxes. HG usually does not participate or support in any cost recovery system even though some countries could provide tax exemptions and depreciation procedures similar to the cost recovery system.	The contractor receives agreed percentage of the production to cover its costs and the remaining of the production distributed between the HG and the contractor. Tax may be settled by NOC on behalf of the contractor or should be paid separately to the HG.	HG pays the contractor agreed amount for the work. Tax may be settled by NOC on behalf of the contractor or should be paid separately to the HG.	The contractor receives the agreed fees and costs of the production. The remaining of the production goes to the HG. Tax may be settled by NOC on behalf of the contractor or should be paid separately to the HG.

6.1. Does it matter what type of HGI the HG offer? Why and for whom?

It is not straightforward to determine which HGI is the most beneficial. In reality, it is not possible to say that one HGI is better than another, but it may be possible to find the most suitable HGI to suit the expectations of the particular country in which the exploration and production is to take place.¹⁷⁹ The political situation of each country will undoubtedly influence the type of HGI chosen, both to provide the best protection for the national interest, and attract investors as a result of past experiences or the history of upstream sector in that particular country.¹⁸⁰

In this sense, it is possible to suggest that perception and reputation are relevant for any upstream investment as well as for any HG consideration before creating or modifying its legal system. For example, concessions do not possess a “positive” connotation in developing countries due to past connections with the colonial period and highly unfavourable terms towards the HG. More recently, Mexico changed its constitution (after a long period of State monopoly and restrictions against sharing oil and gas resources) and allowed other HGIs to be awarded apart from the service contract (including licenses and PSCs), but still does not allow a concession agreement as a clear sign against the term “concession”. A contract-based system is also more likely to be used in a jurisdiction without a highly developed legal system where there might be a perceived necessity to provide further details in a contract.

It is possible to suggest that PSCs are more common in countries where the industry has been profoundly affected by the political situation and higher geological and financial risks (i.e. Africa and Asia).¹⁸¹ In these cases, PSCs ensure that the HGs maintain closer control of its resources and participates entirely or at least significantly in the oil and gas industry. HG in developed economies are not heavily dependent on oil and gas activities, and the private sector tends to determine most of these activities, based on the following of specific rules (minimum work program, HSE, etc.) with some exceptions in the European Nordic region with higher and direct governmental intervention in the upstream sector.¹⁸² This soft governmental approach is favoured by the concession or license regime while Service

179. Smith and others (n 1).

180. Toyin Falola and Ann Genova, *The Politics of the Global Oil Industry: An Introduction* (Greenwood Publishing Group 2005) 18.

181. Raymond F Mikesell, *Petroleum Company Operations and Agreements in the Developing Countries*. (Routledge, London 1984).

182. Terence Daintith, ‘Discretion in the Administration of Offshore Oil and Gas -A Comparative Study’ [2006] OGEL.

Contracts take a more conservative approach as the HG takes complete control of upstream activities and permits the private sector minor participation (e.g. the Middle East).¹⁸³

The most critical element of these HGIs is that the parties involved receive precisely what is intended from the agreement and that all terms and conditions are met.¹⁸⁴ This is crucial because the nature of conflicting interests and objectives of major parties in the HGIs means that it is necessary to create a perfect balance between such discrepancies in order to achieve a successful agreement for upstream activities.

6.2. Flexibility

A far better deal can be drawn up based on the understanding of either party's wants or needs. The already cyclical nature of the oil and gas industry will continue to be affected by privatisation and nationalisation of resources, market liberalisation and global and regional geopolitics.¹⁸⁵ Creating a balance between risk and reward will be an essential element in successful business ventures in the future, and an understanding of the ever-changing nature of this industry will go a long way to helping establish this balance.¹⁸⁶

Despite the difference between the details included in the contracts it is important to establish two key issues: 1) the division of profit between the government and IOCs, and 2) how resources are to be controlled. In certain circumstances, negotiations become incredibly complicated when there are high levels of uncertainty arising from the high-risk nature of the business as well as a lack of information.¹⁸⁷ Typically, neither party in the agreement can predict, when signing the contract, the exact costs involved in the total exploration of a contract and the development of a field; how much oil or gas exists in the field; or whether future oil or gas prices will justify the expenditure.¹⁸⁸ The average rate of success is not high. Exploration efforts on nine out of ten concessions result in a loss.

183. Smith and others (n 1).

184. Daintith (n 182).

185. Roberto Chang, Constantino Hevia and Norman Loayza, *Privatization and Nationalization Cycles* (The World Bank 2009).

186. Chang, Hevia and Loayza (n 180).

187. Gamal Abou-elkhair, 'Oil & Gas Contracts ' Risks Negotiation in the Climate of Economic Recession', *Society of Petroleum Engineer* (2015).

188. Abou-elkhair (n 182).

There is significant pressure on the HG to negotiate and manage agreements in order to produce the “best” possible contract.¹⁸⁹ There is also pressure upon society as a whole, parliamentarians and the media to hold accountable both governments and investors. The complex nature of contracts drawn up for large natural resource investments raises challenges for those negotiating, implementing and reviewing contracts.¹⁹⁰ There is increasing importance given to issues revolving around Corporate Social Responsibility (CSR), sustainability and environmental protection.¹⁹¹

This is why HGI should be designed in a way that provides flexibility in order to absorb these challenging circumstances, higher expectations from a variety of different stakeholders and uncertainties involving the upstream sector. As shown in Section 5, empirical evidence clearly suggests that flexibility, rather than stability, is one of the common denominators of all HGIs throughout history.

6.3. *Will there be a carried interest?*

Carried Interest is a sole risk scenario where the party or parties with working interest agree to bear the costs of another working interest. The carried party will have to pay those costs and generally will have to pay some risk premium to the carrying party if production comes out of that carrying event. This is commonly seen in Joint operating agreements in nonconsent operations.

In the HGI context carried interest depends on the regime set up by the HG and its goals. It is quite common to see the NOC be carried by the IOC when NOC participation is necessary.¹⁹² For example, regardless of the HGI type, the HG law may require that the IOC pay all of the exploration and development costs of the granted area. In return the IOC will be able to deduct those costs from the production or revenue earned once commercial production begins. Depending on commercial factors, this may be a risk that the IOC is willing to take.¹⁹³

Generally speaking, a historical **concession agreement** (i.e one that does not involve an NOC) does not bring up carried interest issues with regards

189. Talus, Looper and Otilar (n 2).

190. Ingilab Ahmadov and others, ‘How to Scrutinize a Production Sharing Agreement’ [2012] London: IIED.

191. Peter Roberts, *Joint Operating Agreements: A Practical Guide* (Globe Law and Business, London 2010) 226.

192. Charlotte J. Wright, Rebecca A. Gallun, 142 *International Petroleum Accounting*, (PennWell Books, 2005).

193. *Id.*

to the overarching HGI since the government is not working the field or pay for its share when it does (i.e. Norway and Brazil). However, there are HGIs that bear the name concession that one should be mindful of carrying interest (i.e. Morocco). **Production Sharing Agreements (PSA)** will quite often contain a carrying provision since governments generally require that the NOC be involved in this type of development scheme and less “mature” NOCs might not be able to pay for its bills (e.g. Kenya and Mozambique). Lastly, what about carried interests in **service contracts**? In the standard service contract, there is not a carried interest issue. The IOC does the work and is paid with oil or currency for performing its contractual duties. However, in a risk service contract, the IOC agrees to take carry the costs and later recover those costs in oil or currency depending on the agreement struck.¹⁹⁴

6.4. Confidentiality and Transparency

From the above it follows that when deciding which HGI to select it is important to have an awareness of the significant need for confidentiality involved in awarding such contracts, as well as an excellent working knowledge of the terms included in the contract, with particular attention paid to the fiscal element.¹⁹⁵ The high level of confidentiality and, therefore, the apparent lack of transparency surrounding these contracts has become the center of some heated political debates, which include politicians, and members of society.¹⁹⁶ The lack of transparency could potentially act as a cover-up for corruption, which may exist under such levels of confidentiality or secrecy.¹⁹⁷

It is necessary for oil and gas contracts, subcontracts and regulations to become completely transparent and made public if claims of corruption and foul play are to be disproved.¹⁹⁸ This is a difficult task for these contracts are traditionally extremely complex and parties are reluctant to disclose their terms, which could leave them open to corruption.¹⁹⁹ In Norway, for example, the awarding of each license and the criteria used to establish the

194. Daniel Johnston, *International Exploration Economics, Risk, and Contract Analysis*, 41-42 (PennWell Books, 2003),

195. Iledare (n 4).

196. Farouk Al-Kasim, Tina Søreide and Aled Williams, ‘Grand Corruption in the Regulation of Oil’ [2008] U4 Issue 7.

197. Nicholas Shaxson, ‘Oil, Corruption and the Resource Curse’ (2007) 83 *International Affairs* 1123.

198. Al-Kasim, Søreide and Williams (n 188).

199. Smith and others (n 1).

award is recorded in the public domain.²⁰⁰ It is only in these instances that the public can adequately judge the effectiveness and stability of the agreements as well as the decision-making of public servants and government officials who were involved in the creation of the contracts.²⁰¹

7. Conclusion

Based on the previous sections, several concluding points can be made. The **first** point is that the best HGI will depend on the terms and conditions agreed upon by the parties. In other words, it is not a matter of which type, but one of negotiation. Different HGIs could offer advantages and benefits, but any HGI can be adjusted to fit most interests. The **second** point is that the political, cultural and legal backgrounds of each country are equally relevant for they might prevent certain HGI from being negotiated. The clearest example is that of historical concessions in the Middle East. The **third** point is that the expectations of the relevant stakeholders might vary from country to country (e.g. export or import based, robust economic development or not) and investor to investor (e.g. small, large, major oil and gas companies). This is why in principle any HGI could work in any given country. The **fourth** point is that it is difficult to implement a stable HGI in a long-term project. This is why some countries simply do not offer stability (i.e. most Western countries) or end up re-negotiating at some point. Flexibility remains the key to a successful long-term cooperation of parties in HGI.

