

US Position in the International System Regarding Oil Supplies, Development of The Oil Sector Before WWI

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Key questions

- What is the US role in global energy environment?
- What role does oil play in the US and „western“ economies?
- What are the specific features of oil as an energy source?

US as a Key Player in the System

- Rooted in early 1800s
 - Monroe doctrine 1823, „Manifest Destiny“,...
 - Originally a defense against European powers, aspirations on hegemonic role in N. & S. America, W. hemisphere,...)
- Efforts to secure position on the W. hemisphere – isolationism (ended with WW II)
- Efforts to eliminate threats to own security and position
 - main and stable goal of the US foreign policy (and, in fact, of any other state)
- Introduction of interventionism – after WWII
 - e.g. Spykman, Kennan (containment), Brzezinski,...
- From isolationism to global interventionism
 - development of challenges directly correlated with the development of the US position in IR and challenges the US has faced
 - from national to hemispheric and global





US Advancing to a Hegemonic Status

	Traditional imperial empires	United States
Main goal	Control over the system	Control over the system / Earn benefits
Means of exerting the power/controlling other actors	Directly – by using hard power	Directly & indirectly - by also other means (soft power)
Territorial expansion	Important	Not important
Role of ideology	Not important	Important, one of the main goals (and also tools at the same time), importance of soft power
Nature of a state economy	Focus on autarky, independence	Open
Means of using military power	Waging wars using own military power	Waging wars in cooperation with allies
Level of military cooperation with other actors in the system	Low level of cooperation	High level of cooperation

Cold War & Post-Cold War Era

- Hegemonic rivalry between US and USSR since the WWII
 - US as a hegemon in its own political and cultural environment and vice versa
- After the Cold War – victory of liberal democratic order (F. Fukuyama), USA as a sole global hegemon surpassing other actors (in military sphere, economy, technology, cultural attractiveness)
- US - facing various threats in different eras and areas
 - Another superpower in the system (USSR)
 - „Rogue states“
 - Terrorism
 - **Threats to economy**
 - Environmental threats, etc.

Cold War & Post-Cold War Era

- US as a hegemon supported by culturally and ideologically compatible countries, capable and willing to exert power abroad
- US acts in its own interest as well as in the interest of ‘like-minded’ countries
 - allies profit from the hegemonic role of the US
- **Main goal – to eliminate immediate threats to its position**
 - **stays relevant regardless the structure, level of the environment/threat (local, hemispheric, global), and/or era**

Role of the US in the System

- High importance of the soft power component compared to traditional imperial powers (J. Nye)
 - cultural compatibility as a facilitating factor
- The US position as a result of combination of several factors (military and economic power, favourable geography, cultural attractiveness, ...)
- Liberal-democratic principles and free market as tools for spreading the influence and cementing alliances, important role of mutual **interdependency**
- **Hegemon:** An actor whose power influences other actors in the system and makes them to act according to the hegemon's will (Jackson & Sorensen)

Type of Power	Behavior	Sources	Examples
Soft	Attract and co-opt	Inherent qualities	Charisma
		Communications	Persuasion, example
Hard	Threaten and induce	Threats, intimidation.	Hire, fire, demote
		Payment, rewards	Promotions, compensation

Oil as a Factor in the US Foreign Policy

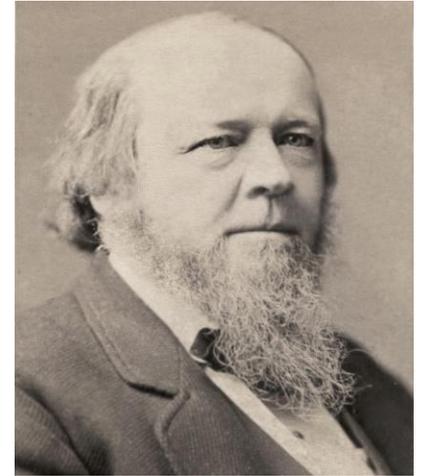
- Insufficient/unstable/unaffordable oil supplies as one of threats for the (US) economy, internal and external security, and position in IR
- Also a threat to the stability of the (world) system – ramifications for the economy
- Oil as a determining economic factor, vital for exerting power
 - Economic power as universal power (Gilpin)
- The pattern of mutual support of like-minded countries is applied also in the case of oil supplies
- **Threats to oil supplies = threat to position of the US as such**

