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# Trends in Energy Financing and the Effects of The Reform

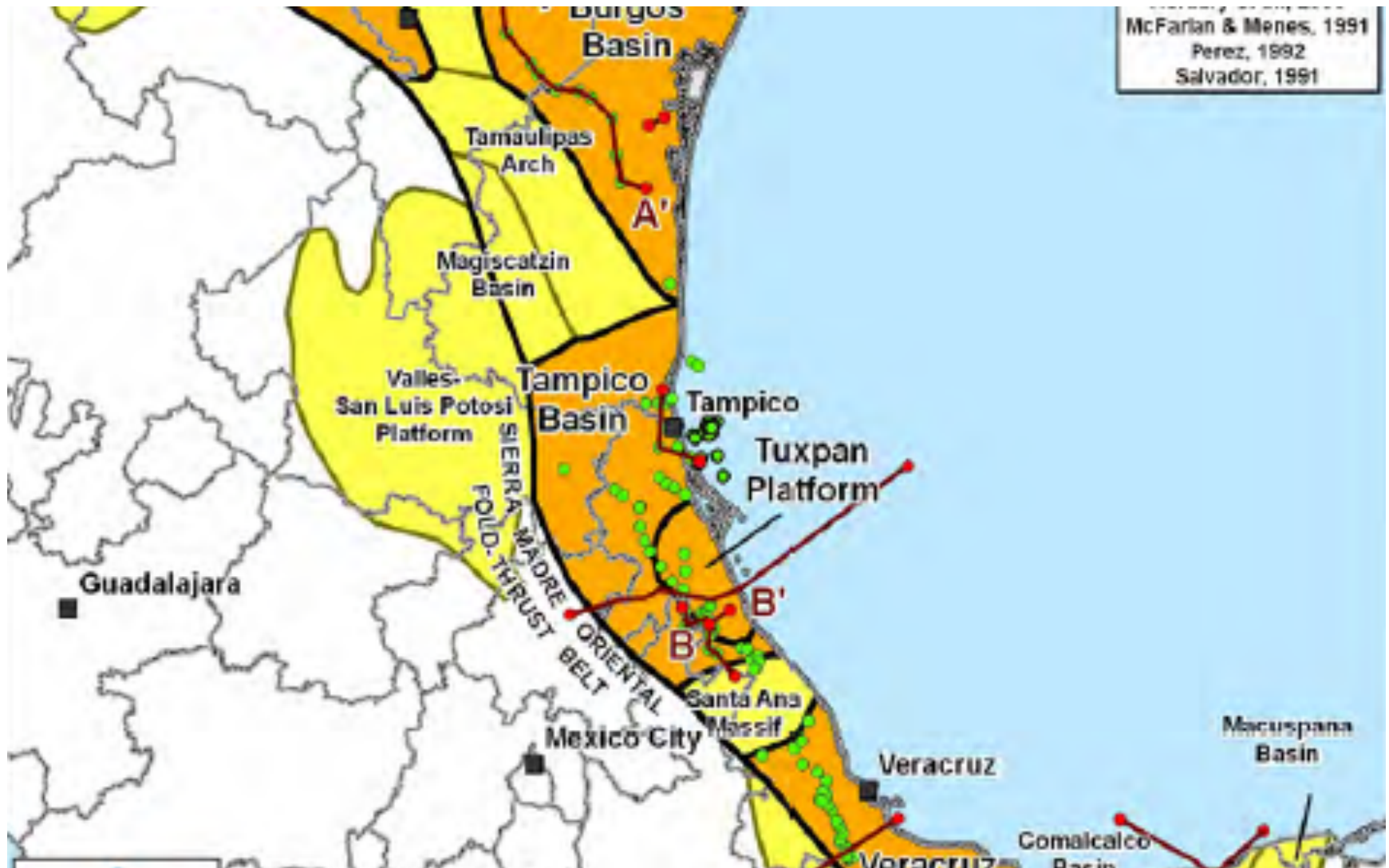


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# Eagle Ford in northern Mexico



