

# DESIGNING OF FISCAL REGIME FOR OIL AND GAS SECTOR IN UZBEKISTAN

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**ABSTARCT:** Today a comprehensive range of fiscal tools existing to policymakers to design a fiscal regime for the oil and gas sector that will attract investment at the same time provide a reasonable share of economic interest for the country. Some countries rely on production-based levies to ensure a steady stream of revenue to the state budget, while others put greater emphasis on profit-based levies to minimize distortions. The conducted study uses documental analysis methods and shows that most countries have mixed (profit-based and production-based) levies. Fiscal terms declared by a country reflect the negotiating strength and experience of the country, potential reserves, and the track record of previous projects. Potential fiscal income may be lowered to compensate for specific high costs of extracting oil, commercial or political risk premia the study is revealed.

**Keywords:** Uzbekistan, taxation, oil, gas, incentive, fiscal, regime.



## OVERVIEW OF UZBEKISTAN' OIL AND GAS SECTOR

Uzbekistan is the most density country with about 32 mln people in Cental Asia and the country has significant primary energy resources, notably fossil fuel. The proven reserves are estimated at about 1.8 trillion cubic meters (tcm) of gas, 0.6 billion barrels of oil, and 1.9 billion tons of coal. Most of the gas and oil reserves are located in the South-Western parts of the country. At current production rates, the proven reserves are estimated to last 31, 22 and 95 years respectively. The total undiscovered resources are estimated to be substantially larger (see table 1).natural gas accounting for 70 percent in terms of energy content (ArturKochnakyan, Sunil Khosla& et al., 2013).

Energy sector for 7 percent of GDP and nearly 50 percent of capital investments. Natural gas was the largest source of export revenue in 2015, accounting for 25,9 percent of total exports.

According to government data fossil fuels are currently the basic sources for electricity in Uzbekistan. For instance, natural gas prevails in the energy supply mix, it accounts for 82 percent of total primary energy supply while oil and coal contribute 10 percent and 3 percent, respectively. Renewable energy resource potential is estimated to be significant, but, with the exception of hydropower, is not yet exploited on a large scale (ArturKochnakyan, Sunil Khosla& et al., 2013).

The oil and gas sector (OGS) in Uzbekistan are run by the vertically integrated state-owned monopoly, the National holding company "Uzbekneftegaz" (UNG). UNG, through its subsidiaries, controls all major down- and upstream activities, including gas and oil exploration and production, processing, transmission, distribution and storage.

Today UNG is in the top 10 producers of hydrocarbon resources among the companies of the CIS countries, and is the 12th largest producer of natural gas in the world (ADB, 2016).

**Table 1. Fossil Fuel Energy Reserves**

Resource	Proven reserves	Estimated undiscovered resources
Natural gas	1,841 bcm	4,000 bcm
Oil	594 million bbl	5,700 million bbl
Coal	1.9 billion tons	5.7 billion tons

Source: World Bank team estimate based on UNG web-site, Government of Uzbekistan portal, BP Energy Report 2011, Energy Information Agency and other public sources; Business MonitorInternational, Uzbekistan Oil & Gas Report, Q3 2012.

The development and significance of the OGS is remains essential to the economic development of Uzbekistan, and the system of taxation applied to the production of hydrocarbons is one of the key factors directly determining effective functioning of the sector as a whole.

The study reveals that the tax system has some issues that hold up strategic investments from investing into the industry, and thus reduce the efficiency of incentives created (ADB, 2016).

The country practices single taxation system for all branches of the economy, practically with no regard to any peculiarities of the mining companies. According to Leila Ponomareva from UNG, this, in turn, has a negative effect on the financial condition of the oil and gas production companies of the industry(ADB, 2016).

For example, taxes averaged 38% of the income for the oil and gas industry of Uzbekistan. In particular, for the oil and gas production – 41%, for oil and gas processing – 48%, and for gas transportation – 31% (ADB, 2016). Further, the companies of the industry are said to be most affected by the taxes for the use of earth bowels, property, income, infrastructure development and other taxes.

These taxes are account for nearly 30% of all payments, or 91% without VAT and excise tax(Deloitte, 2015)

The current paper studies some aspects of the design of fiscal regime for the OGS in Uzbekistan.

### **FISCAL REGIME FOR OGS**

Uzbekistan's oil and gas extraction plays an essential role as a source of fiscal earnings as well as for employment.

