

SAUDI ARAMCO

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Introduction: On Tuesday, May 13, 2025, Trump began his three-day trip to the Middle East, starting with Saudi Arabia, where he signed a strategic economic partnership with Prince Mohammed Ben Salman. The amount of future Saudi investment has been estimated at \$600 billion by the White House. This pharaonic amount leads us to reconsider the economic power of this Kingdom, which is essentially based on its oil reserves.

Once the world's largest market capitalization, Saudi Aramco is the centerpiece of its country's economy. With its stock market valuation down by more than 30% in 3 years, we're going to take a look at whether this industrial giant now presents an opportunity.

At a time when technology stocks are valued at particularly high multiples and the political environment is in turmoil, it is not unattractive for investors to direct part of their portfolios towards more stable companies. That's also why we think Aramco makes sense.

To best analyze Aramco, we will adopt a top-down approach. We will begin with a study of the international oil market, explaining its pricing mechanisms.

After this macroeconomic analysis, we will focus on Aramco, tracing its history, business model, and resources. We will examine the reasons for its competitive advantage in the sector as well as the difficulties associated with its financial valuation.

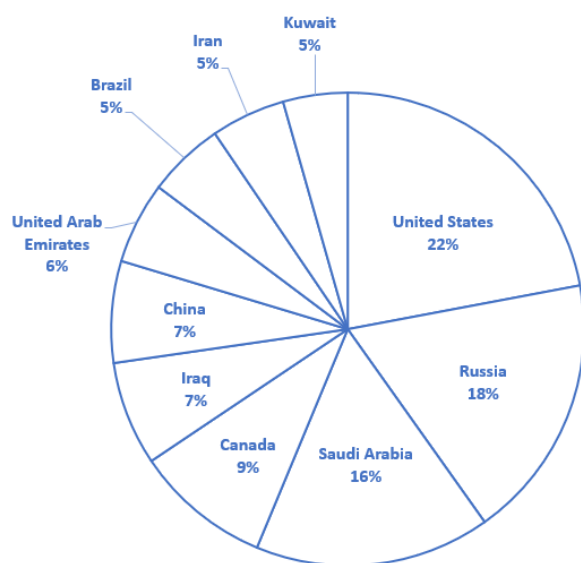
We will also discuss the reasons for its IPO, its lack of popularity among some investors, and the political dimension of its development. Finally, a summary will review the key points of our analysis.

Market overview: The oil market today is underpinned by a demand of around 104 million barrels per day, comprising crude oil, natural gas liquids and other resources. On the supply side, we need to understand who the main exporters of the resource are, and how many companies are involved in this exchange. We'll then briefly explain how buyers and sellers are brought together, via the price determination mechanism.

This graph shows the breakdown of world oil production by country in 2024. It gives an idea of the weight of each country in world production, but this figure remains too general, as it is necessary to understand the nature of each production, its costs and the organizations



involved, such as OPEC, for example.



However, the first economic observation is that among the top 3 producer countries, the kingdom is by far the smallest in terms of surface area and population, which suggests a certain dependence on this sector and enables us to better anticipate important political decisions concerning our business.

This idea is confirmed by the table below, which shows that between 30% and 40% of the monarchy's GDP is based on oil. What's more, this resource accounts for 90% of the country's exports.

Country	GDP (in Billion USD 2024)	Oil/Fossil Fuel Share of GDP	Estimated Fossil Fuel Revenue (USD)
United States	\$28,000.00	3-4%	\$840 billion - \$1.12 trillion
Russia	\$2,200.00	15-20%	\$330 billion - \$440 billion
Saudi Arabia	\$1,100.00	30-40%	\$330 billion - \$440 billion
Canada	\$2,200.00	5-7%	\$110 billion - \$154 billion

Now that we have an overview of the international oil market, we can turn our attention to its formation and operation. As in any other market, the price of the black resource is determined by the mechanism of supply and demand, albeit within a relatively tight framework.

We all know that the resource we use for our vehicles and factories is initially exploited and offered on the market by major oil companies such as Exxon Mobil, BP, Chevron and others. But this supply meets an initial demand from refiners, who are responsible for making it available to end-users, i.e. private, professional and industrial customers. However, refiners call on trading specialists to buy and sell the right volumes according to their customers' demand and needs. These professionals can therefore be seen as traders, looking to make a profit on daily price variations. It's for this reason that during the transportation of cargoes, the owners change several times. The market on which physical exchanges take place is called the spot market. It was on this market, therefore, that the price of WTI temporarily turned negative during the Covid-19 epidemic, due to the saturation of storage capacities in the United States.

Unlike the spot market, the futures market (or paper market) operates on the basis of buying and selling on paper without any actual physical exchange of the product. These transactions can be carried out on specialized markets such as the Chicago Mercantile Exchange (CME), the New York Mercantile Exchange (NYMEX) or the Intercontinental Exchange Futures (ICE Futures). This market is particularly interesting for producers wishing to protect themselves against price variations by selling their production forward. Opposite the producers are all kinds of players, such as speculators hoping to make money; in return, they provide liquidity for this



huge market. The only drawback of this market system is that it leads to greater price volatility, which can be detrimental to the economy in certain situations.

All these markets and players help determine the price at which the resource can be sold by producers. The price of this crude oil can be determined on the basis of benchmarks such as West Texas Intermediate (WTI) and Brent. WTI refers to oil produced in the United States, and Brent to oil produced in the North Sea. In fact, the resource is not the same at each location, due to its composition, viscosity, etc... A discount or premium must therefore be applied to each field, based on the chosen benchmark (WTI or Brent). There are many other benchmark crude oils, however, such as Dubai Fateh (Persian Gulf), Bonny Light from Nigeria or even Western Canadian Select from the oil sands.

Another very important parameter is the price of the basket of oils sold by the 13 members of the Organization of the Petroleum Exporting Countries (OPEC). Often referred to as "the cartel", OPEC is the original grouping of 5 countries: Saudi Arabia, Iran, Iraq, Kuwait and Venezuela. Created on September 14, 1960, OPEC today has 12 members controlling 40% of world production, including Algeria, Congo, Libya, Nigeria and the United Arab Emirates, in addition to the five founding countries. The aim of this organization is to regulate oil prices through a coordinated effort by its members, each of which has a production quota. Decisions to increase or decrease production must be taken unanimously. As a result, oil volumes are openly manipulated by the world's leading exporters. This same organization was responsible for triggering the economic crisis of the 1970s when, in 1973, it agreed to drastically reduce export volumes, causing prices to quadruple.