Beginning of the US oil industry

- Oil was a widely known substance even before mid 1800s (rituals of native inhabitants, curing substance, natural dye,...) but its importance was marginal
- Extracted by very simple methods (naturally occurring /gushing streams, seepages, oil spills on lakes,...) enough to meet low demand
- Demand for safe and reliable source of lighting
- oil was confronted with other sources (turpentine, whale oil, coal gas,...)
- Ongoing mechanization demanded lubricants and fuels
- Uncertainty about both – demand and supply (sources)

Benjamin Silliman

- 1855 - Hired by George Bissell and James Townsend
- Silliman got USD 526,08 for this research
- Fractional distillation of oil
- “Gentlemen, it appears to me that there is much ground for encouragement in the belief that your Company have in their possession a raw material from which, by simple and not expensive processes (fractional distillation), they may manufacture very valuable products.”



Beginning of the US oil industry

- Entrepreneurs Bissell and Townsend saw an opportunity in oil resources - sent col. Drake to explore a potentially oil-rich region in Pennsylvania
- Efforts to develop more advanced ways of extracting oil – drilling – a method considered unsuitable and economically non-viable (originally used for drilling wells)
- August 27, 1859 – first oil well was successfully drilled
- Titusville (PA) – the ‘birthplace’ of modern oil industry in US
- Introduction of ‘barrel’ as a unit of measurement (159 l)
- Civil War as an important factor accelerating the development (use of mechanization)

Titusville, Drake and the 1st oil well





Beginning of the US oil industry III.

- Rapid and unrestricted development caused oil price shocks as oil wells were emerging and only subsequently getting to its customers (short- to mid-term discrepancies between demand/supply)
- Oil prices were fluctuating and market was unstable (e.g. from 10\$ to 50c in few weeks)
- New ‘Gold Fever’ – many oil wells damaged due mismanagement and hasty extraction
- Low awareness of overall oil reserves – fears that production would soon cease („peak oil“)
- ‘Interim towns’ – Oil Regions (Pithole) development – towns growing and disappearing

Pithole

— 0 -15 000 - 0 pop. in less than a year (1/1865-1/1866)

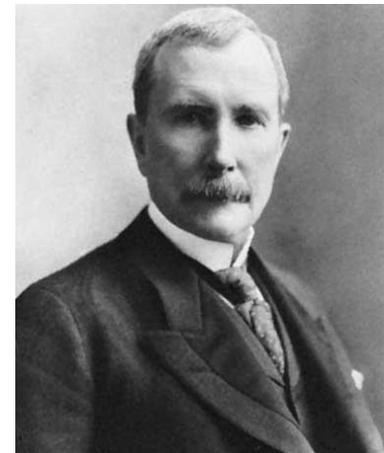


Beginning of the US oil industry IV.

- Key role of railways – deals with oil companies (refineries) – creating unfair environment
- Refineries in the ‘driver’s seat’, producers in inferior position, often blackmailed and intimidated
- Oil extraction still a rather unstable and ‘dirty’ endeavour
- First oil pipeline (Tidewater Pipeline) 1879 – breaking point in oil transport
- cartels of refineries and railways were finally challenged
- Changes in oil trading – originally bought physically (‘spot’), subsequently on ‘stock market’(introduction of terms ‘spot’, ‘regular’ & ‘futures’)

Standard Oil

- John Davison Rockefeller – 1st American to reach wealth of more than 1bn. USD
- Standard Oil - forming the sector from its beginnings (1860s), rooted in midstream and downstream (refineries - 'Standard' = standardized quality of products)
- SO was intentionally refraining from unstable upstream sector
- Mid- and downstream deemed as more-less stable
- The aim was to introduce vertically (and subsequently also horizontally) integrated company and stabilize the sector (i.e. revenues)
- Civil war and following development as a big spur (need for fuels and lubricants)