200. 'Norway: The Petroleum Act and the Licensing System' <<http://www.norskpetroleum.no/en/framework/the-petroleum-act-and-the-licensing-system/>> accessed on March 2018.

201. Ibid pg. 80

*Appendix - Summaries and Examples of Host Government Instruments**8. Summaries and Examples Host Government Instruments Mentioned*

As mentioned previously, the contractual types of HGIs are grouped into three main categories; (1) Concession Agreements (2) PSCs and (3) Service Contracts. It is possible that a fourth option could exist in the form of joint venture agreement and a fifth option in the form of hybrid contract, in which some countries might create an HGI that combines features of different regimes.²⁰² A sixth category would be a preliminary contract without exclusive rights, such as a reconnaissance contract or study agreement, which could lead to one of the three main aforementioned contracts.

The key summary behind each of these three main types of HGIs along with relevant practical examples will be described below.

8.1. Concession Agreement

The petroleum concession²⁰³ is an agreement that grants title of the oil and gas resources (which may include reserves) to the International Oil Company (IOC) that is developing these resources. Historically, the agreement conferred exclusive rights within large areas for long periods against a mere obligation to pay some smaller bonuses, annual sums, and/or royalties.²⁰⁴ Otherwise, the concession holders were exempted from any taxes or duties, including income/profit tax.²⁰⁵ One famous example is the

202. For example, this might be a PSC with a royalty system or a Service Contract with a buy-back option as we will analyze later in this paper. In addition, the host government could offer more than one HGI in different areas of the country or at different bidding rounds. However, for the purposes of this paper we will focus on these 3 conventional types of HGI.

203. This subsection draws upon Section I.A. *Petroleum Concessions*, from Catalin Gabriel Stanescu, Eduardo G Pereira & Aaron Koenck – *Petroleum Concessions, Licenses and Leases: “Same-Same but Different”?*, *LSU Journal of Energy Law and Resources*, Vol VIII, 2019, forthcoming, p. 6-9.

204. RAYMOND F. MIKESSELL, *PETROLEUM COMPANY OPERATIONS AND AGREEMENTS IN THE DEVELOPING COUNTRIES* (Taylor and Francis, London, 2016), p. 21 and fn 3.

205. TAVERNE, *supra* note 1, at 33. For instance, the D’Arcy concession established revenues of 16% as a “quid pro quo for complete fiscal exemption.” See ZUHAYR MIKDASHI, *A FINANCIAL ANALYSIS OF MIDDLE EASTERN OIL CONCESSIONS, 1901-65*, 12–14 (F. A. Praeger 1966). The 1925 Iraqi concession agreement also contained a complete fiscal exemption. See *ibid* 67. The worst situation appears to have been in Kuwait, where the royalty payments were lower than in all neighboring countries, doubled by a complete lack of guarantees. See *id.* at 82-83; see also TAVERNE, *supra* note 1, at 41.

D'Arcy Concession (Persia, 1901) that granted its holder an exclusive right over almost the entire country for a term of 60 years and did not impose any tax liability towards the state.²⁰⁶ Similar terms existed in concessions granted by Iraq,²⁰⁷ Saudi Arabia,²⁰⁸ or Kuwait.²⁰⁹

The contextual background which “allowed” the original petroleum concessions to be awarded no longer exist.²¹⁰ It is unthinkable that another D'Arcy²¹¹ or S. Pearson & Son²¹² concession will ever be implemented again. Traditional type of concessions have been removed and replaced with agreements more favorable to the host nation. Many social, environmental, economic, and political pressures have forced new versions of concessions, along with new types of granting instruments that better serve the purposes of individuals and governments alike.²¹³ In fact, the abandonment of the old concession system is a product of many developing nation-states asserting their sovereignty and increasing sophisticated political systems.²¹⁴

A concession agreement is drawn up for the HG to grant exclusive rights to a concessionaire to explore and produce hydrocarbon resources in a given area over a certain period. The agreement will set out the terms and conditions that cover the payment, assessed on production, of taxation by the concessionaire. On signing the agreement, the concessionaire has the right to: conduct exploration and if successful to develop any discovery resulting from that exploration; to take ownership of the oil and gas produced; and to dispose of such production without restriction. While some HGs issue a license that covers both E&P, others only issue a license for the initial exploration, which may lead the host government to issue a production concession if any commercial discovery is made. HGIs need to ensure that, if the initial exploration was successful, the concessionaire does

206. TAVERNE, *supra* note 1, at 34. *See also* CAMERON PETER, PROPERTY RIGHTS AND SOVEREIGN RIGHTS: THE CASE OF NORTH SEA OIL 11–12 (New York, Academic Press Inc. 1983).

207. MIKDASHI, A FINANCIAL ANALYSIS OF MIDDLE EASTERN OIL CONCESSIONS, 1901-65, 105 (F. A. Praeger 1966)

208. *Id.* at 80.

209. TAVERNE, *supra* note 1 at 36.

210. Ernest E. Smith, *From Concessions to Service Contracts*, 27 *Tulsa L. J.* 493 (2013), p. 3

211. Granted 500,000 Squares miles in 1901. *Id.* at 3

212. Mexican government granted a concession to almost all of the Federally owned lands along the Gulf of Mexico. *Id.* at 4.

213. *Id.* at 42–48.

214. *Id.* at 34–35. Also: MIKESSELL, 2016, p. 23-25.

not encounter any unreasonable obstacles in obtaining a production concession.

It is important to mention the classification of concession agreements. The literature identifies two theories concerned with determining the legal nature of concession agreements. On one hand, they are perceived as *contracts*, which confers upon them a binding character (historical Middle East concessions),²¹⁵ meaning that unilateral change or termination entitles the aggrieved party to obtain compensation.²¹⁶ On the other hand, the concessions are perceived as *hybrid forms* – such as administrative contracts, governed by a special set of rules, addressing and imposing limits to the pressing issue of unilateral change, without banning it altogether (France, Germany, Brazil, the Danish Sole Concession and to a certain extent, Romania).²¹⁷

A creation of French law, the administrative contract is subject to the regulatory power of the state and therefore allows for modification of the contract pursuant to the state's regulatory powers that would not be allowed between purely private parties.²¹⁸ A further interaction between the public and private nature of concessions occurs in certain legal systems, which either require parliamentary approval of the concession, by a specific law or are considering such requirements for their legal system (e.g. Ghana, Tunisia, Iran, and Azerbaijan).²¹⁹

215. TERENCE DAINITH, *THE LEGAL CHARACTER OF PETROLEUM LICENCES: A COMPARATIVE STUDY* 223 (University of Dundee, Centre for Petroleum and Mineral Law Studies 1981).

216. When historical concessions were entered in the Middle East, there were neither petroleum, nor tax legislations in place. The legal framework governing operations was limited to the concession agreement itself. These agreements were of obvious contractual nature. This interpretation can be seen in *Saudi Arabia v. Arabian American Oil (Aramco)* (1963) 27 ILR 117 and *Texaco Overseas Petroleum Co. v. Libya* (1977) 53 ILR 389. In both cases, the arbitrators held that the concessions were more than mere administrative acts subject to the whims of the state.

217. VIBE ULFBECK, *RESPONSIBILITIES AND LIABILITIES FOR COMMERCIAL ACTIVITY IN THE ARCTIC, THE EXAMPLE OF GREENLAND*, 33–34 (Vibe Ulfbeck, Anders Møllmann & Bent Ole Gram Mortensen eds., Routledge 2016).. For details concerning the importance of determining whether the license is a contract or a regulatory act, see HAMMERSON, *supra* note 7, at 62–63.

