Pemex and Mexico's Energy Reform under the New Administration

Leticia Arroyo Abad

(City University of New York)

and

Noel Maurer

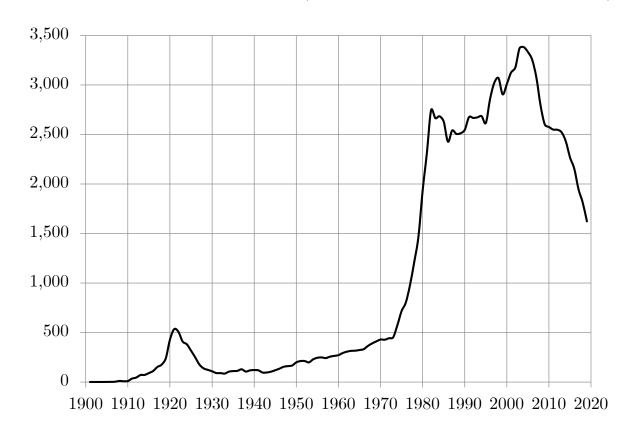
(George Washington University)

The Outlook for Mexico's Energy Sector under the López Obrador Administration
Woodrow Wilson International Center for Scholars
Washington D.C., March 5, 2019

The problem

Production, 1900-2019

(in millions of barrels per day)



Revenues and pre-tax expenses, 2001-17

(millions of 2017 pesos)



A Crude Reform: Pemex in Mexico's New Energy Landscape

• Reform in theory

• Reform in practice

• Reform under AMLO

Energy reform in theory

Constraints

Financial

Fiscal

Human capital

Solutions

External capital

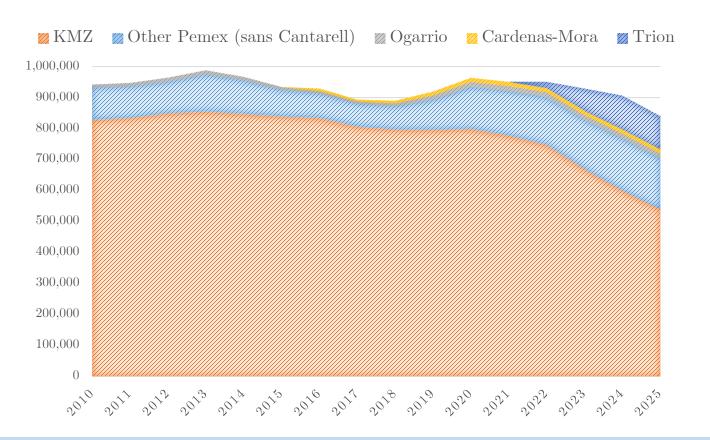
Tax reductions

Reorganization

Reform in practice: External capital

Estimated production, 2010-25

mbd by field (sans Cantarell)



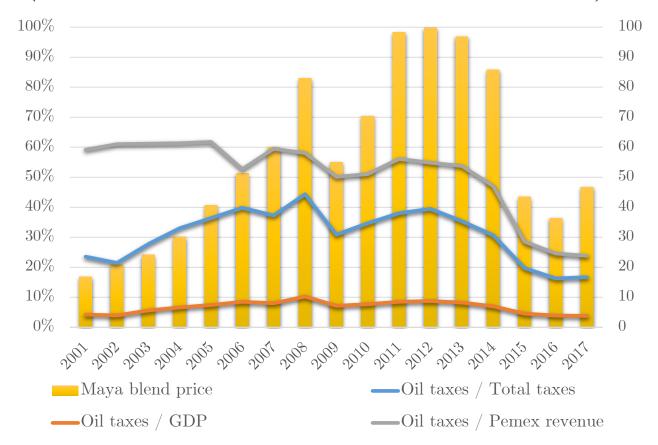
Farmouts did not change the game

- Other than Trion, the farmouts are sideshows
- Trion has a development breakeven price of \$53 at current tax rates
- Pemex has recently found shallow-water fields that should produce (by 2020) 193k-210k bdp (Manik-101A, Mulach-1, Kinbe, Koban, Xikin and Esah-1)

Reform in practice: Taxes

Pemex taxes, 2001-17

(share of Pemex revenue, federal taxes, and GDP)



Pemex's tax burden

• Taxes fell remarkably after 2015

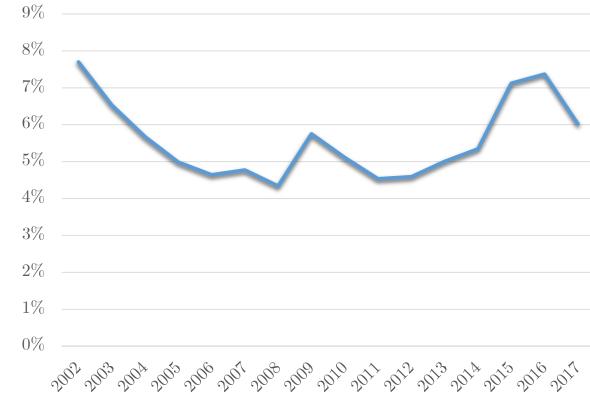
• But taxes aren't the real problem; consider that pretax earnings have collapsed

Reform in practice: Human capital

Pemex employees and unionized share



Pemex payroll as % of revenue, 2002-17



Reform in practice: Why not more savings?

