House Resources

January 27, 2020

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WEEK GOALS AND RECAP

OIL AND GAS TRAINING

- This week we held 3 days of training classes with the intent to provide foundational background and context on the design of petroleum fiscal policy
  - Four 101 classes, about 100 registrants
  - Two 102 classes, about 100 registrants

- We purposefully did not to discuss specific bills or regulations

- We did not offer opinions on what to do – but did discuss pros and cons of certain actions or issues

- During this brief presentation we will highlight at a very cursory level key information from the 5 hours of 101 & 102 training, as well as provide a review of the Alaska's current oil and gas tax system

TRAINING SUMMARY

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OIL AND GAS 101

SUMMARY

- Oil and gas terms and jargon are extensive but important to building knowledge and preventing false assumptions and misunderstandings
  - Schlumberger Oilfield Glossary https://www.glossary.oilfield.slb.com
- Each source of hydrocarbons are finite
- Each barrel of crude oil and cubic foot of natural gas are not created or valued equally
  - Their value, and the associated costs to produce them, are dependent on quality specifications and location
  - These variations result in price premiums or discounts relative to global marker crudes or reginal natural gas hubs
  - Conventional and unconventional reservoirs require different technology and extraction methods, and have varied production profiles
- Oil companies and governments work together in countries across the globe to produce and market hydrocarbons

OIL AND GAS 101

SUMMARY

- From 1998 to 2018 global reserves increased roughly 50%. Alaska's share has declined
- The intent of a fiscal system is to provide economic and other terms that will attract sufficient capital for the prudent development and production of a country's mineral wealth
- There is no single ideal or optimum fiscal structure
  - Government drivers are unique
  - Each hydrocarbon development and production project tends to have unique characteristics and circumstances
- Alaska utilizes a fiscal system comprised of royalty (gross tax) and a petroleum tax based on net revenues

OIL AND GAS 102

SUMMARY

- The role of the government is to ensure the optimal development of its natural resources for the near-term and long-term benefit of its people
- The more durable fiscal systems today are those designed to respond to inevitable change as well as the up and down cycles of the energy industry and geopolitical events
- Policy design should start with a set of agreed goals, which tend to be unique for each government
- Fiscal regime design recognizes that government's own the majority of hydrocarbons in the ground and oil and gas companies provide the necessary capital, trained personnel and technology