Now that we know the size of the international oil market, the mechanisms for determining its price and Saudi Arabia's place in the sector, we need to look at the biggest rival companies. Indeed, even if Aramco is considered the world's largest oil company, it's best to look at its few competitors to get a clear idea of its performance.

Company	Nationality	Market Cap (USD)	Revenue (USD) - Q1.25+Q2,3,4.24
Saudi Aramco	Saudi Arabia	1,540.00B	\$480.00B
Exxon Mobil	United States	350.00B	\$340.00B
Chevron	United States	240.00B	\$190.00B
Shell	United Kingdom	200.00B	\$280.00B
BP	United Kingdom	80.00B	\$280.00B
Total Energies	France	132.00B	\$190.00B
Rosneft	Russia	55.00B	\$120.00B
PetroChina	China	200.00B	\$400.00B
Sinopec	China	90.00B	\$445.00B

Here we find some of the biggest companies in the oil industry. We can therefore compare the Saudi company with its foreign competitors.

History: It all began in 1933 with the first oil discoveries in the kingdom. It was in 1938, after the first drillings in 1935, that a concession agreement was signed with the American Standard Oil Company of California during the reign of the founding king Abdelaziz ben Abderrahmane Al Saoud. The beginning of this story was marked by well number 7 in Dammam. In 39, the



first crude oil was exported, and in 40, production volumes doubled. The name was changed to Arabian American Oil Company (Aramco) in 1944. The photo above is symbolic: King Abdul Aziz of Saudi Arabia with President Franklin D. Roosevelt aboard the USS Quincy on February 14, 1945. Despite a halt in drilling operations due to the repercussions of the Second World War, by 1949 the company was producing 500,000 barrels of oil a day. Between 1950 and 1960, the company experienced immense growth, with the discovery of marine deposits (Safaniya oil field), the construction of the 1648km trans-Arab pipeline, the expansion



of distribution operations and the passing of the symbolic milestone of one million barrels produced per day in 1958. Another symbolic milestone was reached in 1971, with 1 billion barrels exported from Ras Tannurah over the year (photo left). From 1973 onwards, the Saudi government acquired a 25% stake in the company, rising to 60% the following year. The government then stepped up its efforts to acquire full ownership, which it

did in 1980. The company's third and final name was announced in 1988 with the creation of the Saudi Arabian Oil Company "Saudi Aramco" by decree of King Fahd ben Abdelaziz Al Saud. A year later, the company was transformed from an oil company focused on production and export to an integrated oil company. At that time, a partnership was formed with Texaco, which led to the purchase of Star Enterprises, North America's largest crude oil refinery in Port Arthur, Texas. Eager to expand internationally, in 1991 the company acquired 35% of SsangYang Oil Refining Company in South Korea, and 40% of Petron Corporation (refining in the Philippines) in 1994. The end of the century was marked by the completion of the Shaybah field, which required 50 million man-hours and the removal of 13 million m² of sand. In the early 2000s, a research and development center was set up in Dhahran. 10 years after the R&D center was set up, the company developed its "GigaPowers" technology, enabling reservoirs to be simulated using a billion-cell information grid. This technology evolved 6 years later into an information system with a grid of a trillion cells. Pursuing its vision of becoming an integrated energy and chemicals company, the Saudi company launches the Sadara project, a desalination plant, in partnership with the Dow Chemical Company. In October 2021, the company announces its ambition to achieve zero greenhouse gas emissions in Domains 1 and 2 from all facilities and assets managed and wholly owned by the company by 2050. More recently, in 2019, Saudi Aramco became a public limited company by listing on the Saudi Tadawul stock exchange, offering 1.73% of its capital for 3.45 billion shares. The last major transaction was the acquisition of a 70% stake in Saudi Basic Industries Corporation (SABIC) for around \$70 billion. In 2022, 4% of Aramco's shares were transferred to the Public Investment Fund (PIF).



Saudi Aramco / Business Model: After an overview of the company's history and development from its earliest days, to contextualize its situation, we'll look at its current business. We need to understand what its main sources of revenue are, and which of these will be stable in the future. This is an important step before we can look at establishing a Discounted Cash Flow Model, or financial analysis.

Headquartered in the city of Dhahran, in the province of Ach-Charqiya, Saudi Aramco operates both nationally and internationally, thanks to its 70,000 employees. Owning the Kingdom's hydrocarbon reserves, the company operates with a view to maximizing long-term value while increasing its production rates, which today can sustainably reach 12 million barrels per day. Let's take a look at the company's production activities.

- Crude oil: The company offers 5 types of oil: Arab Heavy, Medium, Light, Extra Light and Super Light. Production capacity is 12 million barrels of crude per day, with reserves of over 200 billion barrels. Exports represent over 7 million barrels per day. Importantly, the production ceiling is determined by the government, and the company must maintain its maximum sustainable production capacity of up to 13 million barrels per day.
- Gas: As with oil, Aramco is one of the world's leading gas producers. With over 40 years' experience in the exploitation of this resource, the company is the sole player in the kingdom and owns an extensive pipeline network. Demand for gas in the kingdom alone is growing, thanks to power generation, desalination and petrochemical production, but it is also useful for the production of fertilizers and blue hydrogen. By 2022, gas processing capacity will have reached 18.3 billion standard cubic meters per day. In terms of production, the company set an all-time record with 11.3 billion cubic meters in one day. Natural gas reserves are estimated at 247 trillion cubic meters.
- Chemicals: Operations in this sector began in 1988. Today, it includes the production of basic chemicals such as aromatics, alkenes and polyolefins, as well as advanced products such as polyols and synthetic rubber. These products are used in the packaging, automotive, footwear and household appliance sectors. These petrochemical operations are carried out through the Group's numerous subsidiaries in the UK, China, Japan, South Korea, Malaysia, the USA and the Netherlands. Collaborations with companies such as Dow Chemical (Sadar), ExxonMobil (Samaref), Sinopec (Yasref), Sumitomo (Petro Rabigh), and Total (Satorp) provide secure marketing outlets. And thanks to the acquisition of a 70% stake in SABIC, Aramco is now present in over 50 countries, with a capacity to produce 56 million tonnes of chemical materials a year by 2022.
- Hydrocarbons and lubricants: Aramco is also one of the world leaders in hydrocarbons, with production of between 4 and 5 million tonnes a year. This production is carried out by 3 main companies: Luberef, Motiva and S-Oil. Motiva is an American company, a 100% subsidiary of Saudi Aramco, whose history began in 1988 under the name Star Entreprises between Texaco and Saudi Refining. In 1997, Shell merged its marketing and refining operations with Texaco, creating two joint ventures. Equilon, which combined its western and midwestern operations, and Motiva, which consisted of Star