Pemex wages and Mexican wages



Incentive structures

- Pemex line employees are wellpaid by Mexican standards but underpaid by international standards
- We doubt the incentive story
 - -Pemex executives and engineers (unlike, say, YPF or Petrobras) are rarely recruited by outside companies

Energy reform: little popular buy-in

How it was passed ...

- EPN used the PRI's centralized nature to strike a deal with the PAN;
- The split in the left gave EPN cover to propose the Pacto;
- Energy reform wasn't part of the Pacto, but EPN used the atmosphere of cooperation to speed reform through with PAN support;
 - Smaller parties bought off
- Passed on party-line vote
- Deschamps threatened into line

- ... led to thin popular support
- The process didn't give reform popular support;
- EPN spent a ton of money advertising how great energy reform was going to be. It set an expectations bar that people would quickly get better and cheaper gasoline and electricity. When that didn't happen, the public was very disappointed and even angry.

Reform under AMLO: Pemex's rescue package

External capital

Debt management

Farmouts

Tax burden

Six-year \$750m tax break

Federal support

Inefficiency

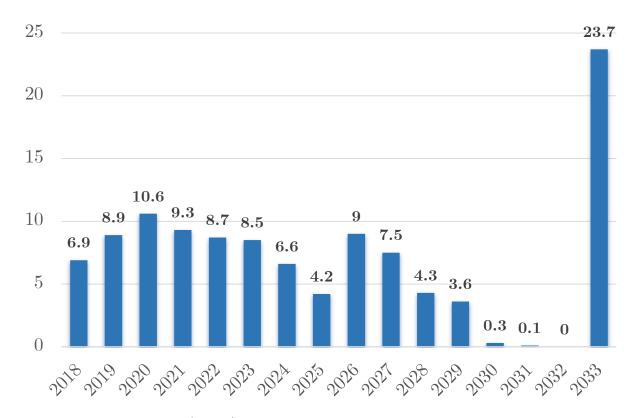
Anti-theft

Anti-corruption?

Reform under AMLO: External capital

Debt repayments, 2018-33

(billions of current US dollars)



Context

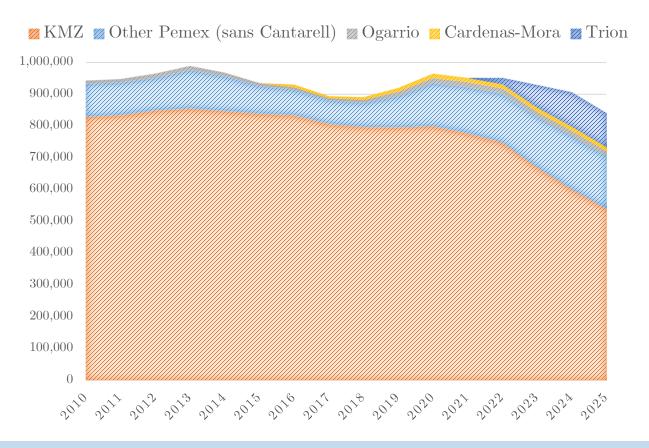
- Pemex is the world's most indebted oil company
- Debt payments should be "manageable" but Pemex's cost structure makes that difficult
- The farmouts (always overstated) have an uncertain future

Source: PEMEX (2019)

Reform under AMLO: External capital

Estimated production, 2010-25

(mbd by field –sans Cantarell)



Context

- Pemex is the world's most indebted oil company
- Debt payments should be "manageable" but Pemex's cost structure makes that difficult
- The farmouts (always overstated) have an uncertain future

Reform under AMLO: Tax break and federal support

The support package

Apoyos del Gobierno de México para PEMEX

			MONTO	
			MMDP	MMDD
1	Capitalización		25.0	1.3
2	Monetización de pagarés (pasivo laboral)		35.0	1.8
3	Reducción de la carga fiscal (acumulativos anualmente, para un total de 90 mmdp en 2024)		15.0	0.8
		Subtotal	75.0	3.9
(4)	Ingresos esperados por combate al robo de combustible*		32.0	1.6
		Total	107.0	5.5

El Gobierno de México, a través de la SHCP, se compromete a tomar medidas adicionales de ser requeridas

* No incluye impuestos.