OIL AND GAS 102

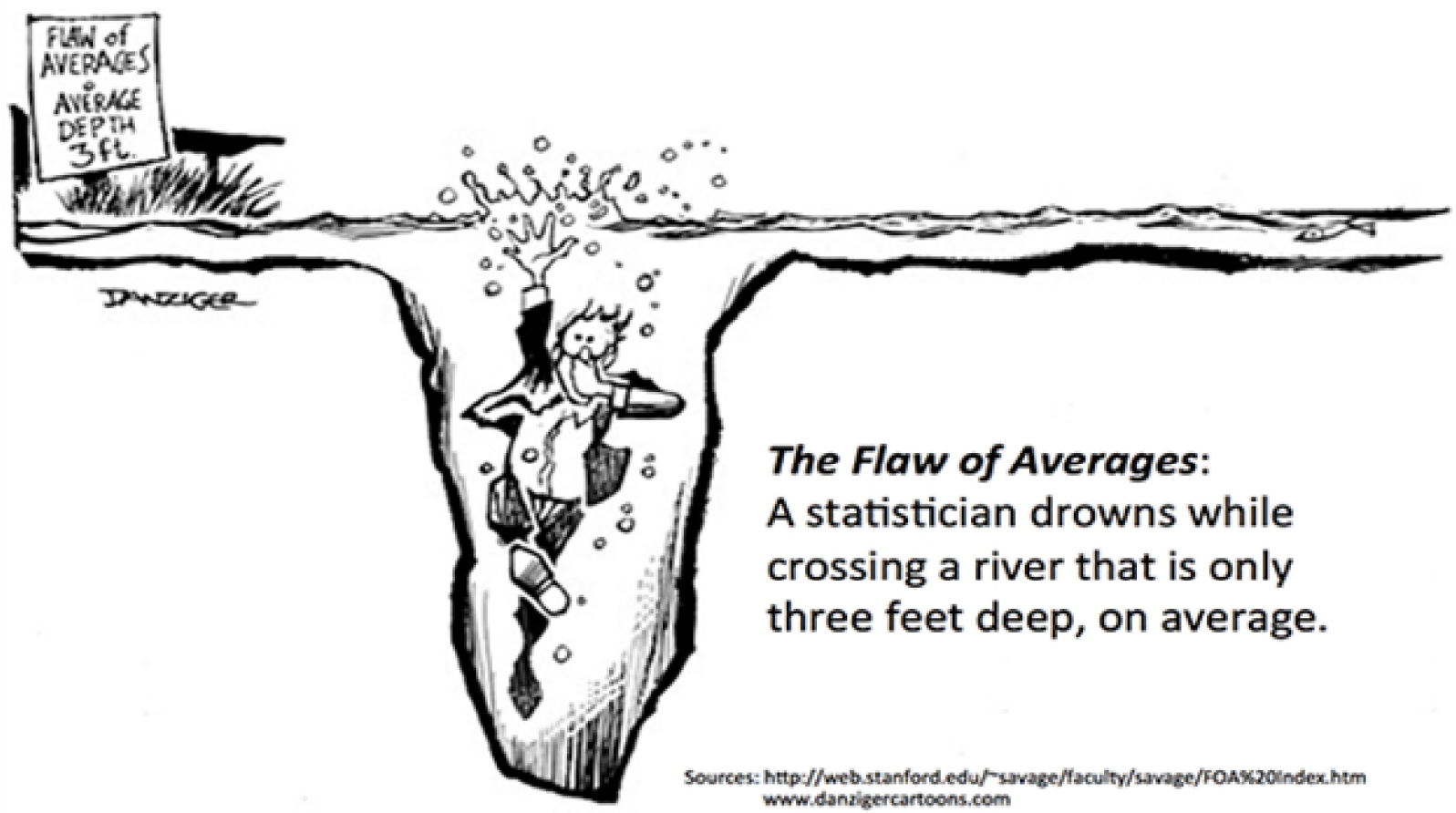
SUMMARY

- The use of a single aspect of a fiscal system, such as headline tax rates or government take, are not an effective way to measure competitiveness or the attractiveness for capital spending
- Within the concession and contract structures there are numerous tools and methods for designing fiscal policy that significantly impact the attractiveness of a regime
- Most of those tools impact the timing of cash flows to a company, and time plays an important role in a regime's attractiveness
- Insight was provided into how oil companies tend to evaluate project economics and make investment decisions

CAUTION: THE FLAW OF AVERAGES

OPERATIONS IN EVERY COUNTRY ARE HIGHLY VARIABLE

- All too often regimes are described, compared or, even worse, modelled using average values



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KEY CONSIDERATIONS

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CHANGE IS THE ONLY CONSTANT

INDUSTRY'S MAIN DRIVER

- The Petroleum industry has continually undergone change, thus it's important to balance preparing for the future while addressing the present in a global market, where no single region, player, or component is isolated from another, and where governments design fiscal policy that is responsive to a complex and sophisticated business environment in a global competition for oil company investment dollars

- In other words, when putting together petroleum fiscal policy you must assume an unpredictable future that can range from much better than hoped to much worse than feared

- The more durable fiscal systems today are those set up to respond to inevitable change as well as the up and down cycles of the energy industry and geopolitical events

ATTRACTING INVESTMENT CAPITAL

THE COMPETITION IS CONSTANTLY CHANGING

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ADDRESSING CHANGE IN FISCAL DESIGN

SCENARIO PLANNING

- To prepare for unexpected change, any policy and design goals should be tested against several possible future scenarios in order to provide a resilient investment climate