Standard Oil

- SO could outprice its competitors thanks to the economy of scale; acted hand-in-hand with transport companies
- South Improvement Co. affair - > ‘oil wars’
- Effective elimination of other competing players
- SO was misusing its position - exerting pressure on producers, transporters, buying competitors and assuming control on competitors through shady intermediaries, organizing cartels, bribery, espionage, subsidized price policy, blackmailing, ...
- Age of ‘unleashed capitalism’ (see: Monopoly – the game)
- SO assumed control over refineries in 1870s
- Despite its generally unacceptable practices, SO stabilized the market

Standard Oil

- Active in upstream since 1890s
- JDR became one of the most-hated entrepreneurs in US and aim of ‘progressivists’ (‘Trustbuster’ Theodore Roosevelt) – others incl. Carnegie, Morgan, Vanderbilt,...
- SO was constantly facing accusations and lawsuits
- Nothing has changed in terms of its activities though
- Oil industry spread from Pennsylvania to other states – Ohio, Oklahoma, Indiana
- SO expanded to Europe (underdeveloped oil sector with oil plays in Galicia and Romania)

L. J. MAGIE.
GAME BOARD.

APPLICATION FILED MAR. 23, 1903.

NO MODEL.

2 SHEETS—SHEET 1.

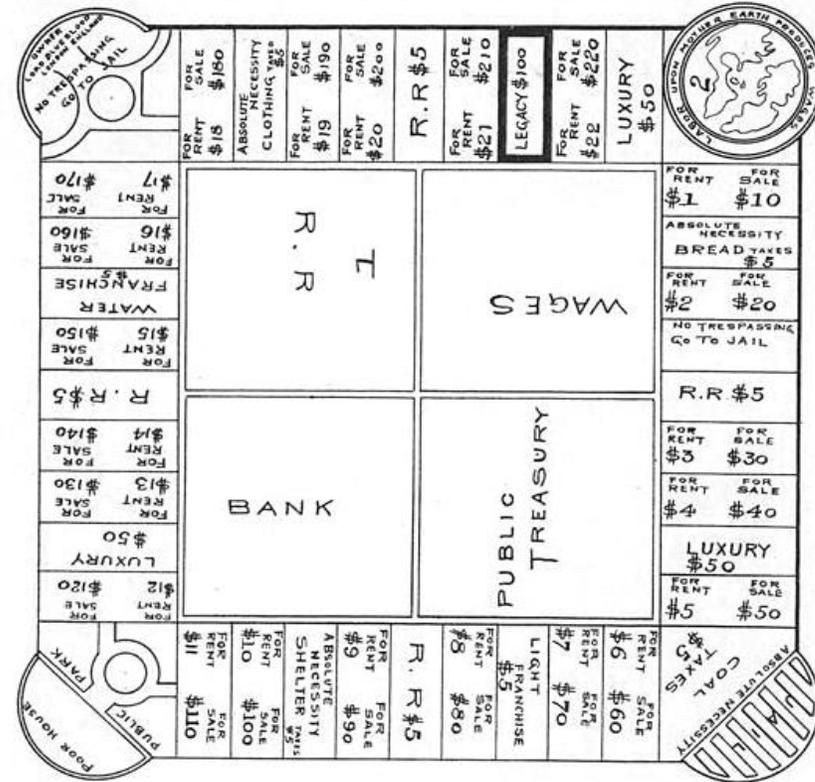
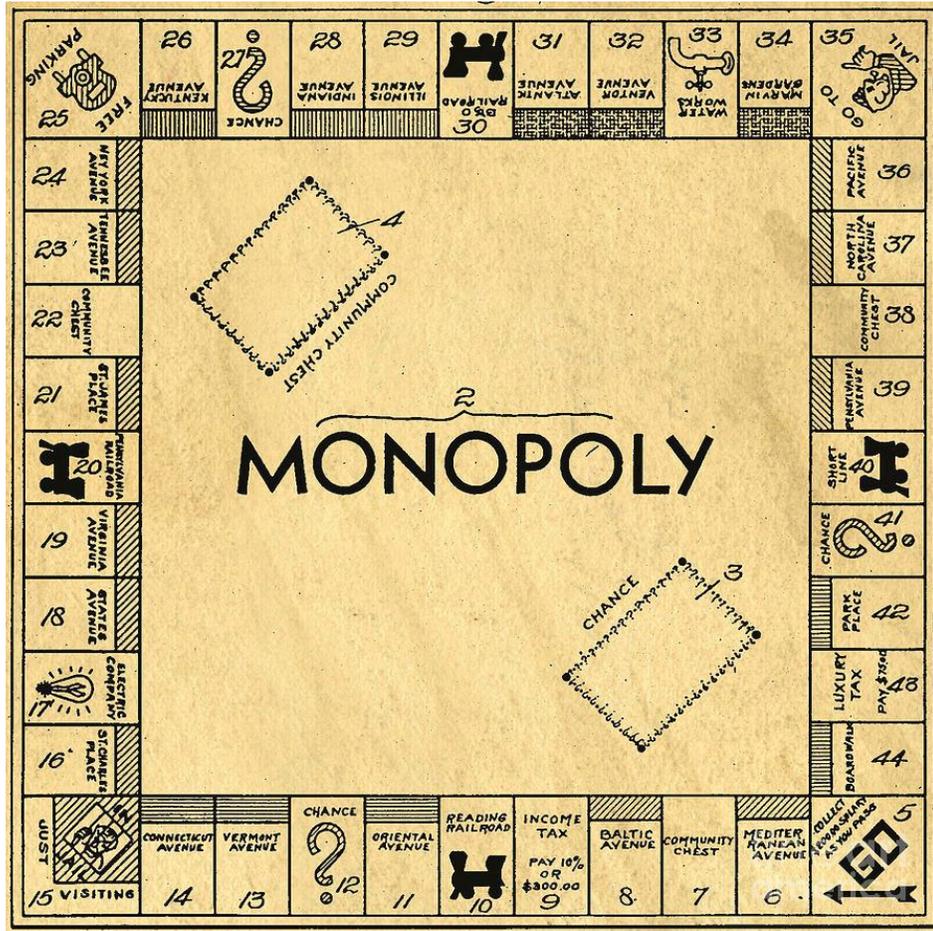
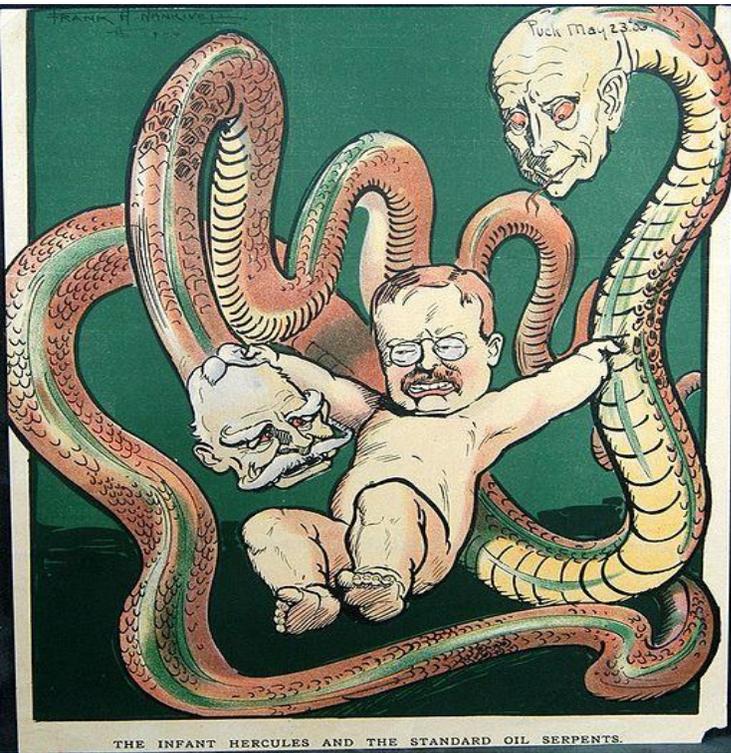