# OFSCap Services - Investment Banking

- Mergers and Acquisitions
  - Deal-making
  - Buy-side and sell-side advisory
  - Divestitures
- Capital Raising
  - Institutional and Private Equity
  - Growth Equity
  - Recapitalizations
  - Leveraged Buyouts
- Financial Advisory
  - Deal Structuring
  - Fairness Opinions and Valuation
  - Industry research



***OFSCap prides itself on bringing together investment banking skills along with corporate development knowledge in providing both a financial and strategic solution***

# Reform, Regulatory & Financial Experience

- The Hydrocarbons Law regulates articles 25, 27 and 28 of the Constitution. It confirms that : Mexican Hydrocarbons remain property of Mexico; The Exploration and extraction will be consider by the law a strategic activity reserved to the Nation, although, Private Parties are allowed to participate through Contracts issued by the State to the investors. The remaining of the Energy activities are open to the investors.
- Once private investors are permitted entry in a contract, it is key having regulatory structures providing transparency and ensuring that everyone plays by the same rules

## Learn the talent to invest In “the right project”

- Ability to assign value to properties and companies
- Make investment decisions in an oil and gas landscape that is relatively unproven
- Mexico NOC’s and new IOC’s investors, learn from other nations experience, like Brazil and Colombia.  
(Example: the “local Content” in Brazil from 37% to 47%  
(Mexico’s local content will become clearer with time)
- Companies that invest in oil & gas projects need top notch modeling & risk management talent.
- Deep pockets and long term commitment
- The above, greatly improves the ability to select the right project and allocate the capital with higher success

# Pemex Financial Autonomy After the Reform

- The financial autonomy of Pemex getting partnerships on round zero was based on both: a new regime of debt and capitalization and financial flexibility
- Mexico has the financial goal: "Establish partnerships with expert Oil & Gas companies that are able to explore and produce in deep water, unconventional reservoirs in the northern states: Sabinas, Burgos and Burro Picacho Basin with heavy crude fields and mature fields

# Pemex Financial Risk

- To reduce financial risk, Pemex diversifies its portfolio of activities of exploration, development and production. Achieving this "large investment capacity" and strengthening the efficiency of the Company and its technology.
- The Mexican Eagle Ford will require annually \$64 Billion Dollars to achieve the extraction, exploration and production of unconventional hydrocarbons over the course of the next 15 years

# Assignment of Contracts for Eagle Ford

- Additionally, contracts will be regulated in the commercial and common law which completes its implementation. Contracts will be subject to a tax regime that will address considerations and conditions, project by project.
- In turn, each contract is determined by Type, Right to Explore and Ownership of Production
  1. Concession~ Private ~ Private
  2. Join Venture~ Shared ~ Shared
  3. Production Sharing ~ State~ Shared
  4. Service contract ~State ~ State



# Concessions to Private Investors After The Reform

- As a result of Round Cero Pemex will add in Round 1 a public concession of eight blocks to private investors that include 1,500 square kilometers close to Cd Acuña, Coahuila
- Currently, Lewis Energy has been in a collaboration agreement with Pemex for 10 years operating a group of wells in the North of Mexico. (Lewis can actually operate through a 100 % owned Mexican Corporate entity)
- Companies willing to enter into The Eagle Ford, most understand” the art of drilling” in a short time of 15 days. Lewis Energy currently operates 400 wells- having the knowledge of the “fracking” business