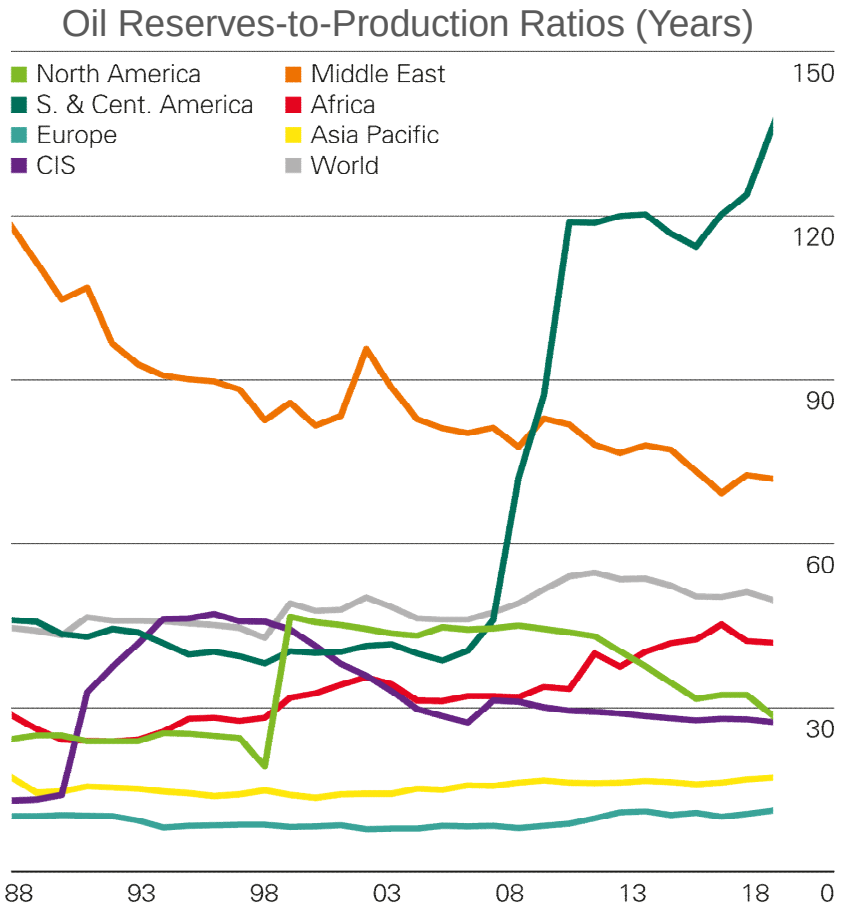
- For example:
  - Continued demand growth - business as usual
  - Move to Green – leveling off of demand followed by slow decline in demand
  - Accelerated Green- quick development and adoption of hydrocarbon alternatives, sharp decline in demand of fossil fuels

- By testing various policy alternatives against a range of possible future end states, a preferred pathway forward can be set

EXAMPLE ON HOW NEEDS DRIVE POLICY

ATTRACTING INVESTMENT CAPITAL

- Fiscal policy should be derived from a defined set of goals
- Each government is in a unique situation, and can choose to design fiscal policy to reach a desired outcome
  - Short term revenue needs vs building multi-generational wealth
  - Providing domestic energy supply
  - Growing associated industries
- The years of reserves in South and Central America have more than tripled since the 1990s
  - This is a result of incentivizing exploration activities with the goal of creating reserves



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EXAMPLE ECONOMIC IMPACTS

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INSIGHT. INQUIRY. INGENUITY.

CAPITAL SPENT IN HIGH TAKE COUNTRIES

WHY DO COMPANIES INVEST THERE?

- The concept of cost recovery is a globally accepted standard, applied various ways throughout fiscal systems. The most important parameters are:
  - Which costs can be deducted and/or recovered?
  - When can the deductions/recovery take place?
  - Before or after tax is due?