Enterprises and Shell's eastern and southeast operations, merged. Texaco merged with Chevron in 2001, and Shell and Saudi Refining subsequently acquired Texaco's interests in the joint ventures. This is an important point, as Motiva Enterprises owns and operates the Port Arthur refinery in Texas, which is the largest refinery in North America and was ranked 6th in the world in 2018, with a refining capacity of over 650,000 barrels per day by 2023.

- Fuel sales: In 2019, Aramco is expanding its service station business by forming a joint venture with Total to manage service stations in the Kingdom, with an agreement to acquire 270 Sahel-branded stations. This initiative enables the Saudi company to distribute fuel to supply the industrial, automotive, residential and commercial sectors in the Kingdom. One of the company's objectives is to become one of the world's leading retail fuel companies.

Now that we know the company's main activities, we can look at their breakdown within sales and compare their proportions with those of other "competitor" companies. However, to complete the list above, we can mention the major centers and deposits that lie behind these business segments.



One of the world's best-known oilfields, Ghawar, wholly owned by Saudi Aramco, is the largest on the planet, covering an area 280km long and 30km wide. It has long accounted for more than half of the company's production, and still does today. For a long time, Riyadh claimed that its field could produce up to 10 million barrels a day, but after 40 years of silence and a 470-



page document published in 2019 by the company, Ghawar is actually producing 3.8 million barrels a day. The world's leading oil field thus becomes the Permian Basin in Texas (photo right). Ghawar's oil remains more highly prized and much cheaper to extract, even if Aramco does not adjust as easily to the market. So Ghawar remains far more profitable than the Permian Basin, which requires horizontal drilling and hydraulic fracturing (fracking method).

However, in his book *Twilight in the Desert* (2005), analyst Matthew Simmons asserts that Ghawar's recoverable reserves are low, and that the field will reach peak oil during the 2010s.

Another notable deposit is Safaniya. It was discovered in 1951 by Chevron Corporation and began production in 1957, enabling the Saudi company to exceed one million barrels produced



per day just one year after start-up. At its peak in 1980, Safaniya was producing over 1.5 million barrels a day. 13 years later, the field had 624 wells. This makes it the world's largest offshore oil field, measuring 50km by 15km. Production has recently declined, from 2 Mbbl/d in 2000 to 1.7 recently.

To the west of the first Ghawar field lies Khurais, also one of the kingdom's largest oilfields. Abandoned twice in the past, it now represents one of Aramco's major projects, with a revival in 2009 and a goal of producing 1.2 million barrels a day using advanced technology such as water and gas injection. In 2019, the site will come under attack, claimed by the Houthis. This site could prove extremely important in offsetting declining production from other fields.

Shayba is also one of the kingdom's giant oil and gas fields. Its exploitation is relatively recent, at the end of the 90s, which makes this site one of the youngest. The field could quietly produce 500kbbbl/d of very high quality oil until 2050. Like the Khurais field, it will have to replace the older ones, so its production could be brought up to 1Mbbl/d, thus shortening its lifespan. The infrastructure designed solely for the exploitation of this deposit is such that its name deserves its place among the kingdom's notable sites. Like Khurais, in 2019, the site will come under attack from a dozen drones claimed by the Houthis.

Although there are many more major sites to mention, Saudi Aramco has too many to list. However, attention can still be drawn to the Zuluf site, which like Safaniya is an offshore field located in the Persian Gulf, but which continues to be developed in order to balance future production. It is important to note that communication about Middle East deposits is sometimes misleading. This is particularly the case with one of the first giant deposits, Abqaiq, which appears to be the most severely depleted of the Saudi giants, and which too came under attack by the Houthis in 2019.

We can now explain how these facilities are reflected in sales (in this case for 2024) by examining their distribution, both from a business point of view and in terms of the origin of their resources. First, we can observe the breakdown between upstream and downstream revenues. Upstream concerns the exploration, production and extraction of crude oil and natural gas, and is therefore Aramco's historic core business and main source of revenue. Upstream revenues therefore include oil and gas exploration, crude oil production and natural gas production. Once again, the proportion of this type of revenue can be misleading, since it can vary considerably depending on the price of crude oil. That's why, in 2022, it represented nearly 80% of total revenues. Downstream revenues, on the other hand, encompass all activities related to the processing, distribution and sale of petroleum and petrochemical products. The proportion shown here demonstrates Aramco's commitment to diversifying its revenues through major investments in the past. Downstream's main activities therefore include refining, petrochemicals, the distribution and sale of fuels and, to a lesser extent, new energies.

Even if Aramco remains above all an "upstream" company, it is clear that its future will depend on its ability to strengthen its downstream segment and adapt to the energy transition. This strategic evolution could be achieved through vertical integration in order to reduce its dependence on crude oil with its volatile prices, capture more added value since a barrel of



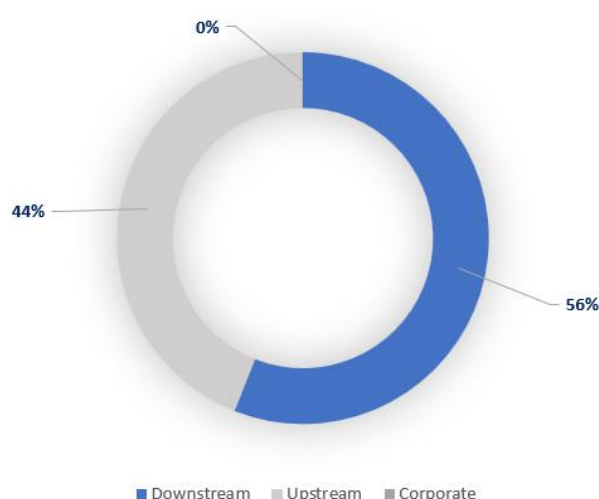
refined oil brings in more than a barrel of crude, and of course prepare for the day when its reserves are completely depleted.