# Best Documented Play: Burgos Basin

Basic Data	Basin/Gross Area		Burgos (24,200 mi <sup>2</sup> )			
	Shale Formation		Eagle Ford Shale			Tithonian Shales
	Geologic Age		M. - U. Cretaceous			U. Jurassic
	Depositional Environment		Marine			Marine
Physical Extent	Prospective Area (mi <sup>2</sup> )		600	10,000	6,700	6,700
	Thickness (ft)	Organically Rich	200	200	300	500
		Net	160	160	210	200
	Depth (ft)	Interval	3,300 - 4,000	4,000 - 16,400	6,500 - 16,400	7,500 - 16,400
Average		3,500	7,500	10,500	11,500	
Reservoir Properties	Reservoir Pressure		Highly Overpress.	Highly Overpress.	Highly Overpress.	Highly Overpress.
	Average TOC (wt. %)		5.0%	5.0%	5.0%	3.0%
	Thermal Maturity (% Ro)		0.85%	1.15%	1.60%	1.70%
	Clay Content		Low	Low	Low	Low
Resource	Gas Phase		Assoc. Gas	Wet Gas	Dry Gas	Dry Gas
	GIP Concentration (Bcf/mi <sup>2</sup> )		21.7	74.4	190.9	100.3
	Risked GIP (Tcf)		7.8	446.4	767.5	201.6
	Risked Recoverable (Tcf)		0.9	111.6	230.2	50.4

# Understanding Investor Concerns

- Investors are looking for clear terms and conditions on their investment agreements to be stable inside a regulatory environment that can be “monetised”. At the end of the day, most of the investments in the energy sector have a very long shelf life, it means: the investment horizon should be 15 to 20 + years with a significant initial investment capital.
- Under these conditions, the ability of the Mexican government to attract investment in the energy sector, will be driven not only by its size and attractive - which is certainly large and relevant to the industry, but more importantly, the way in which the regulation is implemented and the rule of law enforced.

# Investor Objectives

- Develop reserves to add to reserve inventory
- Diversify asset base
- Minimize capital and operating costs
- Maximize operational freedom
- Reasonable taxation and royalties
- Maximize equity returns
- Minimize political risk and provide for stabilization of investment
- Establish long term, mutually beneficial relationship with host country

# Types of Financing Available:

- Debt or Capital?
- The Size Matters:
  - Large Corporation –Corporate Financing
  - Small and Medium-Forced to get the capital structured as a solution
  - Preferred Equity vs. Mezzanine Debt
  - Both Financing Types fill the Financing “Gap” between Preferred Equity and Capital, both represent “pros” and “cons”