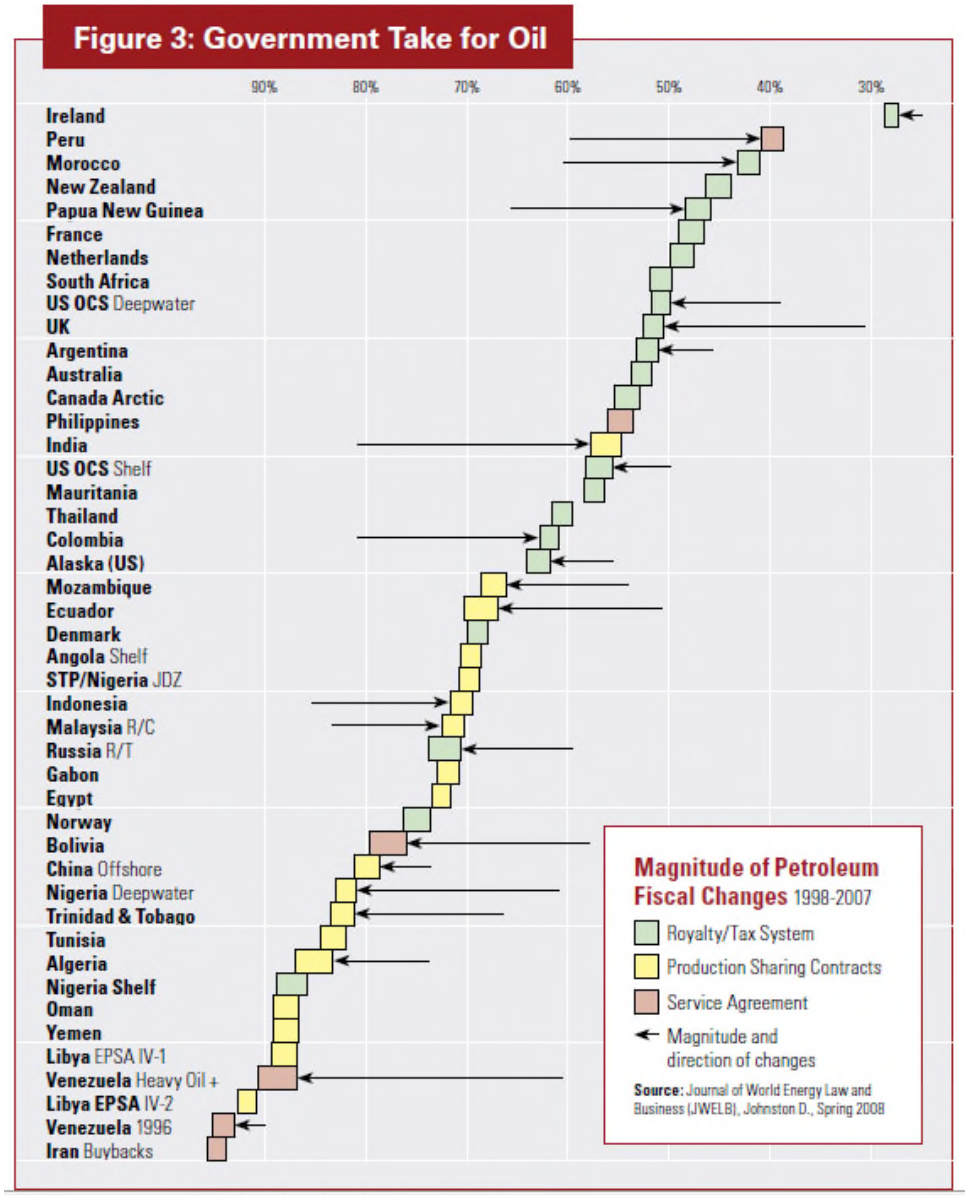
- Non-deductibility or exclusion of costs (such as disallowance of some or all NOLs) significantly hurts economics and increases risk, thus creating a deterrence for producers to invest

- Global standard is to deduct and recover 100% of costs, such as exploration, development, production, administration and services

- Usual minor exclusions are financing interest, excess corporate overhead, penalties, entertainment, and donations

SHARING BENEFITS

LEVEL OF GOVERNMENT TAKE



- Determining the right amount of government take is not an easy task
- Chart shows government take (or non-producer share)
  - Lower government take is to the top & to the right of the chart
  - Higher government take is to the bottom & to the left of the chart
- A rational assumption would be that the bulk of the petroleum investment dollars would be spent in countries in the top half of the table
- But there is significant industry spending in countries in the bottom half of the table
- **This tells us there is more to energy investment decision making than government rates of take**

CAPITAL SPENT IN HIGH TAKE COUNTRIES

ATTRACTING CAPITAL

- Simple example comparing 3 regimes with these key differentiators
  - Tax rates
  - Disallowed costs
  - Uplift

	Regime A	Regime B	Regime C
Allowed Costs	90	115	115
Disallowed Costs	25	0	0
Uplift %	0	0	10%
Uplift Years	0	0	3
Royalty	15%	0	0
Net Tax	45%	75%	85%

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CAPITAL SPENT IN HIGH TAKE COUNTRIES