As a resource owner, the government to render nation's assets such as a crude oil or natural gas deposit into financial resources. However, there is a fundamental conflict between oil and gas producers and the government over the division of risk and reward. The optimal design of fiscal arrangements that encourage an attractive fiscal climate and efficient resource development maximizes the values of the revenues to be divided.

Nevertheless, the stable fiscal regime would improve the trade-off between each party's interests. Oil and gas agreements and the associated fiscal rules establish the "price" of the resource in terms of the bonuses, royalties, taxes or other payments the investor will make to the state during the life of the project (Emil M. Sunley, Thomas Baunsgaard and Dominique Simard, 2002).

The research shows that taxation of OGS can use multiplicity of tax and nontax tools. Many countries are using production-based and/or profit-based rent tools. Production-based tools, such as royalties, usually ensure the government receives at least a minimum payment for its mineral resources, where profit-based taxation concede the government to share in the upside of highly profitable projects. Also, in some countries, the state participates directly by taking an equity interest or indirectly by taxation such as VAT and/or customs duties.

Moreover to these tools, there could be bonuses and different types of rental payments. The study shows that where bonuses ensure some advance revenues and encourage companies to investigate contract areas, annual rental remuneration usually are not a considerable source of revenue but can be designed to promote companies to waive their rights.

The signature bonus is a one-off payment levied on subsurface users for the right to conduct prospecting and exploration for mineral resources in Uzbekistan.

Depending on the type of the mineral resource, the amount to be paid varies from 100 to 10,000 times the minimum monthly wage (MMW), while for hydrocarbons, it is 10,000 MMW. One MMW is set at UZS 130,240 (approximately US\$46) as of 1 January 2016.

The commercial discovery bonus is a fixed payment by subsurface users when a commercial discovery is made on the contract territory.

The ground for calculation of the commercial discovery bonus is established as the global market value of the extractable minerals properly approved by the qualified state authorities. The rate of the

commercial discovery bonus is fixed at 0.1% of the value of approved extractable resources in Uzbekistan.

The analysis reveal that the most well-known way of taxing the OGS consists of combination of *tax and royalty payments*. A tax/royalty regime could be in three levies: to secure a minimum payment, the regular income tax (is applicable to all companies), and a resource rent tax to capture a larger share of the profits (for the most profitable projects).

Because of simplicity of administration and velocity of the revenue received *royalties* are appealing comparing to than many other fiscal tools. Royalties are characteristically either specific levies (based on the volume of oil and gas extracted) or ad valorem levies (based on the *value* of oil and gas extracted).

*Corporate income tax(CIT)* should be levied on oil and gas companies, as on all other companies. Many multinational companies anticipated to be subject to an income tax in the producing country, as this tax will be creditable against the income tax levied in the home country. Staying out of income tax in the producing country, the multinational may be subject to higher tax payments in the home country.

In Uzbekistan CIT is applied to all companies at the rate of 7.5% in regard of taxable income. "Taxable income" is calculated as the difference between aggregate annual income (after certain adjustments) and statutory deductions. The following items are generally not deductible for tax purposes: non-business expenses, entertainment, business travel and certain voluntary insurance expenses in excess of established statutory limits, interest on overdue and deferred loans (in excess of normal loan interest rate), losses resulting from misappropriations of funds or assets, audit expenses (if an annual audit was conducted more than once for the same period), charitable donations, litigation expenses, fines and other monetary penalties (EY' Report, 2016).

The taxpayers of *subsurface use tax* are defined as legal entities conducting the extraction or processing of minerals. The taxable base is generally the average actual sales value of extracted minerals. The rates differ depending on the type of minerals extracted or processed (30% for natural gas, 20% for crude oil and gas condensate) in Uzbekistan(EY' Report, 2016).

Subsurface users extracting, producing and selling natural gas (export), cathode copper, polyethylene granules, cement and clinker are generally subject to Excess profits tax or EPT in Uzbekistan. In general, the taxable base is the difference between the selling price and the cut-off price set by legislation, as well as certain taxes.

Currently, the established tax rate is 50% for all the above products. EPT for natural gas is generally calculated as follows: selling price above US\$160 per 1,000 cubic meters is taxes 50%.