218. See Henry Cattán, *THE LAW OF OIL CONCESSIONS IN THE MIDDLE EAST AND NORTH AFRICA* (Willis L. M. Reese, Foreign Parker School of and Law Comparative eds, 1967).

219. See Wissem Heni & Amir Shafaie, *Tunisia's Draft Law on Parliamentary Approval of Oil Contracts: Miss Transparency Opportunity?*, RESOURCE GOVERNANCE (Mar. 15, 2017) <https://resourcegovernance.org/blog/tunisia's-draft-law-parliamentary-approval-oil-contracts-missed-transparency-opportunity>; Gilbert Ankrah & Richie Osei Asiedu, *Ghana:*

Countries that have adopted and still use the system of concessions or any of its variations (e.g. licenses or leases) include North America (led by US and Canada), Europe (led by Norway, the UK, Sweden, Denmark and the Netherlands), South American (led by Brazil and Argentina); others include Australia, South Africa, Morocco and New Zealand.²²⁰

8.1.1. Practical Example: Brazilian Concession Agreement

The Brazilian upstream sector has suffered several changes within its history. Initially it started as a “free market” system between the late 19th and early 20th centuries. Later it moved to a nationalistic and state monopoly for nearly five decades under the control of Petrobras, then it reopened the market at the end of the 20th century under a competitive licence regime. More recently it moved back to create a higher level of state intervention as it changed from the licence regime that existed in the late 1990’s to a hybrid regime created by the combination of a licence regime and production sharing regime. But why?

The Brazilian government could have arranged its fiscal system in order to achieve the same financial income irrespective of the model adopted. From a legal or economic point of view it was not required to move from a single licence regime since the late 90’s to a hybrid regime with licence and production sharing regime at this present moment. This process would have been fairly straightforward as the royalty and special participation processes were already in place and could have been increased in order to achieve the same financial benefits expected from the new PSA regime. The special participation would be much easier to be changed as it would not require the approval from its national congress. So, a fiscal adjustment in the petroleum legal regime would have allowed for development on the pre-salt reserves within a shorter period of time, as well as maintaining the stability and progress of the previous petroleum regime. M.R. de Oliveira gives a good example of this matter:

Parliament to Approve Petroleum Exploration Contract Between Ghana and AGM Petroleum, ALL AFRICA (Nov. 29, 2013) <https://allafrica.com/stories/201312020636.html>; Alireza Ramezani, *Iran Closer to Rolling Out New Oil Project Contracts*, AL-MONITOR (Aug. 24, 2016) <https://www.al-monitor.com/pulse/originals/2016/08/iran-petroleum-contract-ipc-final-confirmation-parliament.html>; Nermin Rehimova, *Azerbaijan Parliament Ratifies Agreements on “Umid-Babek” Block*, AZ REPORT NEWS AGENCY (May 2, 2017, 4:36 PM) <https://report.az/en/energy/azerbaijan-parliament-ratified-agreements-on-umid-babek-block/>.

220. Ibid

“(…) PSA offers no additional benefits to Brazil, since a simple change in contractual regime will not necessarily increase the government take. In addition, comparing both regimes, it was proven that it is feasible to arrive at similar government take whatever type of contract is in force.”²²¹

Why was there a need to implement a new petroleum regime to develop the well known and prospective Pre-Salt area?²²² The most reasonable answer stems from political and national security issues. It is possible to suggest that the creation of a new NOC in the Brazilian petroleum regime has clear political motivation, which is directly related to the rationale behind the new PSA.²²³

Although most developing countries face popular claims to protect national resources and feel uncomfortable delegating proprietary rights to an IOC, this, in theory, should not apply to the currently Brazilian scenario as the state monopoly was relaxed in 1995 and it was working fairly well for over ten years. However, sustained political stability is hard to achieve in any country and these recent changes within the Brazilian Upstream sector seem to be a regressive measure towards national restriction from private and foreign investment. Nevertheless, it is important to highlight that some of the restrictions of the PSA regime (e.g. operatorship) have been made more flexible due to the financial crises and scandals suffered by Petrobras.²²⁴

8.1.2. Practical Example: Malaysian Concession Agreement

Malaysia is a constitutional monarchy with an elected Parliament. It was a British protectorate and it achieved independence in 1957. Since independence, Malaysia has had one of the best economic records in Asia,

221. M.R. de Oliveira, 'The Pre-Salt Oil Reserves in Brazil: To What Extent Is It Really Necessary to Adopt a Production Sharing Agreement System?', 21 *OGE* (2009), 21.

222. The 'pre-salt area' is described in the Federal Law No 12.351/2010 ("Pre-salt Law") and subject to a production sharing regime.

223. Johnston has the same perspective as he states that 'At first PSCs and concessionary systems appear to be quite different. They have major symbolic and philosophical differences, but these serve more of a political function than anything else.' Daniel Johnston, *International Petroleum Fiscal Systems and production sharing contracts* (Penwell, Oklahoma 1994), p. 39. In addition, Bindemann suggests in his conclusion that "In that sense it can be argued that a PSA is a political rather than an economic contract." Kirsten Bindemann, *Production Sharing Agreements: An Economic Analysis* (Oxford Institute for Energy Studies, Oxford 1999), p. 88.

224. See Federal Decree no. 9.041/2017.

with Gross Domestic Product (GDP) growing at an average 6.5% per annum for almost 50 years.²²⁵ Natural resources are one of the major contributors to the growth of the Malaysian economy.²²⁶

In general, people might get misled with the history of petroleum industry in Malaysia. It might be perceived that the productions of oil and gas were only started when PETRONAS was founded in 1974.²²⁷ However, such perception is incorrect. The petroleum industry had in fact begun long time ago during the British colonial period. The British colonial masters had exploited hydrocarbons and other minerals in the country including tins prior to the independence of Malaya in 1957.²²⁸ Petroleum exploration in Malaysia commenced in the beginning of the 20th century in Sarawak, where oil was first discovered in 1909 and first produced in 1910.²²⁹ The oil companies in Malaysia had been previously operating under a concession system.

Post-independence, Malaysia inherited and continued using the same concession system. In fact, more concessions were awarded to Shell and Esso to explore oil and gas in the deep-water of Malaysia.²³⁰ Under this system, the IOCs were given extensive rights over a certain area, including potential reserves contained in the oilfield.²³¹ On this point, the entire area of development expenses would be borne by the IOCs in which they had significant freedom of contract and procurement rights, technology decisions, while local host government had almost limited right to make decision except for several matters pertaining to environmental and safety regulations.²³² In exchange for these rights, the IOC was obliged to pay the government the royalties and taxes.

225. Sani Saidu, 'A Comparative Analysis of Production Sharing Contracts of Selected Developing Countries: Nigeria, Indonesia, Malaysia and Equatorial Guinea' (2014) 2 *J. Finance & Acc.* 34.

226. Shing Chyi Chua and Tick Hui Oh, 'Review on Malaysia's National Energy Developments: Key Policies, Agencies, Programmes and International Involvements' (2010) 14 *Renewable & Sustainable Energy Rev.* 2916.

227. Anas Alam Faizli, 'Is Malaysia's Rigid Fiscal Regime the Best Recipe for Petronas' Success?', *Rich Malaysia, Poor Malaysian - Essays on Energy, Economy and Education* (Gerakbudaya Enterprise Petaling Jaya, Malaysia 2012).

228. For examples, Royal Dutch Shell Oil exploration started in Miri offshore in 1910, and along with Esso, built the first refinery in 1914. The first pump station, Esso was erected in Kuala Lumpur in 1921.

229. Razmahwata bin Mohamad Razalli, 'The Malaysian Oil and Gas Industry: An Overview' in Ridwin G Candiah (ed), *Jurutera*, vol 1 (IEM 2005).

230. Faizli (n 227).

231. *Ibid.*

232. *Ibid.*

Original Areas Awarded to IOCs Under Concession System²³³

Location	Company	Area (square kilometers)	Onshore/ Offshore
Peninsular Malaysia	Mobil Malaysia Exploration Company	31,997	Offshore
	Esso Production Malaysia Incorporated	72,520	Offshore
	Continental Oil Company	52,839	Offshore
Sabah	Sabah Shell Petroleum Company	26,374	Offshore and Onshore
	Aquitane Petroleum Company (S. E. A.)	6,838	Offshore and Onshore
	Esso Production Malaysia Incorporated	19,891	Offshore and Onshore
	Sabah Teiseki Oil Company Sdn. Bhd.	6,630	Offshore and Onshore
	Oceanic Exploration And Development Corporation	1,469	Onshore
Sarawak	Sarawak Shell Berhad	177,720	Offshore and Onshore

A conventional concession-type relationship of IOC with the host-government was governed by the Petroleum Mining Act 1966 and the Petroleum Income Tax Act 1967. IOCs were operating under the system of

233. Chung Sooi Keong, 'Ten Years of Petroleum Exploration in Malaysia' (1977) 11 United Nations ESCAP, CCOP Technical Bulletin.

concession were given significant freedom in the management of petroleum resources and control the ownership of all assets, and crude oil and gas produced. In return they paid royalty to the HG amounting to between 8 to 11 percent of output produced and sold after 5 years of production and corporate income taxes at the rate of 50 percent to the Federal Government. Posted price was used as the base for income tax payments.