ATTRACTING CAPITAL

	Regime A	Regime B	Regime C
Government Take	**60%**	**75%**	**85%**
Revenue	200	200	200
Less Royalty	30	0	0
Less Allowed Cost	90	115	115
Uplift	0	0	38
Taxable Income	80	85	47
Net Tax	36	64	40
Gross Profit	44	21	7
Less disallowed Costs	25	0	0
Non-taxed Upllift	0	0	38
Producer Share	19	21	45

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FISCAL REGIME TOOL KIT

BUILDING GOVERNMENT SPECIFIC FISCAL SYSTEMS

- So how does the simple math of Revenue – Costs = Taxable Profit become complex?
- Fiscal systems are modified using one of many different “tools” to achieve a subset of goals and to prevent another subset of unwanted outcomes
- Each of these tools can be deployed in a variety of ways
- While high-level fiscal structures have not changed much, variations on how to handle constituent parts continue to be developed
- Regimes and fiscal systems that share benefits that align with oil company investment decision-making metrics, timing and processes can be expected to attract the most investment dollars

FISCAL REGIME TOOL KIT ITEMS

TYPICAL GOVERNMENT TAKE METHODS IN USE TODAY

- Bonuses
- Bid Fees
- Annual Fees

- Income Tax
- Capital Gains Tax
- Petroleum Tax
- Property Tax
- Excise Duties
- Import Duties
- Ringfencing

- Royalty
- Cost Oil & Caps
- Profit Oil & Split
  - Rate
  - Reserves
  - R Factor
  - IRR
  - Combination
  - Delta Oil/Gas
- Work Program
- Abandonment Bank

- Data Transfer
- Facility Transfer
- Local Market
- Local Content
- Training

FISCAL REGIME TOOL KIT ITEMS

SIGNIFICANT OIL COMPANY ECONOMIC IMPACTS

- Capital Expense
  - Uplift
  - NOLs
  - Inv Credits
  - Depreciation Schedule
  - Recovery
  - Period Recovery Caps
  - Allowed / Disallowed
- Operating Expense
  - Sole Source vs Bidding
  - Affiliates
  - Allowed / Disallowed
  - Overhead
  - Abandonment
- Other
  - Liability
  - Environmental
  - Insurance
  - Employee costs
- Marketing
  - Ultimate sale point
  - Unit valuation point
  - Allowed expenses
  - Affiliated sales

