



A COMING OUT PARTY FOR THE WORLD'S MOST VALUABLE COMPANY: THE ARAMCO IPO

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Aramco: History

- Aramco's beginnings trace back to 1933, when Standard Oil of California discovered oil in the desert sands of Saudi Arabia. Shortly thereafter, Texaco and Chevron formed the Arabian American Oil Company (Aramco) to develop oil fields in the country and the company also built the Trans-Arabian pipeline to deliver oil to the Mediterranean Sea.
- In 1960, the oil producing countries, then primarily concentrated in the Middle East, created OPEC and in the early 1970s, the price of oil rose rapidly, almost quadrupling in 1973.
- The Saudi Government which had been gradually buying Aramco's assets, nationalized the company in 1980 and effectively gave it full power over all Saudi reserves and production. The company was renamed Saudi Aramco in 1988.

Aramco: Current Standing

- Lots of oil: In 2018, it was estimated that Aramco had in excess of 330 billion barrels of oil and gas in its reserves, a quarter of all of the world's reserves, and almost ten times those of Exxon Mobil, the current leader in market cap, among oil companies.
- Easy to extract: To add to the allure, oil in Saudi Arabia is close to the surface and cheap to extract, making it the most profitable place on oil to own reserves, with production costs of \$20-\$25 a barrel, well below the \$40 costs that many other conventional oil producers, and even further below the new entrants into the game.
- Big payoffs: Aramco produced 13.6 million barrels of oil & gas every day in 2018, and reported revenues of \$355 billion for the year, on which it generated operating income of \$212 billion and net income of \$111 billion.

Company, Country or extension of Saudi Royalty?

- Saudi Arabia Inc? Saudi Arabia is one of the wealthier countries in the world, on a per capital basis, and one of the 20 largest economies, in terms of GDP, but it derives almost 80% of that GDP from oil. Thus, a company that controls those oil spigots is a stand in for the entire country, and over the last few decades, it should not surprise you to learn that the Saudi budget is largely dependent on the cash flows it collects from Aramco.
- House of Saud: The overlap between company and country becomes even trickier when you bring in the Saudi royal family, and close to absolute control of the country, which also means that Aramco's fortunes are tied to the royal family's powers. If there is a change in regime in Saudi Arabia, the terms laid out in the prospectus will be revisited.

The Consequences

- Corporate governance: There is no way that this company can or ever will be controlled by shareholders. The Saudi government is open about this, stating in its prospectus that “the Government will continue to own a controlling interest in the Company after the Offering and will be able to control matters requiring shareholder approval”.
- Country risk: Aramco has a few holdings and joint ventures outside Saudi Arabia, but this company is not only almost entirely dependent on Saudi Arabia but its corporate mission will keep it so.
- Political risk: For decades, the Middle East has had more than its fair share of turmoil, terrorism and war, and while Saudi Arabia has been a relatively untouched part, it too is being drawn into the problem. On an even larger scale, the last decade has seen regime changes in many countries in the Middle East, with some occurring in countries, where the ruling class was viewed as insulated. The Saudi political order seems settled for the moment, with the royal family firmly in control, but that too can change, and quickly.

IPO Twists: Part 1

- Dividends: The company commits to paying at least \$75 billion in dividends in 2020, with holders of shares issued in the IPO getting their share, and to maintaining these dividends through 2024. Beyond 2024, dividends will revert back to their normal discretionary status, with the board of directors determining the appropriate amount.
- IPO Proceeds: The offering is not expected to be more than a couple of percent of the company. None of the proceeds from the IPO will remain in Aramco & will be redirected elsewhere, in pursuit of the government's policy of making Saudi Arabia an economy less dependent on oil.
- Trading constraints: Once the offering is complete, the shares will be listed on the Saudi stock exchange and its size will make it the dominant listing overnight, and also subjecting it to the trading restrictions of the exchange, including a limit of a 10% movement in the stock price in a day; trading will be stopped if it hits this limit.