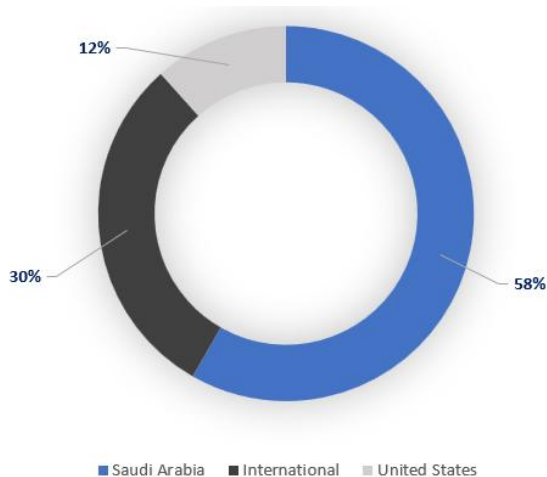
To get a better idea of the infrastructure behind today's Downstream revenues, let's take a look at some of the sites at the heart of this activity. Ras Tanura, a town in the province of Ach-Sharqiya, is as symbolic as it is important, since it was here in May 1939 that King Abdelaziz turned the valve to load the first export cargo of crude oil. Today, it is also home to one of the world's largest oil refineries, with a capacity of 550,000 barrels a

day. Still in the same province is the Jubail refinery, the origin of the Total project launched in 2005 and commissioned eight years later. It cost an estimated \$9.6 billion and covers an area of 500 hectares, with a 175-metre flare. The refinery can produce 400,000 barrels a day. Abroad, Motiva, located in Port Arthur, remains one of the strategic players, with a capacity surpassing the previous two. Finally, SABIC, one of the world's largest chemical companies, founded in 1976, has been more than 70% owned by Aramco since 2019, and this collaboration will eventually produce nine million tonnes of chemicals and base oils a year.

On the other hand, it's important to study the source of its revenues, because even if the Kingdom is seriously denting its reserves, it may decide to compensate for its shortfall by buying or investing in foreign resources, thus avoiding the need for the company to move away from its core business.

It would be interesting to be able to combine the indicators of revenue categories and countries of origin, and thus compare them with each of Aramco's competitors. However, we can see that even if profits generated by the Kingdom remain in the majority, we still have good diversification, with 42% of revenues coming from structures based abroad. The "international" category covers a wide range of countries. However, generally speaking, all other activities are present in the United States, Canada, Brazil, South Korea, Japan, Thailand, China, India, Malaysia, Singapore and other countries. This international presence is also explained by the large number of subsidiaries and strategic collaborations abroad. While the first name that springs to mind is Motiva, there's also the Hyundai Oilbank refinery and petrochemical plant, founded in 1964 and now 17%-owned by Aramco, with a refining capacity of 650,000 barrels a day. Esmax Distribución Spa, considered one of Chile's leading fuel and lubricant distribution companies, was also acquired at 100% by Aramco in March 2024. China's Fujian province is also home to a petrochemical complex designed to refine over 16 million tonnes a year (equivalent to 320,000 barrels a day), the result of a petrochemical project between Aramco, Sinopec and Fujian Petrochemical Company Limited. All these partnerships and acquisitions demonstrate the extent to which Saudi Aramco seeks and succeeds in establishing itself in every





corner of the globe through its strategic presence, thereby reducing its dependence on the Kingdom's resources.

We now know the company's history, its market position, the few competitors it has, its main resources and partnerships, and its means of transformation for the future. When it comes to investing, and particularly in the stock market, using a DCF (Discounted Cash Flow) may seem systematic, but here we can make a different judgment on the use of this method,

for several reasons. In principle, a DCF is supposed to forecast estimated cash flow growth, which may be generated by sales growth or other factors. However, as far as the companies mentioned in this document are concerned, they are virtually all dependent on the price of oil. So, by definition, since the price of oil varies, and sometimes with great volatility, it is not necessarily easy to establish a DCF model. All the more so since another very important parameter concerns the company's ability to maintain its production levels, which we don't know because, as demonstrated in the section devoted to the Ghawar field, there is a significant asymmetry of information concerning the Saudi company. Geopolitical decisions (such as production quotas imposed by OPEC+), and regulatory risks (energy transition, specific taxes) are also factors that are difficult to control in projections. Returning to the example of 2020, the fall in oil prices to negative levels has rendered any cash-flow projections obsolete, while Aramco maintains ultra-low production costs (certainly by a few dollars a barrel), a structural advantage difficult to model in a standard DCF. Another valuation strategy would be to study all the academic articles on oil production and extraction in order to place a probability of X amount of oil remaining, and repeat the process for each of Aramco's active wells. The second step would be to review all CAPEX and D&A to accurately assess the value of each asset and infrastructure. Then we'd need to assess probable consumption in relation to global demand, and estimate future production levels, in order to deduce what decisions the company will take regarding empty wells (whether or not to resell assets). Talking about the government is very relevant, as we would also be questioning its plans to find out what direction a company - which by definition is state-owned, but on which the country's entire economy and politics rests - will take. Of course, all these steps will be irrelevant if we are unable to "accurately" predict the price of the black resource, which is, moreover, relatively volatile. Other sections will give us an idea of the direction of the company's activities and the various policies involved.