Taxpayers are also bound to transfer excess profit remaining after taxation to a special investment account at the time when the EPT payment is due. These special-purpose funds are disbursed only with the approval of the Ministry of Economics and the Ministry of Finance of the Republic of Uzbekistan for financing investment projects and for modernization and technical upgrading of main production, among other things. In other words, these funds are set aside from normal operations for specific purposes that are controlled by the government (PWC' Report, 2016). Subsurface users operating under PSAs are not subject to EPT.

A first and foremost effort both to ensure the government with an adequate share of economic rent and to make the tax system less distortive to investors is the *resource rent tax(RRT)*.The RRT is applied in many countries, including Uzbekistan, Australia and is imposed only if the accumulated cash flow from the project is positive. The net negative cash flow (in the early years of a project) is accumulated at an interest rate

that, in theory, is equal to the company’s opportunity cost of capital (Palmer, 1980). The study reveals the resource rent tax has not been a substantial revenue source in practice. There may be many grounds for this. It could reflect the difficulty of designing the tax, especially the choice of the discount rate and tax rate. If the discount rate is set too high, chances are that the resource rent tax will never apply; if it is set too low, the tax may become a major restrictive to investment (Van Meurs, 1988).

Production sharing is used as an alternative to a tax/royalty regime with this arrangement the ownership of the resource remains with the state and the company is contracted to extract and develop the resource in return for a share of the production. The state remains the right to petroleum reserves in the ground but appoints the investor as “contractor” to assist the government in developing the resources. While the government bears the risk, cost and expense, the parties agree that the contractor will meet the exploration and development costs in return for a share of any production that may result (PWC’ Report, 2016).It's common practice that contractors pay income tax on their share of production. This tax could be discharge of the government’s share, but then the government’s share should be enlarged, all other things equal. A substantial advantage of this treatment is that the investors would have fiscal stability—any future changes in the tax rules would affect only the allocation of the government’s share between tax and non-tax oil. The guarantee of fiscal stability is an essential investment stimulus, carrying the cost of reduced flexibility for the government to increase tax on a given project in future.

*The safeguard mechanism that is often sought by investors is the inclusion of a fiscal stability clause(FSC) in the project agreement.*

FSCs come in diverse forms and *one approach* is to “freeze” the fiscal system at the time of the project contracts. If the fiscal system is later get changed, this will encompass a special treatment of a particular taxpayer, adding to the administrative burden, especially if several projects are operating under different fiscal systems. *Another approach* is to assure the total investor revenue. If one tax is increased, this will be offset by a reduction in another tax (or basically by paying a redeeming subsidy), which potentially better guarantees the integrity of the fiscal system. Still, it may be quite troublesome in practice to accept on compensatory measures that can satisfy both government and investor. There are also some stability clauses that are asymmetric: protecting the investor from unfavorable changes to the fiscal terms but passing on benefits of economy-wide reductions in tax rates.

FSC are prevalent practice in the OGS. Of 109 countries surveyed in 1997, a majority (63 percent) provided fiscal stability clauses for all fiscal terms (see annex table A). A small group (14 percent) had partial FSC excluding income tax. Finally, a minority (23 percent) did not provide any FSC in project contracts at least up until 1997). However, this does of course not hinder an investor from seeking to renegotiate fiscal terms in response to policy changes.

There is no intrinsic cause to prefer a tax/royalty regime to a PSC regime, since the fiscal terms of a tax/royalty regime can be replicated in a PSC regime, and vice versa (table 1).

**Table 2. Comparison of Tax/Royalty and PSC Regimes**

Risk/Reward Trade-	Tax/Royalty	Production Sharing
Low risk to government	Royalty	There may be an explicit royalty; or there may be a limit on cost oil that functions as an implicit royalty
Medium risk	Income tax	Income tax, which may be paid out of the government’s share of production

High risk	Resource Rent Tax	The determination of the amount of profit oil can mimic a resource rent tax
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The study reveals governments may also participate more directly in an oil and gas projects by taking equity in the project (Daniel, 1995). According to Nellor and Sunley (1994), possible contradiction of interest arising from the government’s role as regulator overseeing the environmental or social impact of a project, which may differ from its objectives as a shareholder. In many cases, it's believed that the government may be better off by focusing on taxing and regulating a project rather than being directly involved as an equity participant. It should also be kept in mind that fiscal tools can replicate the economic impact of an equity share.