IPO Twists: Part 2

- Inducements for Saudi domestic investors: The Saudi government will give one bonus share, for every ten shares bought and held for six months, by a Saudi investor, with a cap at a hundred bonus shares.
- Corporate tax rate: The corporate tax rate will be 20% on taxable income on the downstream income, though tax rates on different income streams can be different. The Saudi government also imposes a Zakat, a levy on revenues, which is effectively a tax on income. In sum, these tax rate changes were already in effect in 2018, and the company paid almost 48% of its taxable income in taxes that year.
- Royalties: The royalties on oil were reset ahead of the IPO and will vary, depending on the oil price, starting at 40% if oil prices are less than \$70/barrel, increasing to 45% if they fell between \$70 and \$100, and becoming 80% if the oil price exceeds \$100/barrel.

Pricing Aramco

- Early estimates: The initial attempts by the Saudi government to take Aramco public, came with a rumored expectation that the company would be “valued” at \$2 trillion or more.
- IPO pricing range: Much has been made about the fact that there seem to be wide divergences in how much bankers seem to think Aramco is worth, with numbers ranging from \$1.2 billion to \$2.3 trillion, with Prince Mohammed, the crown prince, rumored to be hoping for \$2 trillion.
- Pricing, not valuations: Most of these numbers are not valuations, but instead represent pricings of Aramco, where assessment of price being made by looking at how the market is pricing publicly traded oil companies, relative to a metric, and extending that to Aramco, adjusting (subjectively) for its unique set up in terms of corporate governance, country risk and political risk.

The Sector: Integrated Oil

<i>Company Name</i>	<i>EV</i>	<i>Invested Capital</i>	<i>PE</i>	<i>PBV</i>	<i>EV/Sales</i>	<i>EV/EBITD A</i>	<i>EV/IC</i>	<i>EV/ Reserves (Mil bbl)</i>	<i>EV/Production (Mil bbl)</i>
Exxon Mobil Corporation	\$320,114	\$225,377	16.17	1.49	1.18	8.85	1.42	\$23.01	\$228.78
Royal Dutch Shell plc	\$298,289	\$260,053	11.57	1.19	0.82	5.57	1.15	\$58.42	\$222.94
Chevron Corporation	\$246,788	\$180,442	15.00	1.43	1.61	7.42	1.37	\$36.35	\$230.75
PetroChina Company Limited	\$183,879	\$215,092	25.10	0.82	0.54	3.73	0.85	\$23.09	\$123.27
TOTAL S.A.	\$160,222	\$138,135	14.06	1.19	0.89	5.12	1.16	\$26.49	\$158.17
BP p.l.c.	\$176,439	\$145,861	27.24	1.31	0.63	5.58	1.21	\$16.47	\$133.01
Petróleo Brasileiro S.A. -	\$172,259	\$141,562	12.51	1.43	2.37	6.33	1.22	\$20.85	\$199.70
Gazprom	\$118,410	\$220,324	3.40	0.47	0.90	2.78	0.54	\$22.68	\$31.82
China Petroleum & Chemical Corp	\$79,675	\$102,938	12.68	0.78	0.19	3.32	0.77	\$47.82	\$176.47
Rosneft Oil	\$119,753	\$106,369	7.85	1.23	0.91	3.84	1.13	\$2.93	\$60.96
PJSC LUKOIL	\$61,254	\$57,723	5.81	1.06	0.46	3.14	1.06	\$5.10	\$71.52
Equinor ASA	\$72,985	\$54,656	11.26	1.43	1.05	3.07	1.34	\$28.53	\$102.36
Eni S.p.A.	\$72,240	\$75,795	20.63	0.94	0.89	4.03	0.95	\$20.41	NA
Suncor Energy Inc.	\$57,445	\$43,386	12.37	1.44	1.98	5.78	1.32	\$14.00	\$211.58
PTT Public Company Limited	\$48,158	\$32,403	12.50	1.58	0.63	4.74	1.49	NA	NA
Occidental Petroleum Corporation	\$45,562	\$29,896	9.63	1.73	2.48	5.16	1.52	\$28.78	\$189.84
Ecopetrol S.A.	\$45,405	\$25,389	10.98	2.18	2.21	5.13	1.79	\$40.29	\$174.23
Gazprom Neft	\$37,089	\$33,053	4.53	1.15	0.94	3.56	1.12	\$5.79	\$53.88
Repsol, S.A.	\$35,761	\$45,578	11.51	0.72	0.70	6.48	0.78	\$56.05	\$137.01
Oil and Natural Gas Corporation	\$38,431	\$44,826	5.98	0.80	0.63	3.40	0.86	\$10.27	\$89.06
Surgutneftegas PJS Co	\$4,694	\$43,992	3.40	0.38	0.18	0.58	0.11	NA	NA
OMV Aktiengesellschaft	\$20,134	\$14,669	8.73	1.40	0.77	3.05	1.37	\$31.38	\$129.06
Imperial Oil Limited	\$21,858	\$20,932	7.95	1.05	0.86	5.92	1.04	\$5.92	\$174.58
Galp Energia, SGPS, S.A.	\$15,781	\$7,609	37.64	2.56	0.87	7.03	2.07	\$53.28	\$402.58
Cenovus Energy Inc. (TSX:CVE)	\$17,014	\$19,187	19.41	0.83	1.13	5.36	0.89	\$4.12	\$96.39
Origin Energy Limited (ASX:ORG)	\$13,598	\$13,294	11.20	1.03	1.31	20.85	1.02	NA	NA
Average			13.12	1.22	1.03	4.76	1.14	\$ 25.31	\$ 154.45
Median			11.54	1.19	0.89	5.13	1.14	\$ 23.01	\$ 147.59
First Quartile			7.92	0.83	0.63	3.38	0.88	\$ 10.27	\$ 94.56
Third Quartile			15.29	1.43	1.21	6.02	1.37	\$ 36.35	\$ 202.67