It is important to note that after the 1973 oil embargo, the oil-producing countries of the world realized the importance of monitoring their own petroleum resources.²³⁴ In Malaysia, it led to the legislation of the Petroleum Development Act (PDA) in 1974 and the formation of a national oil company to ensure that the nation's petroleum resources could be developed in line with the desires and wishes of the nation. This corporation was known as the 'Perbadanan Petroliaam Nasional' (National Petroleum Corporation) or PETRONAS.²³⁵ Subsequent to the legislation, Malaysia switched over from the concession system to the PSC model.

8.1.3. Practical Example: Libyan Concession

The classic concession model was the initial arrangement between the Libyan government and the IOCs for petroleum exploration and production, and the granting of concessions began soon after approval of the Petroleum Law in 1955. In terms of ownership of oil and gas, the Law stated in Article (1) that hydrocarbons found in their natural state in the subsoil layers of Libya are regarded as state-owned property. The primary objective of the Libyan Petroleum Law of 1955 had been to attract and encourage IOCs to invest in Libya, diverting their historical interest away from the Middle East.

Concessionaires were granted rights that covered vast areas, and the duration of the concession was considerable, typically fifty years, and some of them are still in operation (e.g., Wintershall). The country was divided into four zones.²³⁶ With regard to relinquishment, concessions had to be reduced to 75% of their original size within five years, 50% within eight years, and to 33⅓% within 10 years for areas located in the Zones I and II,

234. Hamdan and others (n 29).

235. Khalid Abdul Rahim and Audrey Liwan, 'Oil and Gas Trends and Implications in Malaysia' [2012] *Energy Pol'y*. 262.

236. Zone I represented the territory of Tripolitania, Zone II represented the territory north of the 28th parallel in Cyrenaica, Zone III represented the territory south of the 28th Parallel in Cyrenaica, and Zone IV represented the territory of Fezzan. Concessionaires were granted rights that covered vast areas – in Zones I and II the maximum area was 30,000 square kilometres (km²), while in Zones III and IV it was 80,000 km².

and 25% for areas located in Zones III and IV. The concessionaires were given exemption from export and import duties and total control of petroleum exploitation, with freedom to explore for oil under the most flexible terms. In the case of discovery of commercial quantities of oil, they had the right to produce and export any amount of crude oil at their own quoted prices. The government had no claim on the proceeds of oil revenues apart from the right to receive specified royalty and taxes. No revision of the concessions terms could be effected without prior consultation of the companies. In actual fact, in retrospect, the law was clearly drafted in line with the requirements of the oil companies, to ensure total control and take full responsibility in running the petroleum activities and operations. Fiscally, they can be described as a tax-royalty system, within which, effectively, the role of the Libyan government was restricted to that of a “royalty and tax collector”.

The royalty and tax rates had been maintained at the original level provided for in the concessionary principle of 12½ and 50 percent respectively. The posted prices remained low at the same level as during the concessions period²³⁷. It is clear that during the time when the original concessions were granted the Government, due to lack of experience, was reasonably satisfied with the conditions and share of the revenue provided by the major companies. Moreover, at the time the Government was influenced by the dominant political stance of the oil companies’ home governments. This situation effectively put the government in a feeble bargaining position, which the major companies exploited. The dominant position of the major companies ensured that they maintained this situation and prevented any improvements in the posted price, royalty and income taxes throughout the sixties. However, these circumstances were radically changed through the nationalization policy of the new government in the early 1970s.

In its approach to the restructuring of the Libyan oil industry in 1970, the new government was keen to secure two important objectives. Firstly, operational control, ranging from exploration, field development and production levels, had to be wrested from the IOCs and placed firmly in the hands of the Libyan government. Secondly, a fair price reflecting the intrinsic quality of Libyan crude and its geographical advantages over Gulf crude had to be secured in international markets, and the government’s share of revenue generated from this had to be significantly increased.

237. Morris Albert Adelman, *The World Petroleum Market* (Johns Hopkins Press 1972).

Turning to perceptions of participation at senior levels in the Libyan Government, at the time there were three fundamental issues between the Government and the oil companies: 1) the government's desire for a fair posted price for its crude, 2) a wish to reduce production levels, and 3) the nationalization process. Regardless of the OPEC Resolution relating to participation agreements, Libyan thinking had gone far beyond the two basic terms advocated by OPEC for its members - host government participation to begin at 25 percent and to increase gradually to 51 percent, and compensation at updated book values.

After its success in its participation and nationalisation initiatives, the Libyan government went further towards increasing revenue from its upstream oil sector. It rapidly followed OPEC in increasing its share of revenue from royalties and taxes in line with OPEC's Geneva and Ecuador meetings in 1974. In fact in the period from 1971-1974 the Libyan government made several fiscal terms changes to the Petroleum Law, which increased royalty from 12½% to 14½% and then to 16.67%, with taxes also gradually increased from their level in the original concession 50%, to 55%, then to 60% and finally to 65%. In addition, after long and acrimonious negotiations with the IOCs to increase the posted price, the government achieved this through the 1 September 1970 settlement, the Caracas Posted Prices Agreement in December 1970, the Tehran Agreement of 14 February 1971 and the Tripoli Agreement of 20 March 1971. As a result, the Libyan posted price was increased from \$2.23 a barrel in 1970 to \$3.386 a barrel by 1973. Through this amendment, the government's share in the profits realised by the concessionaires was boosted considerably. Given the fact that the government held the majority in its partnerships with the oil companies, it can be said that the government controlled high portion of oil proceeds.

In any case, the classical concessions were in many ways less favourable to government than were those obtained by other producing countries in terms of the economic and financial benefits. However, the *raison d'être* of these terms was their attractiveness to the IOCs. This turned out to be one of the key features that contributed to rapid growth of the Libyan upstream sector during the period from mid of 1950s to early 1970s.

8.2. *Production Sharing Contracts (PSC's)*

The idea of the state and companies creating an enterprise to share the production of hydrocarbon resources was first developed in Bolivia in the 1950s, but only took a firm hold when the Production Sharing Contract (PSC) was introduced in Indonesia in 1966.²³⁸ Here, the extraction of petroleum is no longer limited primarily to a royalty and tax licence, with the IOC receiving a mining title or license to extract oil, for the simple reason that the IOC is not in fact the owner of the production. Although different types of PSCs evolved in different countries in the years that followed, these new arrangements shared common fundamentals. Among the main ones are the cost recovery aspect, referred to as cost oil, the profit split features, and in some cases taxation. While fiscal elements, such as taxes, were usually the subject of national legislation, others were subject to negotiation as stated in individual agreements.²³⁹

The first model of this kind in Indonesia was that between the US consortium known as IIAPCO and the Indonesian National Oil Company Pertamina, and was devised by Dr. Ibnu Sutowo, the President –Director of Pertamina. Following this model there was no royalty and taxation imposed on the second party, because Pertamina owned all production inclusive of crude stored at export terminals. IIAPCO was allowed to recover annually approximately 40 percent of its exploration and operations costs. The 60 percent left was designated as profit oil to be split 65: 35 percent in favour of Pertamina. Further, when crude oil production exceeded 75,000 b/d, Pertamina received 67.5 percent and IIAPCO the remaining 32.5 percent. Furthermore, as generally applied to all subsequent Indonesian PSCs, the IOCs had to sell 25 percent of its profit oil to the Pertamina under a domestic market obligation, usually at 15 percent of market price. This raised the State's take yearly production from about 39 percent to approximately 46 percent.²⁴⁰

238. Karwan Dhahir Saber, 'Kurdistan's Politics Issues Regarding Production Sharing Contract with Iraqi Central Government and Analyses Whether This Contract Best Suits Kurdistan or Iraq as Whole'.