Source: Secretaria de Hacienda (2019)

The support package in context

- The tax cuts amount to 4% of the company's annual liability
- The capital injections add up to less than half the company's average annual debt amortization.
- The markets didn't like it:
 - □ Peso weakened with announcement □ Bond yields increased by 7 basis points
- The ratings agencies didn't like it

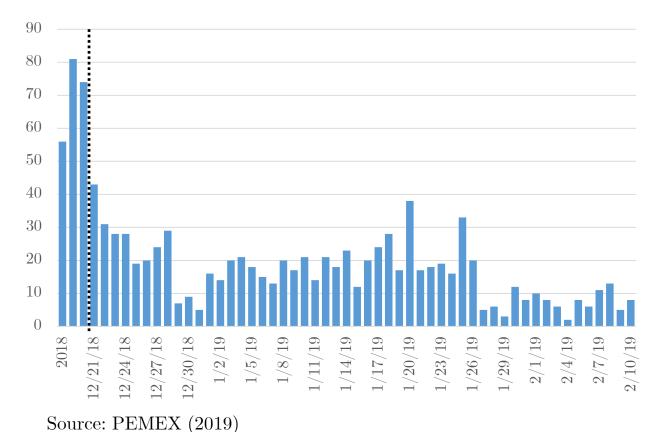
 □Fitch downgraded long-term debt from BBB+

 to BBB- paired with negative outlook
- The IMF didn't like it (but the IMF hates everything)

Reform under AMLO: Addressing inefficiencies?

Volume in fuel theft, Dec 2018-Feb 2019

(in mbd)



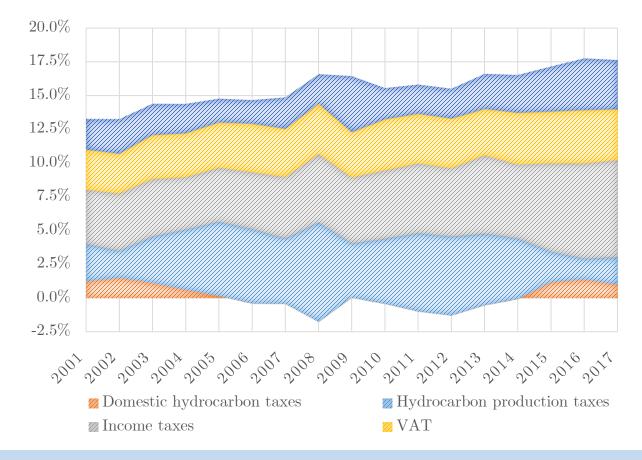
- Patrols require 15,000 soldiers in three shifts
- The action is necessary—but won't dramatically improve Pemex's bottom line
- Internal inefficiencies are massive:
 - \Box It takes 70.7 days to pay suppliers
 - □Salina Cruz refinery took longer to get back running and is still running at only 39.6% capacity
 - □Illegal tappings went unchecked and the SCADA system was poorly installed (so ... uh ... where does the data to the left come from?)
 - □ Fertilizer and cogeneration ventures flopped
 - □Nitrogen injection operations slow to shut down

Big picture: Why save Pemex?

- Mexico doesn't need hydrocarbons
- By 2030, the country can generate 284 TWh of renewable electricity per year based on lowball projections
- The country has already freed itself from dependence on oil revenues

Federal taxes, 2001-17

(share of GDP)

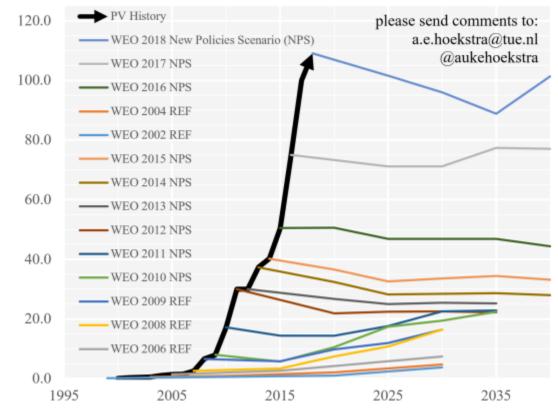


Big picture: Why save Pemex?

- Mexico doesn't need hydrocarbons
- By 2030, the country can generate 284 TWh of renewable electricity per year based on lowball projections
- The country has already freed itself from dependence on oil revenues

Annual PV additions: historic data vs IEA WEO predictions

In GW of added capacity per year - source International Energy Agency - World Energy Outlook



Source: Sener and IRENA, "Renewable Energy Prospects: Mexico" (2015) available at $\frac{\text{https://www.irena.org/publications/2015/May/Renewable-Energy-Prospects-Mexico}{\text{Mexico}}$