Pricing Aramco: A First Cut

<i>Multiple</i>	<i>Pricing Metric</i>	<i>Aramco (2018)</i>	<i>First Quartile</i>	<i>Median</i>	<i>Third Quartile</i>	<i>First Qua</i>	<i>Median</i>	<i>Third Quartile</i>
Net Income	Net Income	\$ 111,071	\$ 879,918	\$ 1,281,898	\$ 1,698,183	7.92	11.54	15.29
Book Value of Equity	Book Equity	\$ 271,142	\$ 224,630	\$ 323,130	\$ 387,988	0.83	1.19	1.43
Sales	Revenue LTM	\$ 355,940	\$ 224,230	\$ 317,936	\$ 431,642	0.63	0.89	1.21
EBITDA	EBITDA LTM	\$ 223,931	\$ 756,254	\$ 1,147,683	\$ 1,349,053	3.38	5.13	6.02
EV/IC	Invested Cap LTM	\$ 249,319	\$ 219,243	\$ 283,333	\$ 341,293	0.88	1.14	1.37
EV/Reserves (millions of barrels)	Proven Reserves	265900	\$ 2,730,512	\$ 6,118,768	\$ 9,664,349	\$10.27	\$ 23.01	\$ 36.35
EV/ Production (millions of barrels)	Production LTM	10300	\$ 973,978	\$ 1,520,173	\$ 2,087,488	\$94.56	\$ 147.59	\$ 202.67