239. Otman and Bunter (n 235).

240. Ibid.

In the succeeding decades, the PSC evolved successfully in line with the huge transformations and consolidations which took place in the global oil industry. The “Indonesian Formula” as it became known in petroleum circles proved highly successful in satisfying the aspirations of the host governments, providing them with control over all phases in the oil industry, from exploration through production to marketing. At the same time these PSCs provided a legal and commercial framework within which the HGs felt as secure as IOCs to certain extent.²⁴¹

PSCs are now used extensively in agreements for oil and gas E&P, particularly in developing countries, even though a number of them might be considered as hybrid HGIs.²⁴² The terms of the PSC determine ownership and allocation of production, usually expressed as a percentage which is calculated on the level of production, with each party free to monetise or commercialise its respective share subject to the agreed terms and conditions after deducting the costs which are known as profit oil.²⁴³ Under the PSC system, the investor will usually only receive a share of the oil or gas produced rather than the entire production.²⁴⁴

However, the HG neither reimburses, nor compensates the relevant contractor if there is no commercial discovery.²⁴⁵ On the other hand, if exploration is a success, and oil or gas can be produced commercially, production will be shared between the contractor and the state according to the formula(s) agreed on in the contract.²⁴⁶ Unlike the concession agreement, the government receives a specific share of oil or gas after the deduction of the permitted costs has been taken by the investor, known as cost oil or cost recovery.²⁴⁷

Countries utilizing PSCs include but are not limited to Nigeria, Equatorial Guinea, Angola, Brazil, Mexico, Russia, Cyprus, Sudan, Egypt,

241. *Ibid.*

242. Allen & Overy 2013. Guide to Extractive Industries Documents – Oil & Gas. Available from: <http://www.allenoverly.com/SiteCollectionDocuments/geiprogram.pdf> accessed on 1st October 2018.

243. Saul Estrin and others, ‘Profit- Sharing in OECD Countries: A Review and Some Evidence’ (1997) 8 *Business strategy review* 27.

244. The Investor might receive the entire production in an early stage if the HG does not establish a ceiling for the cost recovery.

245. Putrohari and others (n 25).

246. Saidu (n 220).

247. Granita R Layungasri, ‘Comparative Study of Indonesian PSC and Malaysian PSC: Challenges and Solution’ (Centre for Energy, Petroleum and Mineral Law & Policy (CEPMLP), University of Dundee 2010).

Malaysia, Indonesia, India, Bangladesh, Turkmenistan, Kazakhstan and Uzbekistan.

8.2.1. Practical Example: Recent Indonesian PSC Changes

As previously mentioned, the Indonesian government, through its Regulation No 8 of 2017, required that for all new PSCs, a “gross split” mechanism will determine the allocation of production from petroleum operations between the HG and the IOC. This new system will increase the investors’ share of the gross production in exchange for the removal of the existing, traditional cost recovery mechanism outlined earlier. The main rationale behind such decision was due to lower oil price combined with higher cost recovery payments.

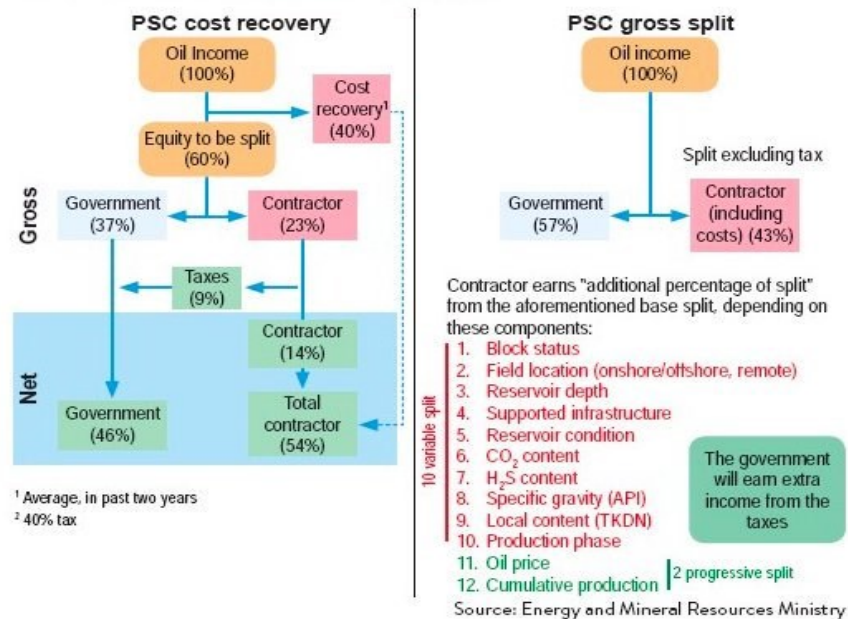
Under a “gross split” PSC, gross production will be allocated between the HG and the IOC based solely on production splits, without involving an operational cost recovery mechanism. On this basis, the Investor’s entitlement to production for each lifting period, and the resulting revenues, will be determined solely on its gross split percentage, which is determined on a pre-tax basis.

Clearly the absence of cost recovery in gross split PSCs will mean that the State’s entitlement to oil and gas in the early years of production under a gross split PSC will be higher. As a result, Investor may need to wait longer to recover their investment costs under gross split PSCs. This changes the dynamics of a contractor’s investment and potentially increases their investment and funding risk. Investors will likely place increased emphasis on reserves and production forecasts when making their investment decisions and may seek to mitigate their cost exposure where there is more uncertainty in terms of investment recovery (e.g. when agreeing firm work commitments)²⁴⁸. Nevertheless, the cost recovery system was not completely removed as some depreciation and/or tax deductions might be allowed in the new system.

In any case, the new system adopted in Indonesia encourages higher performance of local content and other parameters in order to allocate higher profit share to the investors.

248. Ashurst, 2017. Indonesia abandons cost recovery mechanism for new production sharing contracts. Available at: <https://www.ashurst.com/en/news-and-insights/legal-updates/indonesia-abandons-cost-recovery-mechanism/> accessed on 1 June 2019.

Cost recovery vs gross split



However, it remains to be seen if other countries will follow the lead of Indonesia once again, as these proposed changes could eliminate the inefficiency or potential corruption in PSC systems.

8.2.3. Practical Example: Malaysian PSC

In the early 1970's, several countries have moved from traditional concession approach to the PSC.²⁴⁹ In the formative phase of PETRONAS, there was a close relationship between the heads of PETRONAS and PERTAMINA i.e. the Indonesian national oil company, whereby PERTAMINA offered technical assistance and legal advice to Malaysian counterparts.²⁵⁰ In the mid-1970s, Malaysia switched over from the concession system to the PSC model.²⁵¹ It provided incentives for IOCs to continue to produce oil and invest in exploration while at the same time prevent high rental level of capture by foreign oil companies. 'Under a

249. Faizli (n 222).

250. Ibid.

251. Muhammad Zukhairi Muhd Salehudin and Mohd Farizal Farhan Abd Ghafar, 'Getting Involved in Upstream Oil & Gas Sector in Malaysia: A Legal Introduction' (*Azmi & Associates*, 2013) <www.azmilaw.com> accessed 2 June 2019.

legislation enacted in 1985, PETRONAS is required to hold a 15 per cent minimum equity in PSC's with all foreign and private companies.²⁵²

'PETRONAS as a regulator awarded PSC to a number of international O&G companies, including to its wholly owned exploration and production ("E&P") subsidiary, PETRONAS Carigali Sdn Bhd (PCSB)'.²⁵³ In this regard, IOCs that intended to carry out exploitation of hydrocarbon in Malaysia had to enter into a PSC or another form of E&P arrangement with PETRONAS.²⁵⁴ Under the PSCs, all risks and financing had to be borne and provided by the Investors in exchange for an agreed portion of the total production, including recovery costs through the expenses of oil or gas costs.²⁵⁵ The Investors were required to observe the minimum level of commitment for the operations especially in relation to work and finance.²⁵⁶ In addition, the Investors were also required to seek various approvals from PETRONAS throughout all phases of operations.²⁵⁷ Failure to comply with these requirements resulted in automatic relinquishment of the rights to carry out the upstream activities with PETRONAS.²⁵⁸

To date, PETRONAS has entered into 101 PSCs.²⁵⁹ The first was signed with Shell in 1976 with revisions made in 1985.²⁶⁰ Later, two sets of deep-

252. Australian Trade and Investment Commission, 'Oil and Gas to Malaysia: Trends and Opportunities' (*Australian Government*) <<https://www.austrade.gov.au/Australian/Export/Export-markets/Countries/Malaysia/Industries>>.

253. Bank Pembangunan, 'Annual Report 2011: Report on Malaysia Oil and Gas Exploration' (2011) 63.

254. Azmi Mohd Ali, Mohd Rasheed Khan and Stefan Führer, 'Malaysia's Booming Oil and Gas Industry' (*Azmi & Associates*, 2014) <http://www.azmilaw.com/images/stories/PDF/Articles/Malaysias_Booming_Oil_Gas_Industry.pdf> accessed 2 June 2019.