OIL COMPANY DECISION MAKING

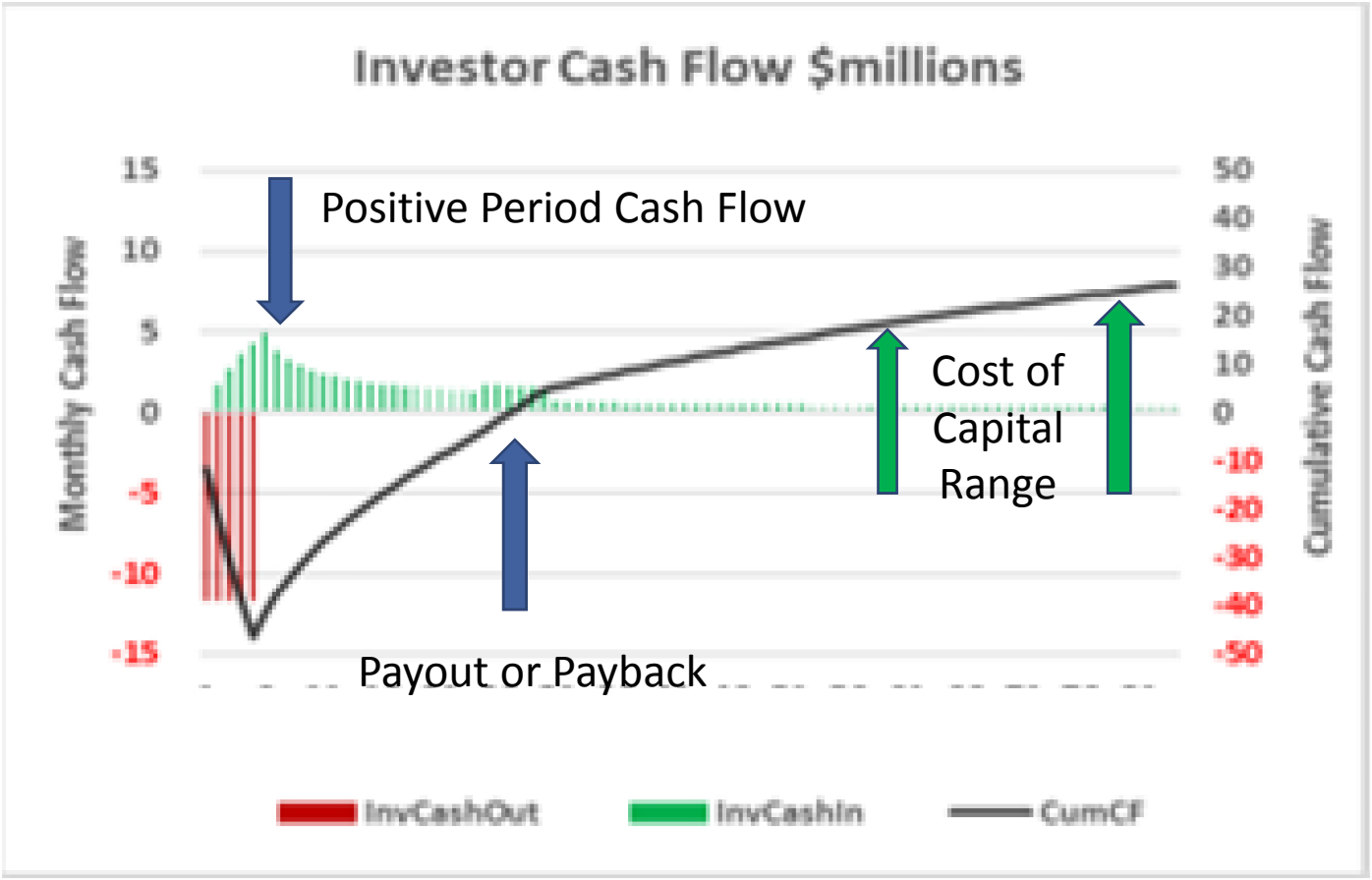
THEIR OWN STANDARDS

- It is not uncommon for producers to create a set of economic standards and project evaluation guidelines and require that all term projects be evaluated in a consistent manner

- Parameters that are typically established as part of a “corporate” standard include:
  - Multi-Year Price Forecast
  - Multi-Year Foreign Exchange Rates
  - Multi-Year Inflation
  - Discount Rates
  - Overhead Allocation
  - Required Sensitivities
  - Risk Analysis Methodology
  - Hurdle Rates for Project Approval

THE PROJECT "HOCKEY STICK"

POSITIVE CASH FLOW DOES NOT EQUAL PROFIT



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ALASKA: TAX & ROYALTY

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FISCAL REGIME TOOL KIT

THE CONCESSION

- Concessionary systems are viewed as having the least complexity
- In its basic construct this is true

  Revenue – Cost = Profit

- However, it can become quite complex

- Market Sale Revenue
  - Less Costs to market
- Value at license border
  - Less royalty
  - Less costs of operations
- Taxable value
  - Less tax
- Oil company profit

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ALASKA FISCAL REGIME HIGH LEVEL VIEW

CONCESSION VARIATIONS

- What causes concession based fiscal regimes to go from simple to complex?

- Usually it is a perception of achieving a big marginal gain or preventing a potential loss; i.e. plugging a loophole

- Putting Alaska in perspective:
  - At 500,000 bpd you get roughly 182,000,000 barrels per year
  - Thus $1 per barrel change in revenues or costs represents a change of $182,000,000 per year

- Consequently, governments like Alaska closely scrutinize revenues and costs and make incremental changes to laws and regulations to ensure they are creating the highest possible taxable value

FISCAL REGIME TOOL KIT

THE CONCESSION – ALASKA TODAY

- How does Alaska make sure the right value ends up back at the lease?