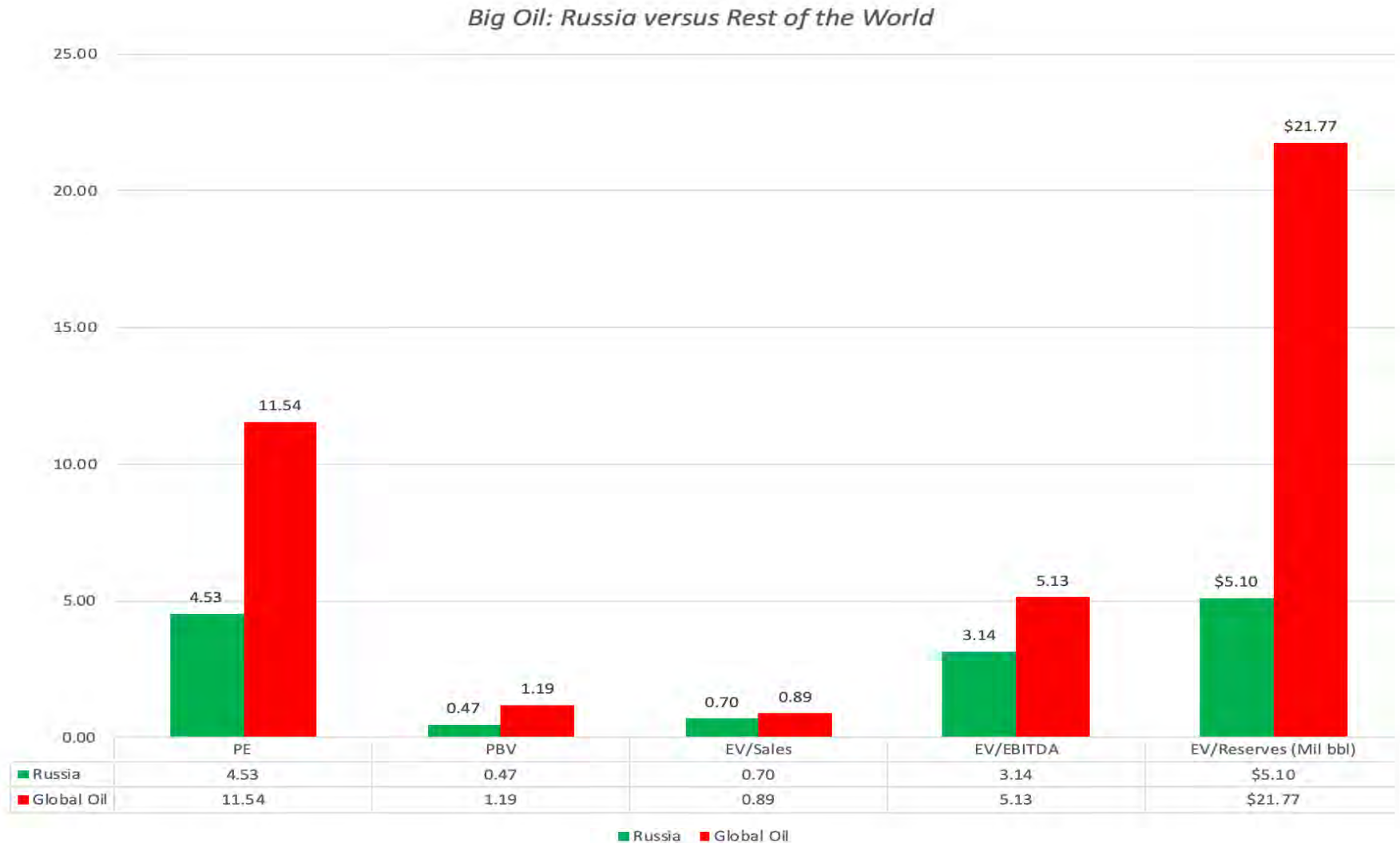
Pricing Implications

- Book value & Sales: If you price Aramco based on its revenues of \$356 billion or on its book value of equity of \$271 billion, its value looks comparable or slightly higher than the value of Exxon Mobil and Royal Dutch, the largest of the integrated oil companies.
- Income: That pricing is missing Aramco's immense cost advantage, which allows it to generate much higher earnings from the same revenues. Thus, when you base the pricing on Aramco's EBITDA of \$224 billion, you can see the pricing rise to above a trillion and if you shift to Aramco's net income of \$111 billions, the pricing approaches \$1.5 trillion.
- The pricing is highest when you focus on Aramco's most valuable edge, its control of the Saudi oil reserves and its capacity to produce more oil than any other oil company in the world. If you base the pricing on the 10.3 billion barrels of oil that Aramco produced in 2018, Aramco should be priced above \$1.5 trillion and perhaps even closer to \$2 trillion. If you base the pricing on the 265.9 billion barrels of proven reserves that Aramco controls for the next 40 years, Aramco's pricing rises to sky high levels.