A little geological history would tell us a lot about the company's profitability levels. Saudi Arabia lies on a continental plate called the Arabian Plate, once separated from Eurasia by an ocean. The ocean closed and the plate collided with Iran, forming the Zagros mountain range. To the northeast lies the *Zagros fold-and-thrust belt*, a zone where the continental crust was folded, followed by a zone where it was scaled, and then the suture zone between the Arabian Plate and Iran. The opening of the Red Sea, which is in fact an ocean, lifted the edge of the plate. Since the Cambrian, it has been frequently covered by the sea, accumulating up to 13,700



meters of sediment. It is in and around the Persian Gulf that Saudi Arabia's oil and gas fields are located. At the end of the Precambrian, rifts were formed. The sea invaded the basins thus created and the evaporation of the water led to the precipitation of salts forming thick layers, the Hormuz salts, up to 2,500 meters thick. These salts played an important role in the genesis of the oil fields, as their low density allowed them to rise over millions of years, pushing back the sediments above them. The end of the Ordovician period (485 to 444 Ma) saw the first major species extinction attributed to glaciation. The melting of the ice cap caused sea levels to rise, partially emerging the Arabian Plate. A lack of oxygen in the seas allowed the preservation of organic matter, which sedimented with clays on the eastern side of the Arabian Plate to form a rock made up of extremely fine lamellae, incorrectly referred to as schists. The organic matter contained in these shales was transformed into hydrocarbons: these are their mother rocks. The Devonian period (419 to 359 Ma) was marked by an important event: Africa, the Arabian Plate, Turkey and Iran were part of the supercontinent Gondwana, which collided with Laurasia. The ocean separating them was the Paleotethys. It closed by subduction, the floor of the Paleotethys sinking beneath Gondwana. This led to compression of the Arabian Plate, with "reverse" faults like those shown in the figure. The raised ground between two faults is called a horst. One of these, running north-south, is the source of the giant Ghawar oil field. The Arabian Plate was mostly emergent throughout the Devonian Period. The Carboniferous (359-299 Ma) was marked by severe erosion, which removed more than 1,000 meters of rock from the Ghawar Ridge. At the end of this period and the beginning of the next, the Permian (299 to 252 Ma), new glaciations occurred, leaving glacial sediments including cold-climate sand dunes, which are good reservoirs for hydrocarbons.

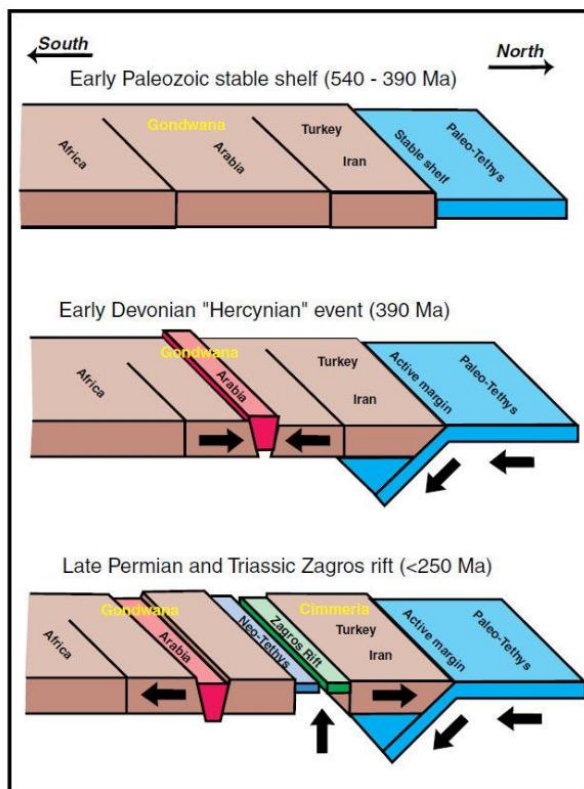


Figure 8. Evolution of Arabian Plate tectonics from early Paleozoic to Late Permian and Triassic, showing Early Devonian "Hercynian" compressional event and Early Zagros rifting event. Modified from McGillivray and Hussein (1992).

During the Jurassic (201 to 145 Ma), Saudi Arabia is located in a tropical zone, and the Jurassic strata are very important as they are the source and reservoir rocks for Saudi oil. The Tithonian (152 to 145 Ma), at the end of the Jurassic, saw the deposition of a thick layer of anhydrite that prevents oil from rising to the upper layers. 92 Ma ago, a compression phase began on the Arabian Plate, and at the location of today's Sultanate of Oman, became a mountain range. At this point, the Arabian Plate sank beneath an oceanic plate. This phenomenon, together with the collision of the Arabian Plate with Iran, has led to the formation of folds that are oil traps. More accurately, they are anticlines: a bulge in the continental crust. The Ghawar oil field is located in the En Nala anticline. *According to an article based on Richard M. Pollastro's report published in 2003 by the U.S.*

Geological Survey.



These few words may seem long, but they quickly sum up what the earth has produced over millions of years, and in this case, why the kingdom has such a great advantage over other countries and its competition. So, for all these reasons, there's little point in looking at the company's income statement. Its competitive advantage is more than enormous, and it's not by investing \$500 or \$2,000 million that a competitor will manage to match Aramco's margins, not to mention the quality of its oil, which is a first choice for refiners. In view of this information, a study of the income statement is not necessarily effective, and this remark will also be justified by the study of management decisions, which will be in the section on the Saudi political environment. In addition, a stock market analysis can include a valuation of the company's price using the multiples method, based on several figures such as EBITDA, sales, EV and others... Despite the difficulty of establishing a DCF, we would naturally like to turn to this method, but on reflection it might seem that it is no more conclusive than the first. First of all, there is a real disproportion of scale between the companies presented above, with Aramco producing more than double the number of barrels than its nearest competitor. Secondly, there is also a huge discrepancy between the capacity and advantages of other companies and their stock market valuations, certainly attributable to the political and economic conditions in each country, which we'll come back to later. For example, ExxonMobil and Chevron do not have the same mix of reserves (and especially production), nor the same link to a state (Saudi Arabia owns 98% of Aramco and directly influences its strategy). At the time of the 2019 IPO, Aramco's valuation (\$1,700 billion) was set much more politically than economically, rendering the sector's multiples (EV/EBITDA, P/E) inoperative, as no peer benefits from such strong state support or access to such gigantic reserves. Thus, these methods under- or over-value Aramco without capturing its strategic and geopolitical specificities. So, in short, using the multiples method may be more relevant for other business areas, such as the pharmaceutical industry in the USA or even certain international automotive groups, but here there are far more differences, whether in terms of business model, scale or even country and market access, a point we'll come back to.

So the valuation of Aramco, a company with unique characteristics, comes up against the limits of traditional methods such as DCF or the multiples method.