255. Wan M Zulhafiz, 'An Empirical Study on the Contractual Risk Allocation Provisions and Indemnity and Hold Harmless Clauses in the Oilfield Service Contracts in Malaysia', *Paper Proceedings on 'Second International Conference on Interdisciplinary Legal Studies (ICILS) 2015' on 9th-10th June 2015 in Toronto, Canada* (Unique Conference Canada, June 2015).

256. Zulhafiz, 'Perception of Contractual Risk Allocation in the Oil and Gas Contracts in Malaysia' (n 47).

257. Wan Zulhafiz, 'Unfair Contract Terms Act 1977: Does It Provide a Good Model in Regulating Risk Allocation Provisions in Oilfield Contracts in Malaysia?' (2015) 8 *International Journal of Trade & Global Market* 3.

258. Wan Mohd Zulhafiz Wan Zahari, 'Unbalanced Indemnities: A Comparative Analysis of Risk Allocation in Oilfield Service Contracts in Malaysia, the UK and USA' (University of Aberdeen 2016) 4.

259. Ali, Khan and Führer (n 254).

260. The Star Online, 'Miri – from Where It All Began' (20 May 2005) <<https://www.thestar.com.my/news/nation/2005/05/20/miri--from-where-it-all-began>> accessed 29 September 2019.

sea PSCs were introduced in 1993 and onshore PSC terms were developed in 1995.²⁶¹ Recently, PETRONAS has taken initiative by introducing Enhanced Oil Recovery (“EOR”) PSC Terms in order to attract and reward IOCs to deploy the EOR techniques.²⁶²

8.2.4. Practical Example: Libyan EPSAs

In case of Libya, the rise in prices during 1973–1974 led to massive profits for the oil companies under the classic concession terms and participation agreements. This turned out to be one of the major factors driving the emergence of the first Libyan PSC (Exploration and Production Sharing Agreement, EPSA-I) in 1974, followed by EPSA-II in 1980, the latter introduced during the second oil market shock following the Iranian Revolution in 1979.

Two main factors lead to the Libyan government’s introduction of the EPSA-I. Firstly, the Libyan petroleum authorities, after the completion of the nationalization or participation process of its oil industry in the first half of the seventies, felt reasonably confident about their ability to exercise control over all stages of the oil production cycle, from exploration to selling. The creation of the Libyan National Oil Corporation (LNOC)²⁶³ was presented with a very challenging agenda by the Libyan Government. –It had to harness the potential oil and gas wealth of the unexplored and undeveloped areas of the country, and to acquire foreign capital and technological expertise to do so. Secondly, global oil prices increased by approximately 400% in less than half a year, during 1973-1974. In these circumstances, the oil companies were seen to be making excessive profits under the classical concession-type agreements.

261. Bindemann (n 101).

262. ‘PETRONAS Activity Outlook 2019-2021’ <[https://www.petronas.com/ws/sites/default/files/Media/PETRONAS Activity Outlook 2019-2021.pdf](https://www.petronas.com/ws/sites/default/files/Media/PETRONAS_Activity_Outlook_2019-2021.pdf)> accessed 29 September 2019.

263. The Libyan National Oil Corporation (LNOC) was established under Law No. 24 passed on 12 November 1970 and which gave it the right and responsibility for oil sector operations. It was later reorganized under decision No. 10, 1979 by the General Secretariat of the General People's Congress, to undertake the realization of the objectives of the development plan in the areas of petroleum, supporting the national economy through increasing, developing and exploiting the oil reserves and operating and investing in those reserves, to realize optimum returns. In carrying out its activities, LNOC may enter into participation agreements with other companies and corporations carrying out similar activities. This event was, effectively, the commencement of the re-construction of Libyan fiscal policy for the oil industry.

It is useful to consider how the Libyan EPSA I model differed from similar type of agreements used in other producing countries at the time²⁶⁴. The Libyan first model of PSC did not set aside any part of the production for cost recovery. Instead, the investor received a fixed percentage of production. This percentage was different for offshore and onshore acreage with the majority of agreements concluded based on the 85:15 percent

264. Duration: This was between 30 to 35 years, including an exploration period of around 5 years.

Distribution of Costs and Expenses: 1) All of the exploration expenditure was undertaken by the foreign company, which essentially comprised drilling of the appraisal wells. An exploration program attached to the EPSA gave mobilisation details of projected number of wells to be drilled, seismic crews, and drilling equipment. However it was the amount of the initial minimum exploration expenditure rather than a work programme that determined the IOC's obligation here. 2) Further costs and expenses, including development and operating expenditure and overheads after the exploration phase were to be shared between the IOC/LNOC in proportion to their share of produced crude. 3) LNOC's share of development expenditure was treated as an interest bearing loan repayable by LNOC when the total production attained an agreed quantity or at a specific volume of export production. Repayment was to be annually, extendable up to 20 years. 4) Where a contracting party defaulted in providing its share of costs, this entitled the non-defaulting party to advance a like amount, charging interest to cover the period of the delay. If the delay exceeded 90 days, the non-defaulting party was entitled to offtake the defaulting party's share of production to settle outstanding plus interest, with crude valued at the market price.

Production Sharing: Crude oil production was determined by the percentages fixed in the Agreement. Against the economic and market factors following the first oil shock and the 1973 Arab oil embargo LNOC's share exceeded 80 percent in most cases of production.

Taxation: The IOC's production share was exempted from income tax, royalties or any other government charges.

Management: The company acts as operator on a no loss no profit basis. Petroleum operations were to be managed by a Management Committee comprising three representatives, with LNOC appointing two of these, including the Chairman, and the company a third. This Management Committee was to decide on work programs, operational budgets and other relevant matters with a simple majority vote final and binding on the parties.

Sole Risk: The IOC maintained the right of non-participation in any project decided by the Management Committee if it deemed such project to be uneconomic for the company. In this case LNOC could proceed with the project at its own cost, with entitlement to all benefits. Importantly, EPSA-I recognized the right of the IOC to re-enter such a project on agreed terms.

Title to equipment: LNOC was to own all the equipment purchased by operator in relation to the work program, from its point of entry into Libyan ports.

Buy-back Provision: The company was granted a first option to buy LNOC share of crude, subject to advance agreement on the price.

formula for onshore and 81:19 percent for offshore areas in favour to LNOC²⁶⁵.

Essentially the EPSA-II terms were not significantly different from those offered in the first generation EPSA's in 1974. EPSA-II terms were generally regarded by foreign investors as too heavily weighted in favor of LNOC, and were seen as less favorable to them than EPSA-I. Production sharing under EPSA-II was different depending on the prospects of the acreage concerned. These were 85:15 percent to LNOC's advantage for what was classified as top acreage, 81:19 percent for medium acreage, and 75:25 percent for the least favored acreage, but again the IOC's share of output was free of taxes and royalties.

A drop in oil prices during the 1980s had devastating effects on the Libyan economy as well as on oil companies globally. In 1983 the oil price was \$34 a barrel while in 1986 it was less than \$10. The decline in oil prices adversely affected the capacity of the oil companies to invest in petroleum exploration and development in Libya.

These market conditions and the impact of the US companies' withdrawal from the Libyan oil sector in 1986, exacerbated the LNOC's multiple problems which, because of insufficient E&P brought about by the strict terms of EPSA-I and II, forced a change. To reverse the situation, the third one (EPSA-III) was announced by the Libyan government in 1988 as a response to changes in the international oil market and an attempt to attract more participants in new exploration. In this new model the LNOC adopted flexible contractual terms, including the guaranteeing of cost recovery by the international oil companies, and the achievement of a larger and earlier cash flow on investments relative to the previous generation of agreements. Despite the new attractive terms, however, the Libyan oil sector was still overwhelmed by a continuing drop in oil prices, and the political fallout from the sanctions imposed by the US and United Nations.

The lifting of US sanctions against Libya in 2004, and drastic changes in the geopolitics of the global energy markets in the preceding 30 years made it imperative for the LNOC to re-evaluate its relationship with the international oil companies. In the 1970s and the early 1980s, the competitive environment in the industry was characterised by limited opportunities and abundant financial resources, largely because significant parts of the world were closed to direct foreign investment and because of

265. WA Otman, 'Appraising the Libyan Petroleum Agreements: A Comparative Analysis of Risk Factors & an Evaluation of Their Effectiveness' (2007) 5 *Oil, Gas & Energy Law Journal* (OGEL).

the prevalence of high oil prices respectively. In the early 1990s, as most countries started to open up, new opportunities became available to the IOCs at a time when the available financial resources were scarce, mainly due to relatively lower oil prices.

Therefore, the Libyan government reacted swiftly and took a major step in supporting the IOC's confidence in Libya by introducing its fourth generation production sharing contract model, or EPSA IV.

The four generations of EPSA vary considerably in their economic, financial, and legal terms and implications²⁶⁶, but while there was considerable continuity and similarity between EPSA-I and II, EPSA-III was radically different and similar to EPSA-IV. Currently EPSA-IV is the only contractual form presented by the Libyan government to IOCs wishing to invest in the Libyan E&P sector.