Pricing Caveats

- Production limits: Aramco not only does not own its reserves in perpetuity, with the rights reverting back to the Saudi government after 40 years, with the possibility of a 20-year extension, if the government decides to grant it, but Aramco is also restricted in how much oil it can extract from those reserves to 12 million barrels a year.
- Governance and Risk: We noted, earlier, that Aramco's flaws: the government's absolute control of it, the country risk created by its dependence on domestic production and the political risk emanating from the possibility of regime change.

The Country/Governance Discount for Russian Oil

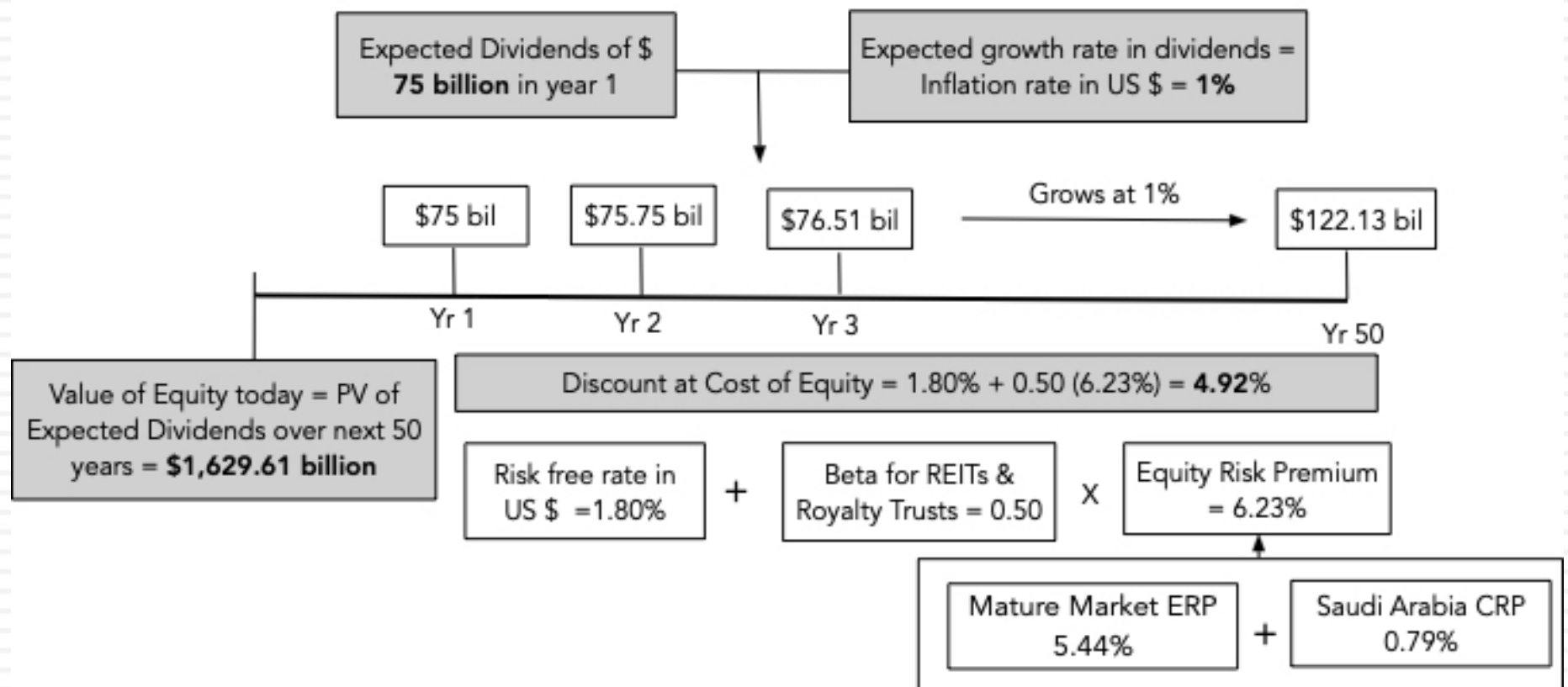


Valuing Aramco: General Assumptions

- In US \$: I will do my valuation in US dollars, rather than Saudi Riyals, since as a commodity company, revenues are in dollars and the company reports its financials in US dollars (as well as Riyal). This will also allow me to evade tricky issues related to the Saudi Riyal being pegged to the US dollar though the reverberations from the peg unraveling will be felt in the operating numbers.
- Expected Inflation: I will use an expected inflation rate of 1.00% in US dollars, representing a rough approximation of the difference between the US treasury bond rate and the US TIPs rate.
- Equity Risk: I will use the equity risk premium of 6.23% for Saudi Arabia, representing about a 0.79% premium over my estimate of a mature market premium of 5.44% at the start of November 2019.
- Life: I will use a 50-year growth period, representing the fact that the company's primary asset, its oil reserves, are not infinite and will run out at some point in time, even if additional reserves are discovered.