	Saudi Aramco	Exxon Mobil	Chevron	Shell	BP	Total Energies	Rosneft	Petro China	Sinopec
Country	Saudi Arabia	United States	United States	United Kingdom	United Kingdom	France	Russia	China	China
Employees	75 000	61 000	45 000	103 000	100 500	100 000	330 000	360 000	360 000
Market Cap	\$1,540.00B	\$450.00B	\$244B	\$200B	\$80B	\$132B	\$60B	\$200B	\$90B
Price	\$6.66	\$104	\$140	\$34	\$5	\$60	\$4.5	\$1.2	\$0.8
Barrels per day (millions)	12	4.3	3.2	1.4	2.4	1.4	5.2	4.9	-
Turnover	\$480B	\$340B	\$194B	\$290B	\$280B	\$190B	\$130B	\$400B	\$423B
PER	16	14	16	16	-	7	7.5	9	16
Average PER	20	15.8	19	20	36	-	-	9	-
Operating Margin	43%	14.15%	10%	9%	5%	13%	21%	8.6%	3.6%
CAPEX	\$53B	\$27B	\$16B	\$20B	\$16B	\$18B	\$18B	\$38B	\$32B
Free Cash Flow	\$85.3B	\$34.4B	\$15B	\$40B	\$12B	\$17B	\$17B	\$15	\$8B
Payout Ratio	> 100%	52%	75%	54%	-	57%	-	56%	75%
Dividend yield	6,52%	3.82%	4.90%	4.15%	6.15%	6.3%	15%	5.60%	5%



However, here is a table showing the figures generally observed by investors for companies in the oil sector. Shaded are the three largest companies by production. The table includes companies from the United States, France, the United Kingdom, Russia and China. Some of the figures are relatively difficult to obtain (also due to the use of different standards), but these give a representative order of magnitude.

Pre-introduction period :

In this section, we'll try to understand a part of the situation that may seem incoherent. Saudi Aramco is the world's most profitable company, sitting on reserves that would seem astronomical if the following statement in the 2024 annual report is anything to go by: "As at December 31, 2024, Aramco's reserves under the concession agreement amounted to 250.0 billion boe (2023: 251.2 billion boe), including 189.8 billion barrels of crude oil and condensate (2023: 191.3 billion barrels), 26.1 billion barrels of NGL (2023: 26.0 billion barrels) and 209.8 tscf of natural gas (2023: 207.5 tscf). *boe = barrels of oil equivalent - NGL= Natural gas liquids, which are liquid or liquefied hydrocarbons produced during the manufacturing, purification and stabilization of natural gas. For reserves reporting, ethane is included in NGL. For production reporting, NGLs are included in total liquids, and ethane is reported as a component of total gas - tscf = Trillion standard cubic feet*" To summarize this extract from the annual report, the declared/claimed reserves are 250 billion barrels of hydrocarbons. Knowing all this, one imagines that the State, being 100% owner, can pursue any policy or project with enough resources not to have to worry about the financial aspects. And yet it is indeed Aramco's IPO that is being carried out in 2019. The purpose of this type of operation is to provide a company with capital to facilitate its development. However, if we are familiar with the company's data, we would find it hard to understand why it would need to raise money... Could this be a signal that the company's business model is no longer sustainable in the long term?

It all began in 2016, with the Crown Prince announcing that he was considering an IPO for the oil company. The broad lines of this communication were that it would be possible to sell 5% of the company's capital with a valuation of \$2,000 billion while making this IPO quickly. Crown Prince Mohammed bin Salman, who came to the throne in 2017, aims to reform his country and diversify its economy. This ambition has been implemented through the plan, made up of three five-year phases, called "Vision 2030", which among other things was drawn up in response to the budgetary difficulties faced by the kingdom following the sharp drop in oil prices in 2014. Aramco's IPO is part of the first phase of this plan, and should help finance projects and facilitate the process of achieving objectives. But this reform plan is the subject of much controversy. According to players in the economy, "Before the IPO, there was a certain disillusionment: none of the major projects had come to fruition, and the economy was in a bad way. People were asking, 'What happened to Vision 2030?' "With the IPO, they can say they've delivered on their promises." It is now clearer just how fundamental the political dimension of this company and of the kingdom's economy is, which is hardly surprising given the Saudi government's more than substantial share in the company's capital. The Kingdom will most likely be run by MBS's hand for decades to come, so investors need to look at his vision and plans for realizing it. To get a better idea of the shape this new (political) direction is taking, we can list the notable events that have happened since 2017. Concerning the living conditions



of Saudi citizens, there has been the right to drive for women, as well as their help in finding employment. In terms of attractiveness, the country announced the issue of tourist visas for 49 countries for a period of 90 days for a small fee, as well as the construction of sports complexes and infrastructure reserved for events. However, other negative events on the business front offset the progress of this reform, such as the locking up of 300 princes and tycoons at the Ritz-Carlton (Purge of 2017) to obtain more than \$100 billion, or the murder of Jamal Khashoggi by dismemberment. These elements are important and must be taken into account, because as we'll see in the next section, the main buyers targeted by this IPO are Saudis and businessmen connected with the country. Only, according to them: "We've seen our friends go to the Ritz, we've seen our bills not paid (by the government) and now they say we should come and invest?" Nevertheless, 5 million citizens and expatriates subscribed to the offer and became shareholders in the company. Indeed, the IPO would not be marketed in Western financial centers such as London or New York, and would focus instead on Saudi and regional investors. In the end, only 1.5% of the company's shares were issued for \$25.6 billion, making this the largest IPO in history, ahead of Alibaba and far ahead of Uber, Lyft and the aborted Wework IPO of the same year. These figures do not quite reflect the opinion of the professionals who explain that this decision was not a deal but a purely political one. At the time of its introduction, many banks, mainly Western, had tried to drive the price down and would not buy at the price offered. To provide a better overview of the company's valuation perspective, if oil prices remain in the \$70-80 range, then demand for companies in this sector would be higher. To raise the final positive aspects of this introduction despite the many controversies. The PIF (Public Investment Fund) has been enriched to the tune of \$30 billion. This first step could be the opening for several more share sales and even listings abroad, certainly in Asia (the driving force behind the growing demand for oil), in addition to the fame and name that the company is forging by becoming known. In addition to the success attributed to the \$12 billion bond issue, 8 months before its IPO, Aramco has proved that the state, which normally has no regulatory constraints, has aligned itself with the transparency and accountability standards of the Tadawul stock exchange, which will be described in the next section.