The imposition of *indirect taxes*, such as *customs duties* and *VAT* play a significant role in the fiscal regime.

If there were no specific appeal for *import duties*, these would be an attractive way for the government to secure an up-front revenue stream. Given the very substantial import needs, particularly during project development, this revenue is typically even more front-loaded than royalty payments. For the same reason, duty exemptions are more attractive to investors to enhance project income. Duty exemptions can also be sought as a way to minimize dealings with customs officials, where foreign companies with significant import needs can be an easy target for rent-seeking behavior. The import of goods (equipment) is generally subject to import customs duties at different rates based on the declared list (according to customs classification codes). The analysis reveals some exemptions assured by the legislation in Uzbekistan.

In many developing countries, the treatment of the OGS for VAT purposes is often affected mostly by regulative realities. The common international practice is to levy VAT on the origin basis, under which imports are taxed and exports are zero-rated. For this reason crude oil, natural gas and gas condensate sold in the territory of Uzbekistan are subject to 20% VAT. Export sales of crude oil, natural gas and gas condensate, are subject to zero-rated VAT, which means that the entities may generally offset respective input VAT against other taxes and contributions or recover it. Imports of goods and equipment are generally subject to 20% import VAT.

Companies producing or importing excisable goods in the territory of Uzbekistan are subject to excise tax. Natural gas and liquefied gas producing companies must evaluate tax on the sale or disposal of the products at the rates of 25% and, respectively, including export sales (but excluding sales to the general population).

Fuel products are indexed to determined rates depending on the type of products sold or disposed. The import of crude oil and oil products is subject to 20% excise tax (distillates ).

A several other nontax instruments are available, but those are insignificant in terms of income generation. Many countries claim payment of various fees; either fixed or auctioned, such as license, rental or lease fees. These are usually paid to the petroleum department and to some extent act as stimulus for the investor to carry out exploration and development work on the granted license area. The requirement to pay signature, discovery and production bonuses is common for oil and gas projects.

The research of Uzbek tax regime shows that no *stamp duty* currently applies in Uzbekistan and there are insignificant fixed fees apply as registration fees.

Auctions for exploration or development rights could in theory a very appealing to secure the government’s share of economic rent. Despite this bias, an auction can be an acceptable way to manage the allocation of exploration rights in OGS, as it is done in some countries, though it would be unrealistic to rely on this as a main income source.

The results of empirical study are evidenced on the effectiveness of auctioning exploration or development rights are mixed across countries (Frewer, 2000).



## CROSS COUNTRY EVIDENCE

The research shows that there is not one optimal model for taxing oil and gas projects, countries make use of a broad choice of tax and non-tax tools. To evidence the range of fiscal regimes, appendix B presents an overview of current practice in a number of emerging countries. The most of them in the sample apply royalties in order to secure an up-front revenue stream. While almost all countries estimate royalties on an ad valorem basis, the actual rates vary from 2 percent to 30 percent and a usual range for countries with royalties would be around 5-10 percent.

The analysis shows that countries without PSAs or a RRT typically apply a higher income tax rate in the OGS than for other economic activities. Some countries have combined a CIT with a RRT, often rate-of-return based, whereas a few countries apply a higher income tax rate when oil prices exceed a certain trigger level. Other countries have provided for more lenient taxation of natural gas projects, partly reflecting lower resource rents, the typically higher investment requirement, and at times larger risk involved than under an oil project. Important issues in gas development are the identification of a market for the gas and the determination of the most economic means of transporting gas to the market, the research revealed.

The results of analysis show that expensing of exploration and/or development costs, accelerated depreciation allowances, and investment tax credits are remain the most popular investment incentives. Tax holidays or reduced tax rates are less common, but some countries do offer these particularly for smaller projects or to encourage investments in less explored regions. Many countries provide exemptions from customs duties and VAT on imports, at times only for specialized equipment to be re-exported after use. Another common incentive is flexible loss carry-forward provisions, in many countries for an unlimited period of time.

The study of PSAs shows that countries typically to have at least 50-60 percent of profit oil going to the state, but in some countries a higher share applies.

The extent to which countries participate directly in projects as equity holders differs. Typically countries retain the right to take equity in a project. Often this is done on a carried interest basis, whereby the cost of the equity is paid back to the company out of production proceeds.