EPSA-IV was designed and modified to replace all the previous models. In addition, complete transparency was brought into the bidding process, as further incentive for IOCs to invest in the Libya

The new terms of EPSA-IV provide for exploration, appraisal, development and production costs to be recovered very quickly from a proportion of output, for development costs to be equally shared between the investor and LNOC, and for profit production share to be split on a sliding scale. The new EPSA-IV also covered all sizes of discoveries. Small discoveries could still secure an acceptable return to the IOC as well as giving it a fair return in the case of major or giant discoveries. Management Committee rules are similar to EPSA-III, with the only changes made as to their composition, now four members, two each from LNOC and the Second Party. Additionally no income taxes, royalties, rents or fees are levied on the Second Party's share of production.

The IOCs will totally finance and take the risk of exploration and appraisal, as well providing training expenses for nationals during the exploration period. In the event of commercial discovery the development expenditures and risks are shared fifty-fifty with LNOC. The operation costs are divided according to the parties' respective shares of total production (which vary over lifetime of the field). The system is thus a production sharing agreement plus contributory state participation. The investor's liability for royalties, income tax (including surtax), and other direct taxes is met by LNOC on his behalf, however excluding the new bonuses charges which will be paid by the oil company.

266. Johnston, 'Impressive Libya Licensing Round Contained Tough Terms, No Surprises' (n 114).

Furthermore, the IOCs are in principle subject to customs duties, but in accordance with the Petroleum Law they are exempt from duties on the importation of plant, tools, machinery, equipment and materials used for petroleum operations. It is stipulated under the EPSA rules that whatever is exempt becomes the property of LNOC immediately after purchase, whether purchased in Libya, or when landed at a Libyan port if purchased outside Libya. LNOC also has title to all original data resulting from operations under EPSA IV.

In this regard, however, although the EPSA-IV terms appear to be very flexible to IOCs, further consideration needs to be given to several issues. Firstly, the LNOC first take should be reconsidered, allowing cost recovery to be maintained at a reasonable level, so that the IOCs can recover their development and production outlays sooner. Secondly, in the negotiations for the setting of the A and B factor both LNOC and the IOCs should carefully consider unknown factors such as fluctuations in the oil price and unanticipated field conditions involving cost escalations, in order that potential risks can be contained. Finally, the LNOC also takes into account the geographical location and infrastructural challenges of the high risk basins.

The approach Libya took with its EPSA-4 licensing was consistent with much of the disclosure and transparency initiatives underway worldwide. Unfortunately, the sealed-bid type of license round with full disclosure does not work so well for countries with modest or questionable geological potential. As a result and as a matter of necessity, non-transparent, negotiated deals will continue to be part of the industry's future.²⁶⁷

8.3. Service Contracts

Service Contracts, also referred to as advisory agreements, technical assistance agreements, or operational agreements represent a commercial arrangement whereby the HG or the NOC grants certain contractual, but **not** proprietary rights to an IOC for the extraction of oil and gas. Service contracts can be divided into two possible sub-categories: RSC and Pure Service Contracts. The RSC entitles the contractor to carry out E&P activities at its own risk and expense, while the HG reserves the right to exclusive ownership of any hydrocarbon reserves resulting from the exploration. In exceptional cases, the contractor might receive a fee in kind in the form of entitlement to a share of oil/gas, or the right to purchase the

267. Daniel Johnston, 'Changing Fiscal Landscape' (2008) 1 *Journal of world energy law & business* 31.

production from the HG, sometimes at a preferential price; where there is no commercial production from the exploration, the agreement is terminated with no legal obligations for any party.

In the terms of a Pure Service Contract, the HG takes on all the risks associated with the investment and engages a contractor, usually for an agreed flat rate, to carry out the E&P activities. In this case, the contractor takes on the role of service provider and has no interests in nor will derive any benefits from the investment.

The common perception of an IOC is that the contractor is the least incentivized whenever the HG increases its ownership and control of its reserves. This is the case for a contractual framework which does not allow IOCs to retain and/or “book” reserves. Nonetheless, oil and gas service providers like Halliburton or Schlumberger might fit perfectly well into this “profile” and eventually the HG could offer higher flat fees or sliding scale fees, which could encourage IOCs as well.

Service contracts might be common in certain regions or associated with countries that have suffered previous political unrest or where the constitution prohibits private companies from retaining ownership of oil and gas resources (for example, in Iran). Mexico used to be another example of these constitutional restrictions although the Energy Reform Decree of 2013 has gone some way to allowing it to move away from such restrictions²⁶⁸.

8.3.1. Practical Example: Malaysian RSC

Malaysia faces the risk of shortage of natural hydrocarbon resources in the coming years. Given the continued exploration of more petroleum, resulting from the increased demand for domestic consumption, Malaysia cannot ignore and neglect the need to develop existing marginal fields.

Malaysia has identified more than 100 marginal fields, but most of them have not yet been fully developed. It is important to note that the cost required to build a small field is somewhat similar to what is needed for a large field. Therefore, PETRONAS recently proposed an alternative to attract IOCs to invest in its business, namely the risk service contract (RSC). ‘Beginning 2011, PETRONAS has adopted the [RSCs] approach as an alternative to the PSC regime in developing marginal fields. Marginal

268. Mexico: Decreto por el que se Reforman y Adicionan Diversas Disposiciones de la Constitución Política de los Estados Unidos Mexicanos, en Materia de Energía, December 2013.

fields are those with reserves of less than 30 million barrels of recoverable oil or oil equivalent.²⁶⁹

The Contractors are responsible for all exploration expenses including field development and operation, and undertake to absorb related risks and these expenses are usually being monitored and approved by PETRONAS throughout the operation.²⁷⁰ However, '[u]nlike the PSC regime, no research or abandonment commitment is imposed on the contractor.'²⁷¹

The Contractors are compensated for any commercial discovery, which is based upon performance against negotiable performance indicators.²⁷² The ownership and the control of the reserves, however, remain with PETRONAS.²⁷³ Under RSC, petroleum taxes would not be imposed to remuneration fees, however, the tax still applies to companies in Malaysia.

According to Wood Mackenzie,²⁷⁴ the basic fiscal terms for this new Malaysian RSC are:

- Contractor can recover capital and operating costs from annual revenues, up to a 70% ceiling (capital cost recovery is limited to 120% of the capital cost estimate bid by the contractor).
- Contractor will then receive a remuneration fee, based on a negotiable fixed fee per barrel linked to production performance and capital cost performance multipliers.
- Any unrecovered costs at end of field life or contract expiry will be reimbursed
- Royalty of 10% to be paid by PETRONAS.
- Contractor is not liable for abandonment or research payments.²⁷⁵

269. CIMB Bank Research, 'Oil and Gas Sector in for Another Blazing Year' *The Star newspaper Business* (2013) <<http://biz.thestar.com.my/news/story.asp?file=/2013/1/23/business/12612726&sec=business>> .accessed on 1 June 2018.

270. Mohd Rasheed Khan and Mohd Farizal Farhan Abd Ghafar, 'Marginal Fields – Investment Opportunities in Oil & Gas' (*Asian-Mena Counsel*) <http://www.inhousecommunity.com/wp-content/uploads/2016/07/v11i1_JURIS_Malaysia.pdf> accessed 3 June 2018; Bank Pembangunan (n 253) 43.

271. Ibid.

272. Ibid.

273. Eugene Thean Hock Lee, 'Scope For Improvement: Malaysia's Oil And Gas Sector' (*Research For Social Advancement - REFSA*, 2013) 27 <<http://refsa.org/wp/wp-content/uploads/2013/07/OG-Scoping-Report-Malaysia-final-20130701.pdf>>.

274. Wood Mackenzie, 'South East Asia Upstream Service: Malaysia Country Overview' (2012) 41.

The first RSC was awarded in 2011 to Kencana Petroleum Bhd, Sapura Crest Petroleum Bhd, and Petrofac Energy Developments Sdn Bhd for the development of the Berantai field, situated offshore Terengganu, Malaysia.²⁷⁶ Later, the second RSC was awarded to Dialog Group Bhd, Roc Oil Malaysia (Holdings) Sdn Bhd and PETRONAS Carigali Sdn Bhd for Balai Cluster Fields, offshore Sarawak, and the most recent RSC was awarded to Coastal Energy Co for the Kapal, Banang and Meranti fields.²⁷⁷

8.3.2. *Practical Example: The Iranian Buy Back Contracts*

The Iranian Constitution of 1979 prohibited the granting of petroleum rights on a concessionary basis or holdings of direct equity stakes in petroleum ventures to foreign companies or individuals. Later on the Oil Act of 1987 permitted the establishment of contracts between the Iranian Ministry of Petroleum and the National Iranian Oil Company (NIOC), and local or foreign investors. Such contracts were defined in Article 1 as “contractual obligations (undertakings) concluded between the Ministry of Oil or an operational unit or any natural person or legal entity for carrying out and fulfilling a part of the petroleum operations in conformity with the laws and regulations of the Government of the Islamic Republic of Iran and on the basis of the provisions of this Act”. This gave rise to the Iranian Buy Back Contract.