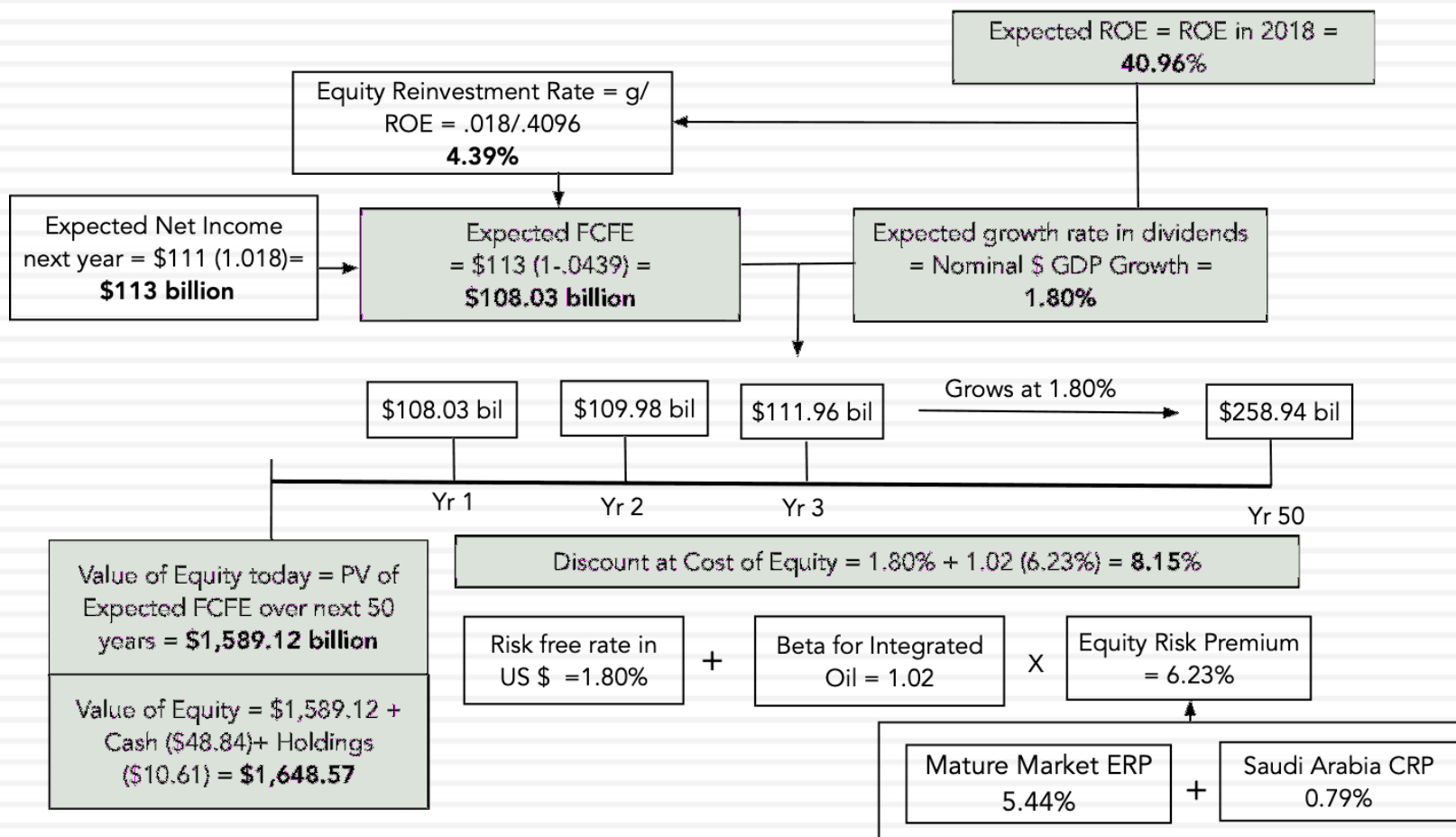
Valuing Aramco: Promised Dividends

A Dividend Discount Model Valuation of Aramco



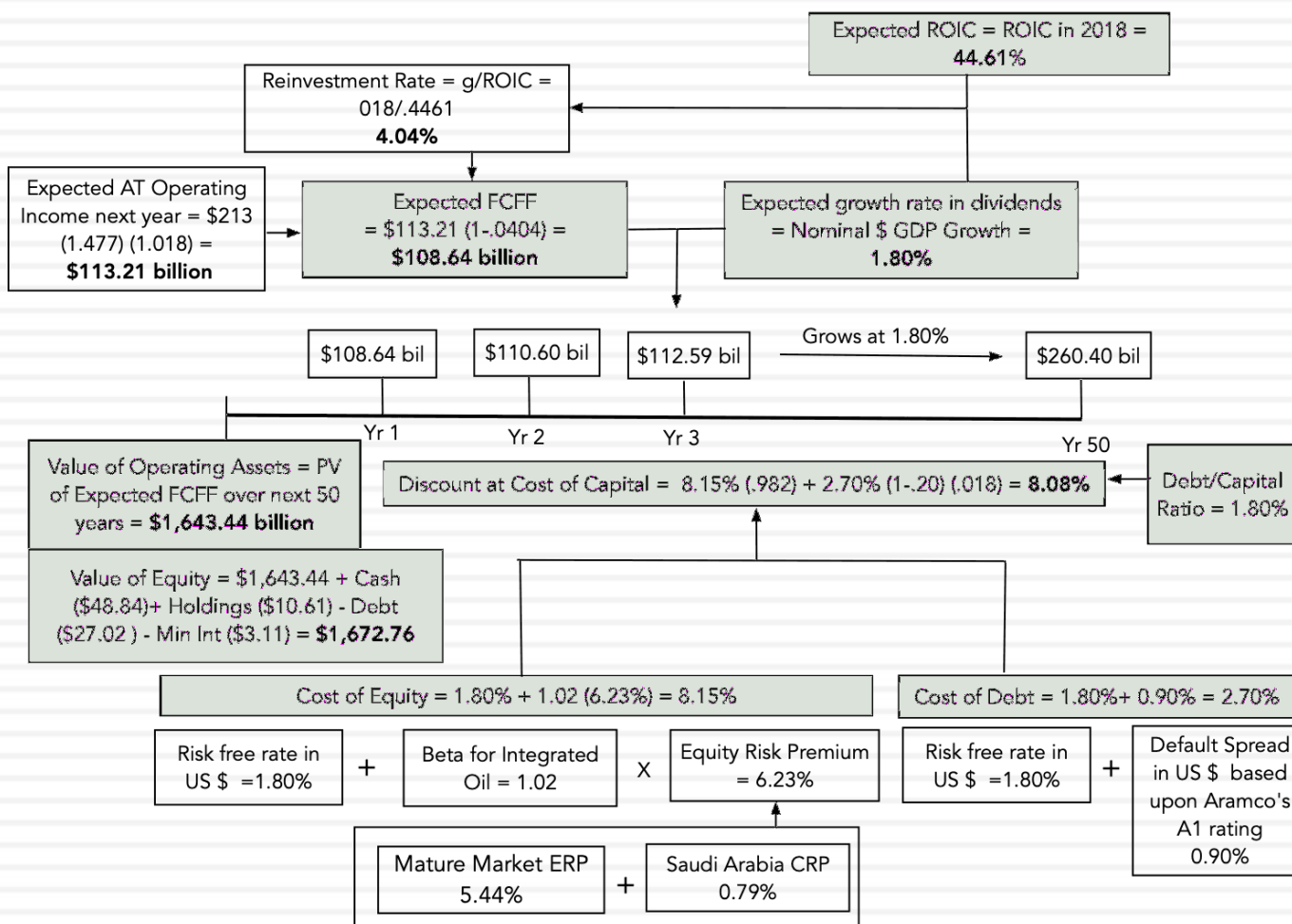
Valuing Aramco: Potential Dividends

A Potential Dividend (FCFE) Discount Model Valuation of Aramco



Valuing Aramco: As a business

A Firm Valuation of Aramco



Valuation Afterthoughts

- Political Risk: I have used the default spread of the country as a proxy for the Saudi equity risk premium, but that misses the risk of regime change, a discontinuous risk that will have very large and potentially catastrophic effects on value. While that risk may seem low, it is definitely not zero.
- Upside limits: The royalty structure that the Saudi government has created, where the royalty rate will climb from 40% at current oil prices to 45% if they rise above \$ 70 and 80% if they rise above \$100/barrel will mean that your share, as an equity investor, of the benefits of higher oil prices will be capped, dampening the value today.
- Price setter/taker: Aramco has more influence on the oil price than any of them, as a result of Saudi Arabia's role in the oil market. Put simply, while the power of the Saudi government to set oil prices has decreased from the 1970s, it does continue to wield more influence than any other entity in this process.