We now know the country's three most important players: Crown Prince MBS, Saudi Aramco and the PIF. The Public Investment Fund is the sovereign wealth fund of the Kingdom of Saudi Arabia, created in 1971 (the same period as the government takeover of Saudi Aramco) and ranked as the 6th largest sovereign wealth fund in the world in 2024. This fund plays a crucial role in the development and execution of the Vision 2030 plan, which will eventually carry over \$2,000 billion in assets. In particular, the controversial The Line project is supported by this fund, as are Oxagon and all the other Neom projects. The PIF therefore owns significant shares in Saudi Aramco and, like the government, receives substantial dividends to continue investing and achieve Vision 2030.

Tadawul and access to shares: Tadawul is the Saudi stock exchange, and the first (informal) trades on it date back to 1954. Renamed Tadawul in 2007, Saudi Aramco now accounts for around 70% of its total capitalization. The Saudi stock market became officially regulated in 1984. The Tadawul became partially self-regulated in 2018. In July 2024, its market capitalization exceeded 3,000 billion dollars. Its benchmark index is the MSCI Tadawul



30 (launched in 2019), of which Aramco does not have a majority weighting due to its low proportion of listed shares (up to 9%). Al Rajhi Bank, National Commercial, SABIC and Saudi Telecom account for more than half of the index. To gain exposure to the Saudi Arabian market without buying Saudi Aramco shares, you can invest in the MSCI Saudi Arabia ETF (exchange traded fund). Generally speaking, however, holding shares in Saudi Arabian companies is highly restricted for foreign investors. It was only in 2015 that the Tadawul trading center was opened to qualified foreign investors (QFI). Following the listing of Saudi Aramco, the Saudi Stock Exchange joined the FTSE global equity index series as a secondary emerging market. Nationals and residents of the countries of the Gulf Cooperation Council, which includes Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates, can own, buy and sell Tadawul shares if they have a Saudi bank account. However, foreign individuals not resident in these countries cannot invest directly in Tadawul shares. Foreign institutions can register for the Qualified Foreign Investor (QFI) program and invest on the Saudi Stock Exchange. To qualify, a QFI must have at least \$500 million in assets under management. Please consult the Tadawul membership directory to find out which members are registered, and whether your broker is present. However, on October 9, 2024, IBKR (InteractiveBrokers) announced its collaboration with SNB Capital, the Kingdom's largest investment bank, to give eligible international investors access to the Saudi Stock Exchange. Interactive Brokers is the first broker worldwide to offer this service. It is now possible to buy Saudi Aramco shares through this broker.

Why don't the best investors invest? The first reason is obvious: when a non-American company decides to list on the New York Stock Exchange, it may have better access to capital and a broader investor base, or it may add an American Depositary Receipt (ADR), which offers broader access to investors. As a result, investors have to switch brokers, open foreign accounts and end up paying higher fees and commissions. They must therefore turn to ETFs, but these will never replace the shares of the aforementioned company. The second reason is the one that explains the decision to list the company on the Tadawul stock exchange, namely a valuation problem. Indeed, in October at a meeting in Riyadh, one of JP Morgan Chase & Co's most experienced bankers, Achintya Mangla, had told Yasir Al-Rumayyan that international investors would not value Saudi Aramco at \$2 trillion. This episode took place a few weeks before the IPO, and during this meeting Al-Rumayyan began spouting insults in Arabic and English to all the important bankers gathered, which obviously shocked and sent a strong message. Perhaps the chairman of the board (Saudi Aramco) feared MBS's reaction. This happened because of the divergence of wills and opinions, with the Crown Prince holding out for a symbolic valuation of 2 trillion, while Wall Street held out for an initial range of between 1,700 and 2,000, and a Swiss group like Pictet & Cie defended a valuation of \$800 billion. But the global consensus was still \$1,200 billion from the largest investment firms, and the limit could eventually be set at \$1,500 billion. During these meetings, the senior banker specializing in equity capital markets at Goldman Sachs was also excluded from any discussion. Karen Young, a Middle East specialist at the American Enterprise Institute in Washington, says: "Saudi Arabia has always had this problem: top-down decision-making [...] There's a culture of



fear. Wise and competent technocrats don't dare speak out." This left Saudi Arabia with two options: either to renounce its desire to be 2trillion or to postpone the operation. After several scandalous episodes within the Kingdom, the decision was made: the IPO would take place on its territory, thanks to Tadawul. According to some sources, the government put pressure on wealthy local families and called on allies in the Middle East. The IPO was precipitated by fears that oil prices would collapse as a result of the US-China trade war, and Khaled al-Faleh was replaced by Al-Rumayyan. So this introduction was a major upheaval and conflict with all the world's biggest banks, followed by a lack of interest from the others. The solution was to carry out this operation domestically and seemingly in haste, despite 4 years of preparation on the part of the investment banks. A huge divergence in terms of valuation on both sides between the Saudis and the Americans. In any case, on the first day of trading, the share price jumped by 10%, taking the market value to 1,880 billion dollars. We can relate these facts to the statement made by one of the leaders familiar with the royal court: "Prince Mohammed's mistake was to believe, every time someone like Larry Fink visited him, that he believed in the truth and thought they were ready to invest hundreds of billions of dollars, when in reality, they just wanted a piece of the pie". We don't have access to the 4 years of work and research by the big American banks, but it's conceivable that negotiating a lower price would always have been to their advantage.