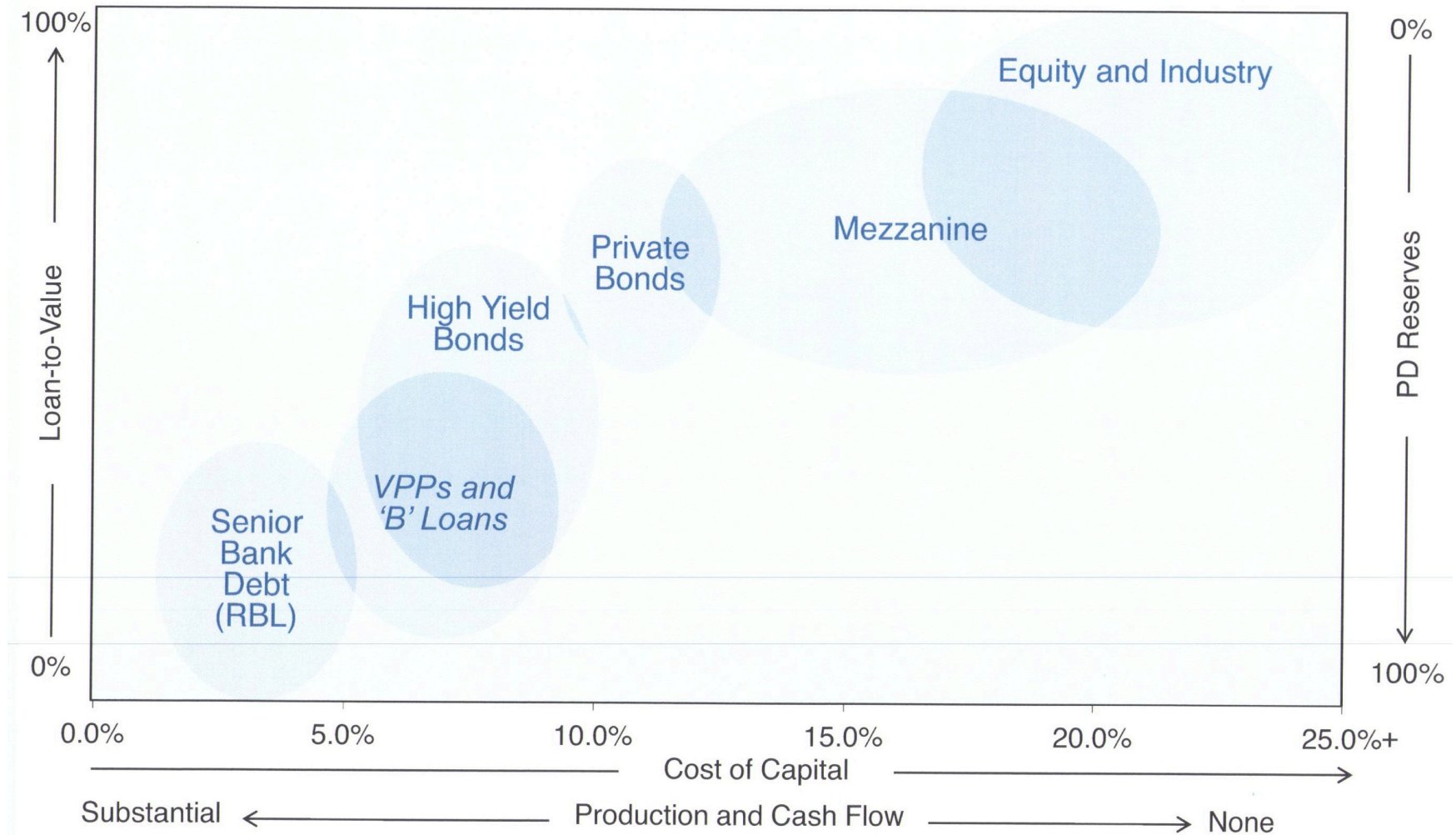
# Mezzanine Debt

- Debt based on shares with a support on warranties
- Generally with out warranties
- Fill the “gap” between Senior Debts (Banks/ securities) and Capital Investors
- Useful in long term high yield growth capital of the Company
- Used in expanding purchases, share acquisitions
- Pros: Easier Criteria and loan agreements, very low or no reimbursement during first years of investment
- Cons: Deliver equity, higher interest rate then usual

# Preferred Capital

- Capital accompanied by debt as a characteristic
- Generally: No warranty
- Fills the gap between senior debts (Banks/ insurances) and equity investors of common equity (commonly used to finance projects in US)
- Useful in long term contracts with a high yield
- Acquisition of assets and shares
- Pros: Option of a payment return by a long term financing. Mostly convert on a variable return payment and reimbursable
- Cons: Refusal to give up the capital

# Risk-Return Spectrum of Sources of Capital





# Fund Needed for US Non-Conventional

- **~\$1.8 Trillion** of Capex Needed to Develop US Resource Plays
- **This will directly compete with Mexican needs**
- Estimates of the 11 US resource plays cost \$1.8 Trillion in the form of capital expenditures to develop core acreage.
- Estimate could increase by over 50% if natural gas prices improve
- Capital estimated do NOT include infrastructure or midstream plays