*Some regional patterns are also apparent during the study.* In Africa, about one-half of the surveyed countries rely on production sharing. Of the other half with a tax/royalty regime, some apply a resource rent tax in addition to the corporate income tax. In Asia, PSAs are widespread. Only a few countries in the Pacific use resource rent taxes. There are also several Latin American countries that have reduced tax rates noticeably over the last couple of years—particularly Argentina, Chile and Peru—to attract investment. In the Middle East, the majority of countries rely on some form of production sharing, which is also common among the surveyed transition countries.

## FISCAL REGIME IN UZBEKISTAN FOR OGS

The generally applicable fiscal regime that applies in Uzbekistan to exploration and production (E&P) activities in the OGS (except for PSAs) consists of a combination of CIT, bonuses, subsurface use tax, EPT, and other generally established taxes and contributions. The taxes applicable to subsurface users are as set out in the table-3 below.

Table-3. Taxes applicable to oil and gas companies in Uzbekistan

Applicable taxes	
Bonuses	Variable
Subsurface use tax	2,6-30%
EPT	50%
CIT	7,5%
Excise tax	Variable
VAT	20%

Infrastructure development tax	8%
Contribution on revenue	3,5% intotal
Unified social payment	25% (15% for small business)
Property tax	5%
Land tax	Variable, depends on location and other characteristics of land plot
Water use tax	Variable, generally immaterial
Other taxes and contributions	Variable

According to current taxation taxable profits may be reduced by certain special deductions, including the following:

- Amounts reinvested in main production in the form of purchases of new technological equipment, new construction, and reconstruction of buildings and facilities used for production needs (less current depreciation), up to 30% of taxable profits, over a five-year period;
- Charitable donations of up to 2% of taxable profits;
- Net excess profit if subject to EPT.

The applicable depreciation rates in Uzbekistan are given in the table-4. Intangible assets are amortized for tax purposes over the useful life of the asset, the life of the company, or five years (if useful life cannot be determined), whichever is the least.

Table-4. Depreciation

Assets	Rate %
Buildings and structures	5
Trains, ships, airplanes, pipelines, communication equipment, and electric power lines and equipment	8
Specialized rotator installations	10
Production machinery and equipment	15
Cars, computers and office equipment	20
Other assets	15

Tax losses allowed carrying forward for five years in oil and gas sector. But, the amount of losses carried forward that may be deducted each year is subject to a limit of 50% of taxable profits for the year. The study shows that the tax law does not allow offsetting profits and losses among members of a tax group.

One of important element of tax regime is *capital gains* which are generally included in taxable profits and are subject to tax at the regular CIT rate. Capital gains received by a nonresident from the sale of shares or participation interest in an Uzbek-resident legal entity are subject to withholding tax (WHT) at a rate of 20% (EY Report, 2016). This rate may be reduced or eliminated by virtue of a double tax treaty between Uzbekistan and the country of residence of the income recipient.

In the absence of a permanent establishment (PE) in Uzbekistan of a nonresident company, WHT applies to a nonresident's income derived from Uzbekistan sources and the general rate is 20%. Double tax treaties may also provide for either exemption from Uzbek WHT or application of reduced WHT rates. Dividends and interest paid by Uzbek companies domestically (except for interest paid to Uzbek banks) are subject to 10% domestic WHT.

There are no thin capitalization rules in Uzbekistan.

*Infrastructure development tax* and associated charges infrastructure development tax at a rate of 8% is imposed on net profit less assessed CIT and certain other reductions (e.g., net excess profit if subject to EPT). In addition, contributions to funds for pensions, roads and the reconstruction of educational and medical facilities are separate contributions assessed on sales revenue (net of VAT and excise tax) at the base rates of 1.6% for pensions, 1.4% for roads and

0.5% for the reconstruction of educational and medical facilities, i.e., 3.5% in total.

*Property taxes* generally imposed at a rate of 5% on the average annual net book value of tangible fixed assets (and certain other assets).

*The unified social payments* paid by employers at a rate of 25% (15% for small businesses) on the total payroll cost (except for certain exempt items).

The employer is obliged to withhold and remit a mandatory pension fund contribution from local employees at a rate of 7.5% from salaries and other taxable benefits. Employers also make mandatory monthly contributions to individual accumulative pension accounts of local employees at a rate of 1% of salaries and other taxable benefits of employees, and the amounts of such contributions are subtracted from accrued individual income tax.