Last discussion :

We're going to try and summarize the key points concerning the idea of investing in Saudi Aramco, adopting a Top-Down approach to try and include as many elements as possible. To begin with, the desire to invest in an oil company is not a bad one, because at a time when technology stocks (and US markets in general) are valued at very high multiples and suffering from high volatility due to White House policies or war with China, looking for a company like Aramco adds more stability to one's portfolio. In fact, Warren Buffett doesn't hesitate to add oil companies to his portfolio, from Occidental Petroleum to Chevron. From an international market point of view, we have seen that demand is very solid and can only increase thanks to India and Asia, which is becoming the new engine of growth, with Opec anticipating an increase in world oil demand of 1.3 million barrels/day on average this year. This oil demand market is unlikely to be strongly impacted by events linked to artificial intelligence, which is currently very much in vogue, but whose demand is much more reliable. Of course, the global economic situation is worth studying, but today the main concern is a crisis on the US markets, which is likely to send oil prices plummeting. However, in this case, Saudi Aramco offers two advantages: firstly, it has the lowest operating costs in the world and will therefore be much more resilient in such a situation; secondly, it is a non-American company and therefore less exposed to the risk of American indices. Here, the disadvantage of not benefiting from the capital of major investors enables it to free itself from a share of the risk that would have been added to it. Talking again of oil prices, as seen above, Saudi



Arabia holds an important position within OPEC and can therefore use its power to maintain a tenable economic situation. The company itself has an understandable business model, despite its gigantic size, insofar as it does not depend on a line of code, a computer server, a drug license or the latest foreign innovation. What's more, its sheer size means there are no new entrants and few genuine competitors. Although the company is considered too fossilized to create value for its shareholders through dividends, the idea here is not to philosophize about stock market buying and selling or speculative operations, but to understand the shareholder mentality. Aramco has paid out over \$440 billion in dividends since its IPO, and will generate quarterly net income of \$48 billion in 2022 (more than Microsoft, Apple, Meta and Tesla combined over the same period), with net income of \$161 billion in the same year. With one of the strongest dividends on the market, this company could be seen as a volatility stabilizer, generating cash flow that could be invested elsewhere or even used to buy back shares (a common practice among Saudi investors). Still in this approach, the study of the share price is not fundamental, since in this sector share values can be divided by 9 depending on the price of the resource. However, with less volatility than its competitors, Aramco's share price has fallen by 30% since its peak and is approaching its historic low. Turning now to the coveted oil reserves, here lies the main problem, as many are warning to be wary of the Saudis' declarations concerning their oil (see Ghawar episode). Their latest figure is 250 billion barrels in the latest annual report. Once again, it would be worth reading up like Matthew Simmons on the subject to form one's own opinion. The OPEC meetings in Vienna show us in pictures just how much this type of information means, as shown in the photo of Khaled al-Faleh (above). However, it's worth mentioning the episode of a man interviewed by Aljazeera who was facing the Saudi oil minister and with one of his directors arriving, the discussion was held in Arabic since the minister didn't know that the man spoke Arabic, with the result that the director declared that there were 3 billion barrels in such and such a reserve and the minister replied; "oh that's too small, cork it up". Which suggests that we're still a long way from knowing much about Saudi oil. It's only fair to point out that the New York bankers obviously didn't know any better, but worked for 4 years to sell the company's shares to the American and international public, certainly thanks to a well-publicized and well-sold IPO. The DCFs published a few years ago show us that nothing is correct, especially as the valuations by various investment banks and funds varied between 800 billion and 1500 billion, which is still a wide range. But in any case, as with all companies, even if you know the exact value of the company and its reserves, but you're the only one, the market won't care, and certainly not when it comes to Tadawul, so for some reason valuation methods represent more of a dead end than anything else. *To come back to very simple notions which are worth what they are worth, we can point out that the Per of the share is around 15-16, i.e. below its average value.* Which brings us to the final point concerning information and power within the Kingdom company, which has been the cause of everything since micro management. Taking an interest in the politics of a state-owned company in a kingdom is important, but even more so in the case of Saudi Aramco. One of the last points in the document reminds us of this, with the dismissal of the former CEO, simply to pursue the Prince's projects and ambitions. It is in this context that we understand that business management is not based on merit and knowledge, but rather on the ability to align the interests of the company with those of the Prince. A study of the political dimension of this economic



situation should certainly not stop at the case of Aramco, since history shows us time and again that, between reforms, the Vision 2030 plan, sequestrations and so on, change is active within the Kingdom. The political dimension can also include the tensions present in the Middle East... The Houthi attacks are penalizing and the conflict in Yemen is still of great concern. Obviously, the aim of this discussion is not to enter into a political representation, since de facto it would be biased. However, we can mention a less well-publicized event, that of the brilliant Prince Salman Bin Abdulaziz Bin Salman Al Saud, who was incarcerated in the high-security prison of Al-Ha'er, south of Riyadh in 2018. This event would suggest that MBS is seeking to rule out any potential rivals, and is indicative of the power transformation taking place within the Kingdom, which merits consideration of several (more dramatic) scenarios for the country's leadership. This political dimension should by no means be underestimated, since even the success of the IPO seems to be a consequence of it. If Aramco were listed in the United States, then the share price would certainly be more volatile, exposing small investors while certainly having been sold with confidence by the investment banks, who themselves must surely have realized the asymmetry of information during their 4 years of studying the company. But the company is listed on the Tadawul and the volume of purchases completely surprised these same bankers, who had nothing to do with it if not the opposite. Even today, the explanation is unclear, but what is certain is that if Aramco is not in the hands of speculators, it will always be supported by its country, which, with its allies, was probably behind the success of the IPO. So, paradoxically, this regime, which is tending towards absolute monarchy, could be a kind of insurance for the behemoth's stock market stability. Investing in Saudi Aramco presents a relatively low currency risk for investors using the US dollar (USD), thanks to the fixed parity between the Saudi riyal (SAR) and the USD. Since 1986, the SAR has been pegged to the dollar at a fixed rate of $1 \text{ USD} = 3.75 \text{ SAR}$, with a very narrow fluctuation band. Beyond everything else, most of the discussion could turn to (oil) reserves very concretely. And from this point of view, there are high hopes when it comes to Manifa. It is an offshore oil field in Saudi Arabia with estimated reserves of 11 Gbbl (billion barrels), making it one of the world's largest untapped deposits, due to its extremely high sulphur (3 to 3.5%) and vanadium content. Today, it is a showcase for Saudi technological excellence. This offshore megaproject is one of the most complex in the world, and promises to have a bright future. So it's on this optimistic note that the discussion can close. The main idea, then, can be summed up as "political", in financial, economic and strategic terms. You have to be aware that studying one of the world's biggest companies, whose business is perhaps more complex than selling cars or telephones and whose activity is rather opaque, present and quoted in the only country bearing the name of a family which owns the majority of shares, is relatively difficult. However, if an answer is to be given in simple terms: if you need to buy just one or a few shares (companies), then don't look at Aramco; if you have a large portfolio and liquidity, but are looking for a complementary strategy and have convictions, then Saudi Aramco deserves to be a company selected for study.



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