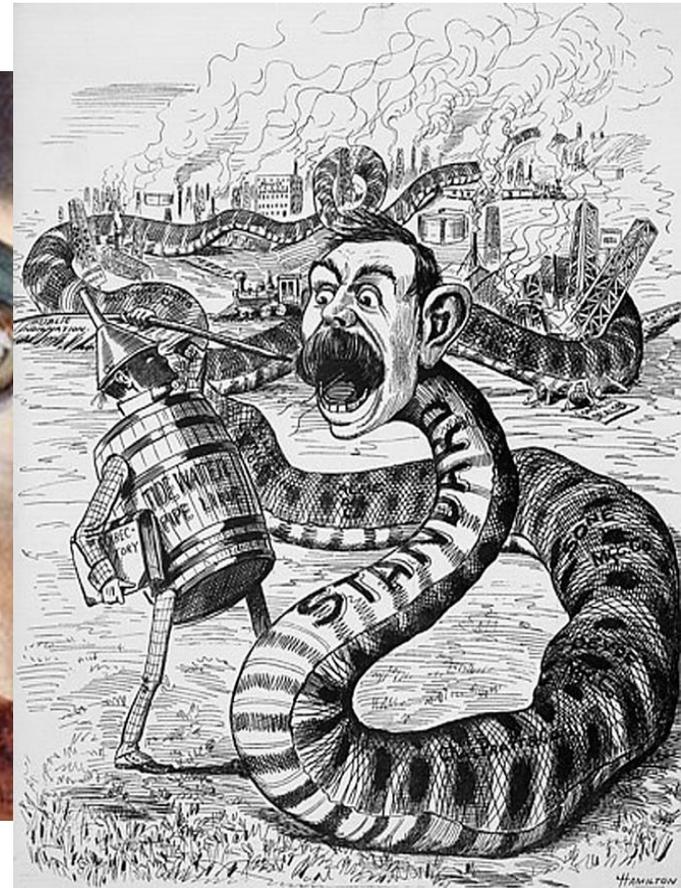
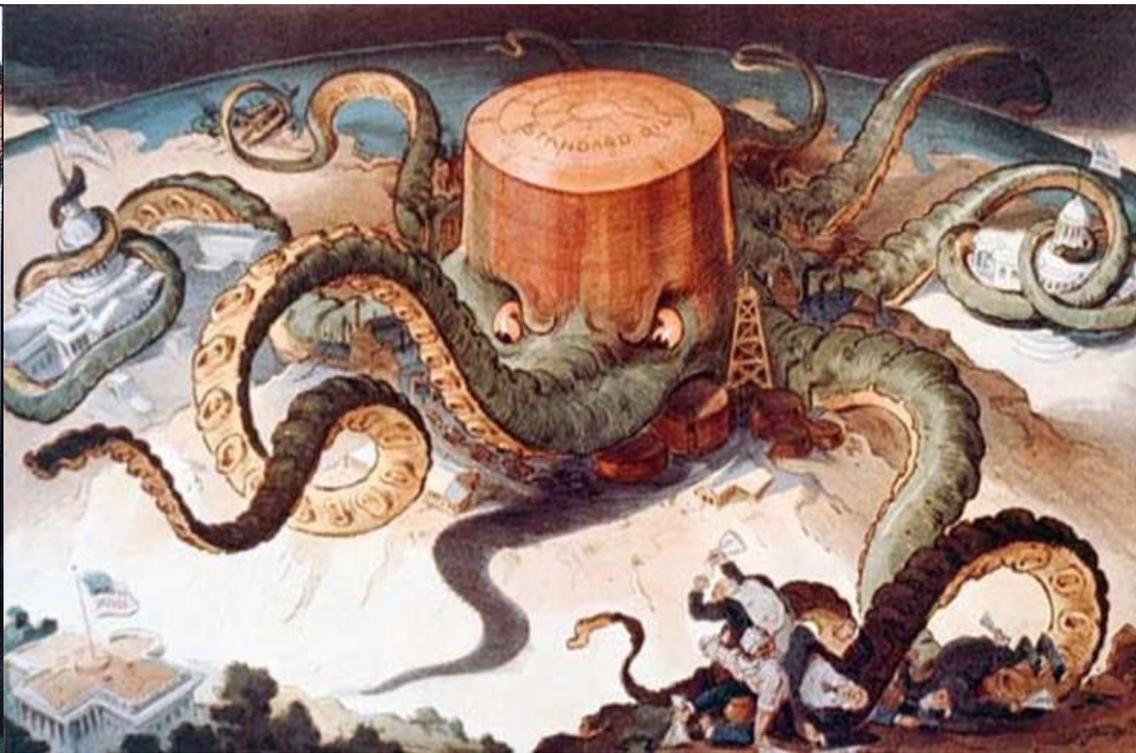
Fig. 1.