	Estimated Total Area (Acres)	Wells to be Drilled	Implied Recovery Reserves (Bcfe)	Future Drilling Capital (\$mm)
Marcellus	12,000,000	150,000	750,000	675,000
Utica	5,000,000	52,500	343,833	281,250
Haynesville	3,000,000	37,500	246,500	300,000
Eagle Ford	3,000,000	37,500	206,100	206,250
Fayetteville - Core	2,500,000	31,250	84,375	101,563
Bossier	1,000,000	12,500	68,800	93,750
Woodford	1,000,000	12,500	38,800	68,750
Barnett - Core	1,200,000	21,818	54,545	56,727
Bakken	3,000,000	9,375	33,800	30,938
<b>Total Drilling</b>	<b>31,700,000</b>	<b>364,943</b>	<b>1,826,753</b>	<b>1,814,228</b>

# Issues to Finance a Service Contract

- Find the solution to the “Gap”
- Sponsors or Service companies can normally provide some equity
- The big challenge is the
  - Example: \$100 million Pemex contract
    - Sponsor can arrange \$15-20 of equity
    - Long term debt is available for \$70 million
    - The GAP is the \$20-25 million
- Solution is structured capital
  - Mezzanine debt (normally with an equity kicker)
  - Preferred equity (lower coupon with a greater portion of equity)

# Due Diligence Checklist

- Financial statements – 3 year historical preferred
- Financial model – assumptions clearly articulated
- Business Plan
- Copies of key documents (contracts, permits, licenses, authorizations, etc).
- Equipment purchase list
- List of advisors (bankers, accountants, lawyers, etc.)
- Management team resumes/bios
- Sources of revenue
- Corporate structure
- Timelines
- Background check

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# Lessons Learned for Raising Capital

- Start the process as soon as possible
- Hire a quality financial advisor
- Provide documentation as fast as possible
- Be highly communicative
- Plan for delays
- The process of raising capital is more difficult than expected
- Takes longer than expected
- Don't withhold information

# Risk Matrix

Risk	Impact	Mitigation/Management
Commodity Prices	Oil and gas prices are affected by global supply of and demand for these commodities. Factors that influence these include operational issues, natural disasters, weather, economic conditions or actions by major oil-exporting countries. Assumptions regarding future commodity prices and potential program is	Manage costs and operations to be a low cost operator. The purpose of an oil and gas investment is to obtain pure commodity exposure, not to hide from it. However, d potential program is
Reserve Replacement	Future oil and gas reserve acquisition	Reserve replacement planning. Our focus is on potential
Production/Operational	This is a complex process involving PE projects. These include engineering, scheduling, political and commercial compar	Operational efficiency, technology and low cost production. Internal communication and member standing issue,
Environmental	Environmental impact	Environmental impact, however, we will manage and risk reduction. Integrity.
Safety / Spill	These risks are associated with exposure to general operational hazards; and personal health and safety. The consequences of such risks materializing can be injuries, loss of life, and environmental harm and disruption to business activities.	Plan to mitigate this risk and support safe and secure execution of all critical operating activities.

**Confidential**  
 OFSCap always prepares a Risk Matrix for every project. Manage the difficult and expected questions before a funding source asks the question/s.

\* While OFS makes an attempt to articulate known risks above, there may be additional risks not envisioned by the team.

# Contact Information

## OFSCap, LLC

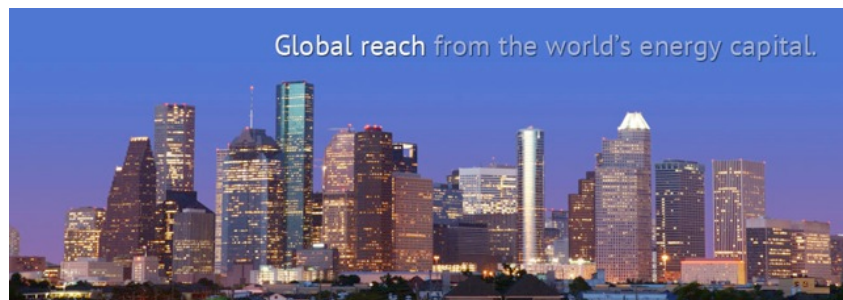
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