Employers are obliged to withhold and remit *individual income tax* to the government at progressive tax rates up to 23% (EY Report, 2016).

As many countries provide an incentive for exploration and project development in OGS, Uzbekistan also created tax legislation to attract foreign direct investments. In accordance with the Presidential Decree dated 28 April 2000 (as amended), "On measures of attraction of direct foreign investments into prospecting and exploration of oil and gas," foreign companies engaged in exploration and prospecting for oil and gas are supported by certain tax incentives, including, in part, the following:

- exemption from all taxes and mandatory contributions for the period of exploration and prospecting
- exemption from customs payments (including import customs duties, import excise tax and import VAT, but excluding a customs processing fee) on imported equipment and technical resources necessary for conducting prospecting and exploration

In accordance with the Presidential Decree, joint ventures involved in the production of oil and gas, established with the participation of foreign companies that were engaged in exploration and prospecting for oil and gas, are exempt from CIT for seven years from the commencement of oil and gas production.

By a special resolution of the government (or investment agreement), a company with foreign investments may potentially be granted additional tax exemptions and other benefits, depending on the importance of the company's project to the government, the volume of the investment to be made and other factors.

According to the Targeted Program on Commissioning Facilities and Production Capacities for 2016, around 46% of the investments will finance 35 projects in the fuel & energy, chemical, petrochemical and metallurgical industries (ITE-Uzbekistan, 2016).

However, in designing of tax incentives, it must be remembered that tax incentives may also be insufficient in determining a firm's location decision. In a recent survey of 75 multinational companies, including 12 firms in the energy sector, most of the energy firms identified non-tax factors, such as geology or market opportunities, as more important for the location of a foreign subsidiary (Wunder, 2001).

## CONCLUSIONS

The results of current study shows that in designing of tax regimes for OGS sector governments try to include different incentives for exploration and project development by allowing costs to be recovered in short time. Accelerated cost recovery brings forward payback for the investor and therefore reduces both investor risk and tax-deductible interest costs. For the most of multinational oil companies, comparing investment opportunities elsewhere in regard to how the fiscal terms affect their risk, what is the expected reward if petroleum is found, and how these factors for any particular regime do is important task. Even though the pressure to provide generous fiscal terms to attract investment can be almost irresistible, the study shows, the overall investment climate is more important determinant for attracting investment than tax factors.

Factors such as exploration, development and production costs, the size and quality of petroleum deposits and investor perception of commercial and political risk are varied in fiscal regimes of



different countries. Thus, project negotiations conducted by case-by-case approach and the fiscal framework should be sufficiently flexible to respond to unforeseen developments so as to minimize the need for unforeseen changes.

The aforementioned factors will influence the size of the government's revenue from OGS where a country with large proven reserves and low exploration and development costs will be able to negotiate a higher revenue share comparing to a country that has a short, and perhaps somewhat uneven, track record, particularly if there is uncertainty regarding the size, quality and extraction costs of its petroleum reserves.

Following are summary the findings of this research and some outlines of desirable features to target when designing a fiscal regime in developing countries, particularly in Uzbekistan for the OGS:

- The ideal design of tax regime should provide the state with a reasonable share of economic rent under variable conditions of profitability. This can be achieved through a tax-based system combining a corporate income tax with a rate of return based resource rent tax, and a royalty at a modest level to secure some up-front revenue.

- The PSA may be more difficult to negotiate for countries with few successfully developed projects. Thus a resource rent based tax system could prove more flexible while requiring less information ex-ante about potential project profitability.

- The capacity of tax management of complex taxation-based system must be taken into consideration when designing the fiscal regime. The administrative burden must be kept as low as possible, while maintaining sufficient safeguards such as ring-fencing to counter tax avoidance, particularly the risk from transfer pricing.

- Fiscal conditions implemented by host countries are influenced by tax policies in the home countries of oil and gas companies. There may be some tendency for revenue collection schemes to become more progressive as a country's petroleum fiscal system matures.

- If the fiscal regime is used to try to compensate for an otherwise unattractive investment environment or high risks (political, market, commercial), the government's share of economic rent can become excessively low as countries compete to attract investment capital for oil and gas extraction.

- There must be a lower bound for the government share from oil and gas extraction below which it would be better for the country to postpone a project rather than forego a reasonable share of the economic rent.