- Market Sales Revenue
  - Actual price and revenues if arms-length sale to a third party
  - If non arms-length sale to an affiliate, the price and revenues are to be agreed between the company and the State of Alaska
  - Large integrated oil companies tend to keep things in house

- Less Costs to Market
  - Shipping
  - TAPS
  - Same issues on affiliated transactions versus third party transactions
  - Additional issues with the perceived fairness of rates set by non-AK regulatory bodies

FISCAL REGIME TOOL KIT

THE CONCESSION – ALASKA TODAY

- Value at the license border/ wellhead
  - GVPP or Gross Value at the Point of Production
  - [Possible 20% GVR deduction]
- Less Royalty
  - State share varies
- Less Costs of Operations
  - Not all costs are deductible
  - Definition of 'direct' costs versus overhead (subject to limits on the deductibility)
  - Deductions not allowed on equipment until present in the field in Alaska
  - Carry forward net operating losses or NOLs

	UGF	Restricted	Total
State Land**	$4.84	$3.16	$8.00
NPRA	$1.75	$3.13	$4.88
ANWR	$3.30	$1.58	$4.88
Other Federal Land	$4.53	$2.85	$7.38
3-6 Miles Offshore	$0.84	$0.85	$1.69
>6 Miles Offshore	$0.00	$0.00	$0.00
Native Corp Land	$2.06	$0.00	$2.06

Source: Ed King

FISCAL REGIME TOOL KIT

THE CONCESSION – ALASKA TODAY

- Taxable Value
  - PTV or Production Tax Value
- Less Tax –
  - The state has established 7 “ringfences” for calculating tax
    - (a) Oil and gas north of 68 (other than gas used in state prior to 2022)
    - (b) Oil and gas not Cook Inlet and not north of 68
    - (c) Cook Inlet oil before 2022
    - (d) Cook Inlet gas prior to 2022
    - (e) Gas not Cook Inlet prior to 2022
    - (f) First 7 years for oil and gas not CI not N68 between 2012 & 2027
    - Oil and gas not covered in (a-f) above

FISCAL REGIME TOOL KIT

THE CONCESSION – ALASKA TODAY

- Taxable Value
  - PTV or Production Tax Value
- Less Tax –
  - The state has established 7 “ringfences” for calculating tax
  - For north slope production the tax payable is the greater of:
    - A gross tax on the GVPP
      - Rate ranges from 0% to 4% based on oil price
    - A net tax on the PTV less applicable credits
      - $0 to $8 per barrel based on oil price
      - $5 per barrel for GVR eligible fields
      - Exploration and other activity incentivizing credits
      - Small producer credit

FISCAL REGIME TOOL KIT

THE CONCESSION – ALASKA TODAY

- Taxable Value
  - PTV or Production Tax Value
- Less Tax –
  - The state has established 7 “ringfences” for calculating tax
  - For north slope production the tax payable is the greater of
  - Finally, the tax is paid by company and not by field
    - Every company is different
    - Those with large production revenues can immediately deduct expenses from new fields
    - Those with no or limited production revenues must wait for production on a new field to commence to deduct costs

FISCAL REGIME TOOL KIT

THE CONCESSION – ALASKA TODAY

- Taxable Value
  - PTV or Production Tax Value
- Less Tax –
  - The state has established 7 “ringfences” for calculating tax
  - For north slope production the tax payable is the greater of
  - Finally, the tax is paid by company and not by field
- Oil Company “Profit”
  - Less Alaska corporate income tax
  - Less us federal income tax
- Money into the oil company bank account

FISCAL REGIME TOOL KIT

THE CONCESSION – ALASKA TODAY

- Driver: Every $1 per barrel represents $182,000,000 per year

- Through the years, with numerous modifications, the simple concessionary design has become quite complex in Alaska

- Fiscal system complexity leads to:
  - Greater number of regulations
  - Greater costs to administer
  - Greater need for regular auditing
  - Greater likelihood to end up in some form of dispute; and
  - Unintended consequences when changes are attempted

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DEALING WITH UNINTENDED CONSEQUENCES

THE RISKS OF COMPLEX FISCAL SYSTEMS

- By creating, revising, or eliminating one aspect of a complicated tax system, there is a very likely risk that other areas of the tax system will be affected to the detriment of one or more parties
- These **unintended consequences** can undermine the intent of original efforts and are often difficult to see or anticipate
- Before making changes, a thorough analysis should be performed to make sure the level and degree of interdependency of certain taxation terms is understood and addressed

THANK YOU

QUESTIONS?

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