Witnesses
F. L. Owsand
M. H. Owsand.

Inventor
Lizzie J. Magie
by John A. Aul
Attorney



THE INFANT HERCULES AND THE STANDARD OIL SERPENTS.



HISTORY OF STANDARD OIL, BY Ida M. Tarbe

OCT 31 1902

MC CLURE'S MAGAZINE

NOVEMBER



Standard Oil

- SO became TNC – creating subsidiaries
- Competing players emerging at home and on global scale
- Nobel Brothers Petroleum Producing Co. (Branobel - Russia), Caspian and Black Sea Petroleum Co. (BNITO – Rotschilids) + Shell Transport and Trading CO. (Asia) - 3 dominant companies
- Negotiations on dividing areas of influence or merging failed with the Nobels, Rotschilids and Marcus Samuel and later with Royal Dutch

Early 1900s

- At home, SO was still mostly uncontested company due to the scale of its activities, integration of the sector (vertical and horizontal)
- Foreign competing players were fended off by tariffs – however, situation began to change at the beginning of the 1900s
- Early 1900s – forced reorientation – car industry became new major consumer of oil (electricity replaced kerosene in lighting); also military consumption increased (e.g. British navy converted to oil) – strategic importance
- Concerns about ‘Peak Oil’ still present – oil was growing in importance

Early 1900s

- New oil wells started to grow in California, Texas Louisiana, Oklahoma,...
- New locations took over from the former production leaders (PA, OH, IN)
- New competitors at home - Union Oil (California), Gulf Oil, Texaco (Texas) and worldwide - Royal Dutch/Shell – (1907)
- 1911 – SO dissolved by judicial order
- Divided into 34 successor companies – Standard Oil of NJ (later Exxon), S.O. of NY (Mobil), S.O. of California (Chevron), etc.
- End of SO, spur for oil industry and innovations



Early 1900s

- Oil sector development was ignited and further spurred by private companies
- Complicated, or even hostile, relations with the federal government (SO as the biggest example, other examples in various industrial sectors - trusts)
- Regional differences
- domination of SO on Eastern coast, new competitors in distant regions (Gulf, Texaco)
- Specific conditions at the dawn of the oil age
- Specific conditions gave birth to a unique and delicate relationship between the federal government and (private) oil companies

The 'Take-Home' Message

- Oil as the winner among other sources of lighting for its versatility, convertibility & EROEI
- Chaotic development in 1860s – discrepancies in demand & supply nexus
- SO consolidated the sector at the price of monopolization
- Beginnings of the industry as a basis for rather complicated relation between the state and OCs

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Your Thoughts?

- Your thoughts on progressivism and its impact on dissolution of SO?
- Do you consider the formation of Standard Oil as a positive or negative phenomenon for the then existed US oil-related market?
- Was the Sherman Act good for the US oil industry?
- If Standard Oil had not been dissolved, could it be the US's national oil champion?
- Who's position on monopolies and trusts, Roosevelt's or Taft's, did you find more suitable?
Why?