Finally, there is a market test for every country's fiscal regime to attract investments in its OGS. If not, the fiscal regime may be inappropriate for the country, given its exploration, development and production costs, the size and quality of petroleum deposits, and investor perception of commercial and political risk.

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**Table A. Petroleum Contracts: Fiscal Stability Clauses**

Fiscal stability clause		Fiscal stability clause, excluding corporate income	No fiscal stability clause
70 countries (63%)		15 countries (14%)	26 countries (23%)
abu Dhabi	India	Albania 3/	Argentina
Algeria	Indonesia	Azerbaijan	Aruba
Angola	Jordan	Belize	Bolivia
Antigua	Kazakhstan	China	Brazil
Bahamas	Kenya 2/	Costa Rica	Czech Republic
Bahrain	Kyrgyzstan	Ecuador	Fiji
Bangladesh	Laos	Eritrea	Hungary
Barbados	Liberia	Ethiopia	Jamaica
Benin	Libya	Guatemala	Lithuania
Brunei	Madagascar	Lebanon	Nicaragua
Bulgaria	Malaysia	Moldova 3/	Papua New Guinea
Burundi	Moldova	Mauritania	Paraguay
Cambodia	Mongolia	Namibia	Poland
Cameroon	Morocco	Pakistan	Russia
C.A.R.	Mozambique	Senegal 3/	Seychelles
Chad	Myanmar	Ukraine	Slovakia
Chile	Nepal		Suriname
Colombia	Niger		Thailand
Congo	Nigeria		Tonga
Cote d'Ivoire	Oman		Trinidad & Tobago
Croatia	Panama		Tunisia
Dominican Republic	Peru		Turkey
Dubai	Philippines		Uruguay
Egypt	Qatar		Uzbekistan
El Salvador	Romania		Venezuela
Equatorial Guinea	Somalia		Zambia
Gabon	South Africa		
Gambia	Sudan		
Ghana	Syria		
	Tanzania		
	Togo		

Source: Barrows (1997)

**Table B. Key Characteristics of Fiscal Petroleum Regimes, Selected Developing Countries**

Country	Royalties	Production	Income tax rate	Resource rent	D.W.T. (nonres)	Investment	State equity
<u>Asia and Pacific:</u>							
Bangladesh	None	60-70% (V)	No	None	...	Yes (I)	No
Brunei	5-	None	55%	None	...	Yes (E)	50%
Cambodia	12.5%	40-65% (V)	30%	70%	...	Yes (I, A,Cr)	No
Indonesia	...	(V)	30%	70%	...	Yes (A, E,U)	10%
Malaysia	10%	80-90% (V)	35%	(Pr.)	13%	Yes (A, E,U)	10%
Mongolia	%	(V)	38%	None	%	E,U)	10%
P.N.G.	12.5%	50-70%	40%	20-25%	No	Yes (I)	%
<u>Middle East:</u>							
Abu Dhabi	12.5-20%	None	55-85%	Production	...	None	60% (C)
Algeria	10-20%	(P)	50%	None	%	None	51%
Bahrain	None	70%	50%	None	...	None	No
Dubai	12.5-20%	None	%	None	...	Yes (I)	ne
Egypt	20%	70-87%	55-85%	None	No	(I)	No
Libya	10%	(V)	40.55%	None	ne	...	ne
Moroc	16.67%	Yes (P)	65%	Yes (ror)	...	Yes (A,I)	No
<u>Transition econ.:</u>							
Azerbaijan	...	(P)	39.6%	(ror)	20%	No	ne
Kyrgyz Republic	No	45-65% (P)	30%	No	15%	Yes (E,O,U)	7.5-20%
	ne	(P)	No	ne	15%	(E,O,U)	20%
	No	60-80%	ne	No	15%	Yes (H)	None
	ne	(V)	25%	ne	15%	...	None

Sources: Barrows (1997), Coopers & Lybrand (1998), PricewaterhouseCoopers (1999), and International Bureau of Fiscal Documentation (various).

1/ Production sharing linked to physical volume of production (V), years of production (T), or realized profitability (P) 2/ Investment incentives: tax holiday (H), accelerated depreciation (A), tax credit (Cr), current expensing of exploration

and/or development cost (E), exemption of imports of equipment and capital goods (I),unlimited loss-carry forward (U) and other (O).

3/ The maximum equity share that the state can select to take, often on a carried basis (C).