- Value Effect: The first two factors are clear negatives and should lead you to mark down the value of Aramco, the third factor may help provide some downside protection. Overall, I would expect the value of equity in Aramco to be closer to \$1.5 trillion than \$1.7 trillion, after these adjustments are made.

IPO Details and Thoughts

- Over the weekend, we got a little more clarity on the IPO details, with a rumored pricing of \$1.7 trillion for the company's equity and a planned offering of 1.5% of the outstanding shares.
- That price is within shouting distance of my valuation, and my guess is that given the small size of the offering (at least on a percentage basis), it will attract enough investors to be fully subscribed.
- At this pricing, I think that the company will be more attractive to domestic than international investors, with Saudi investors, in particular, drawn to the company's reputation.

Good investment

- It will be a solid investment, as long as investors recognize what they are getting is more bond than stock, with dividends representing the primary return and limited price appreciation.
 - ▣ They will have no say in how the company is run, and if they don't like the way it is run, they can vote with their feet.
 - ▣ If they are worried about risk, the research they should do is more political than economic, with the primary concerns about regime stability.
- If you are a Saudi investor, with your human capital and real estate already tied to Saudi Arabia's (and oil's) well being, investing your wealth in Aramco will be doubling down on that dependence.

Not for me...

- Aramco is not a stock for me for two reasons.
 - ▣ I am lucky enough not to be dependent on cash flows from my investment portfolio to meet personal liquidity needs, and have no desire to receive large dividends, just for the sake of reaching them, since they just create a concurrent tax burden.
 - ▣ Second, if I were tempted to invest in the company as a play on oil prices, the rising royalty rates, as oil prices go up, imply that my upside will be limited at Aramco.
- This company will be the ultimate politically incorrect investment, operating both as a long-term bet on oil, in a world where people are as dependent as ever on fossil fuels, but are repelled by those who produce it, and as a bet on Saudi royalty, an unpopular institution in many circles.
- I don't much care for political correctness nor for investors who seem to believe that the primary purpose of investing is virtue signaling, and I must confess that I am tempted to buy Aramco just to see their heads explode. However, that would be both petty and self-defeating, and I will stay an observer on Aramco, rather than an investor.