Within the legal framework developed above a compromise was reached to develop the Iranian oil and gas industry despite the constraints imposed by the 1979 Constitution. This was accomplished by the legal device of the “buy back contract” as a “form of financing” rather than “foreign direct investment.”

Under these contracts, the IOC investment is converted to a project loan (annuity), which is paid back by the revenue generated from a percentage of the oil produced, derived from a long-term export oil sales agreement (LTEOSA). In operational terms, the Iranian buy-back can be defined as a service contract undertaken to achieve specific developmental goals, and can be summarized as follows:

- The IOC, acting essentially as a contractor, provides all the capital required to finance a specific development or rehabilitation project.

275. Ibid.

276. Khan and Ghafar (n 271).

277. Ibid.

- The contractor is reimbursed for capital expenditure and associated financing costs plus an agreed profit over a specified period, usually 3-6 years from the date of the first production, from up to 60-65% of the field's output. Accordingly, the National Iranian Oil Company (NIOC) takes all the risks associated with oil price fluctuations.
- The profit or rate of return on the IOC's investment varies from project to project, and is normally between 15% and 20%.
- The Contractor's profits are paid in equal installments over an agreed amortization period.
- NIOC takes over the operation of the field upon the commencement of production and is responsible for the operating costs.
- The Contractor holds no equity in the field. Over the years since their inception in 1995, the Iranian buyback contracts have evolved into three types, the Exploration Service Contract, the Development Service Contract and the Exploration & Development Service Contract.²⁷⁸

The Iranian government recently changed its contractual regime, offering more attractive terms for foreign investors under an Iranian Petroleum Contract. These new terms could be summarized as follows:

- A longer term (up to a maximum of 20 years from the start of development operations, with the opportunity to extend further in the case of IOR/EOR projects);
- Ability of the foreign investor to be involved in operating the fields during production;
- A remuneration fee set as a \$/bl or \$/scf amount, established in order to incentivize production efficiency, and linked to the market prices for oil and condensate and also to the regional or contractual prices of gas;
- Incentives for higher risk fields, as well as IOR/EOR projects; and

278. Waniss A. Otman, April 2007. *The Iranian Petroleum Contracts: Past, Present and Future Perspectives*. OGEL, Vol. 5 - issue 2.

- Requirements and incentives for the transfer of technology and know-how, as well as participation of Iranian entities in all phases of the project.²⁷⁹

However, the full details of these new terms are not yet disclosed to the public as only a few IPC have been signed and they are confidential.

8.4 Joint Ventures

In some jurisdictions a joint venture (JV) with a government entity is required to develop resources as previously mentioned. This strikes a balance between a NOC wholly developing petroleum assets, which for obvious reasons can be problematic, and the HG tendering blocks of land to an IOC, which, for political and historical reasons, may not be possible. Instead, the JV is a sort of strategic alliance between an IOC and NOC to produce assets with some level of involvement by both parties.²⁸⁰

The basic structure of an equity JV is that the host government and IOCs will agree to form a “partnership” should commercial quantities of crude be discovered, with the foreign partner financing the exploration phase. If a commercial discovery is made an operating company is normally established, with each owning fifty percent of the shares. In general terms the profit split should ensure that the HG obtains up to approximately 75 percent of the net profit. It should be observed that this profit will be calculated on basis of the achieved prices and not the declared or posted prices as in the classical concession contracts. This went a long way to correct the abuses inherent in the concession system in which discounts, allowances and under-invoicing were used by the IOC’s to slim down state share. However, the real distinctive aspect in these agreements was the positive participation of the national governments in controlling their natural sources, the gaining of experience in the actual running of petroleum operations, and role of the national governments in making critical decisions with regard to the petroleum industry.

8.4.1. Practical Example: MENA Joint Venture Agreements

In the petroleum industry JVs were introduced for the first time in the Middle East in March 1957, when Iran signed the first such deal with ENI of Italy (which came to be known as the “**Mattei Formula**” – marked the

279. The New Iranian Petroleum Contract – Government Approval, Herbert Smith Freehills, <https://www.herbertsmithfreehills.com/latest-thinking/the-new-iranian-petroleum-contract—government-approval> accessed on the 29th of August 2019.

280. James, NOC-IOC Strategic Alliances, Working Paper #104, October 2011, P. 10.

beginning of a turning point in relations between producer countries and the world's oil companies). The Iranian model was quickly adopted by Kuwait, Saudi Arabia, Abu Dhabi and Libya in 1961, 1965, 1967 and 1968, respectively.

However, Libyan JVs never succeed since the E&P industry was dominated and controlled by the concessionaires, where the later would not allow such transformation that would affect their interests in Libya and other oil producing countries. By the end sixties a new approach of fiscal regime was emerged among the OPEC oil producing countries. This was called the "Participation Agreement".

One of the key factors leading to the emergence of host government participation was OPEC's role in promoting guidelines for more appropriate and just concession agreements among its members, since throughout early 1970s, the efforts of OPEC had been concentrated on two main issues. Firstly, the attainment of a reasonable price for its crude in an international situation suffering from acute financial dislocation. Secondly, OPEC was pushing all its member countries to negotiate their participation in production with IOCs. The outcome of this was OPEC's Resolution No.139 of 22nd September 1971, the "General Agreement on Participation" calling for its members to acquire a "sensible" level of participation in oil operations in their respective countries.

Originally the idea of participation emerged as an indirect consequence of the views of Sheikh Tariki, the Saudi Arabian Oil Minister. Tariki, known for his fiery speeches regarding national rights and nationalization policies against the majors in meetings of the Arab Petroleum Congress and in OPEC itself, had unambiguously declared that²⁸¹ "once we are strong enough to shut down all the wells, and shut off the pipelines, the companies will see great light. The world cannot live without Middle East oil²⁸²."

In this regard, the Libyan government was also influenced by OPEC guidelines in respect of participation agreements, highlighted in abovementioned resolution, which called for its members to acquire a

281. These views, perceived as extremist at the time both by the majors and King Feisal, lead to his firing from his post as Saudi Minister of Oil by Feisal. The appointment of his replacement, Sheik Yamani, was taken in the Arab world as a pro-western gesture. Yamani too was aware, on his appointment, that Arab public opinion fully supported nationalization and the views expressed by Tariki. As a consequence, he had to find an alternative way to deflect the nationalization issue, a middle path which could at the same time satisfy Arab public opinion and the majors. This led to his advocacy of host government participation in Saudi Arabia and the Middle East producing areas.

282. Saturday Evening Post, February 17, 1962.

‘sensible’ level of participation in oil operations, based on two basic criteria advocated by OPEC – the host government participation should begin at 25% and to increase gradually to 51%; and compensation for nationalised assets was to be given at updated book values.²⁸³

Another example is Qatar. Qatar has been trending away from PSC to JVs. The North Oil Company is a joint venture with the NOC, Qatar Petroleum, and Total developing and producing on of the largest and most complex oil fields in the world, the Al-Shaheen Field.²⁸⁴ Other exceptional examples may include Eni and PetroChina entering into a memorandum of understanding to develop unconventional resources in China²⁸⁵ and Abu Dhabi National Oil Company (ADNOC) entering into an agreement with Occidental Petroleum to develop reservoirs in the Shah field southwest of Abu Dhabi.²⁸⁶

In any case, it is relevant to point out that a number of these joint ventures were conducted several decades ago. Nevertheless, they might still exist in very limited exceptions in the Asia/Middle East (i.e. in Qatar).

283. W Otman and M Bunter, ‘The Libyan Petroleum Industry in the Twenty First Century: The Upstream’ [2005] *Midstream and Downstream Handbook*.(OGEL).

284. Mahmmod S., *Oil and Gas Regulation in Qatar: Overview*, Thompson Reuters: Practical Law

285. Ernst & Young, National Oil Company Monitor Q1 2011, p. 4, available at [http://www.ey.com/Publication/vwLUAssets/National_Oil_Company_Monitor_Q1_2011/\\$FILE/National_Oil_Company_Monitor_Q1_2011.pdf](http://www.ey.com/Publication/vwLUAssets/National_Oil_Company_Monitor_Q1_2011/$FILE/National_Oil_Company_Monitor_Q1_2011.pdf).

286. James, NOC-IOC Strategic Alliances, Working Paper #104, October 2011, P. 13.