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The Leviathan of the Desert: A Financial
Perspective on Saudi Aramco

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Abstract

This thesis provides an in-depth analysis of Saudi Aramco, the world's largest integrated oil and gas company, focusing on its operational structure, financial performance, and strategic outlook. It begins with an overview of the company and its business model, encompassing both upstream and downstream operations, and evaluates its position within the global energy market.

To assess Saudi Aramco's financial performance, key financial ratios were calculated and benchmarked against those of its industry peers. The valuation of the company was conducted using the Discounted Cash Flow (DCF) methodology, incorporating a carefully determined discount rate and free cash flow projections. Additionally, a sensitivity analysis was performed to evaluate the impact of external factors on the company's valuation.

The primary objective of this thesis is to determine the fair value of Saudi Aramco's share price for FY2025, offering insights into its financial health and strategic positioning in an evolving energy landscape.

Keywords: Oil, Energy, Refining, Chemicals

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This report is part of the report: The in-depths of Saudi Aramco – The unmatched oil and gas company (annexed), developed by João Martins and Pedro Mota and should be read has an integral part of it.

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Introduction

This equity research provides an extensive analysis on Saudi Aramco, the oil and gas major in a dynamic energy market.

The joint report is based around a thorough analysis of the company's operations, financial performance, and the broader industry trends. The company's financial performance was assessed, comparing it with other major oil and gas companies.

This individual report forms a key component of the Saudi Aramco Equity Research Project, which aims to evaluate the financial performance, strategic assets and primary variables that drive its operations. Firstly, a company overview and a business model were made to better understand Saudi Aramco's operational efficiency and product portfolio. Afterwards, a financial analysis of Saudi Aramco was made and compared to its peers. The methodology in which our valuation was based upon was exhaustively explained, determining the key variables considered in a company's valuation. A sensitivity analysis around these variables was further performed and its impacted was measured.

As for the joint report, it comprises an industry overview for the industries that Saudi Aramco operates in, considering future trends and potential market disruptions. The transition into clean energies considered in the future projections, namely the company's strategic liquids-to-chemicals approach, having conducted a scenario analysis on key variables. The ESG policies followed by the company were evaluated and a Multiples approach with selected oil and gas peers was performed as a proxy for company valuation.

The objective of this individual report is to present a nuanced valuation of Saudi Aramco while exploring the adaptability of its operations in a constantly changing energy market. As such, a comprehensive understanding of the company's fair value and a settled investment decision were provided.

Company Overview

Saudi Aramco (TADAWUL), officially known as the Saudi Arabian Oil Company, is the world's largest integrated oil and gas producer. Headquartered in Dhahran, Saudi Arabia, Aramco was founded in 1933 and is majority-owned by the Saudi Government, serving as their main source of income.

Aramco operates within the energy sector and its main focuses are the exploration, production, refining and marketing of crude oil, natural gas, and chemicals. With the world's largest proved oil and gas reserves, estimated to be 260 billion of barrels of oil equivalent composed of 191 billion of barrels of crude oil, 26 billion barrels of Natural Gas Liquids¹ and 208 trillion of standard cubic feet of Natural Gas and an unmatched production capacity averaging around 12.8 million barrels per day in 2023, Saudi Aramco is the biggest oil and gas company in the world.

Listed on the Saudi Exchange under the ticker symbol 2222 since 2019, Saudi Aramco had a market capitalization of around SAR 8 trillion (\$ 2.1 trillion) with 242 billion shares outstanding and ranked 6th biggest in the world as of 31 of December 2023. Some of its main competitors to whom we will compare it throughout this paper are ExxonMobil, Chevron, PetroChina, Shell and British Petroleum². Aramco operates in every continent around the globe however their main sources of oil come from Saudi Arabia, North America, and China.

Saudi Aramco is presented as a conglomerate of several different joint ventures and associates that allow the company to leverage its position as the biggest oil and derivatives producer in the world. Their recent 70% equity acquisition, in 2020, of Saudi Basic Industries Corporation³ from SAR 259.13 billion, allowed the company to significantly increase their refined products production such as chemicals and meet global demands.

Aramco has made significant investments in sustainability initiatives, focusing on reducing its carbon footprint through cleaner fuels, carbon capture technologies, and the development of green hydrogen. Additionally, the company has been expanding to refining capacity, both domestically and globally in key high growth geographies such as China, India, and Southeast Asia, which are integral to existing businesses and future expansion strategy. As of 2023, Aramco's main source of revenues come from in-Kingdom sales representing around 62% of total sales with the United States in second place representing 12%.

Since its IPO, Saudi Aramco's share price has demonstrated resilience amidst market volatility, closely tracking global crude oil price trends. For instance, during

Figure 1: Proved hydrocarbon reserves (2023)
Source: Statista

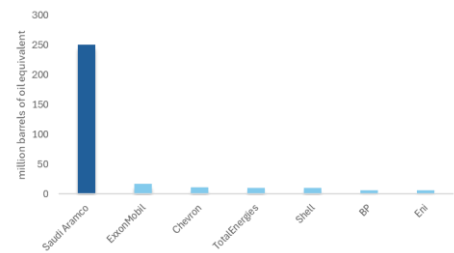


Figure 2: Saudi Aramco proved reserves breakdown 2023)
Source: Annual report

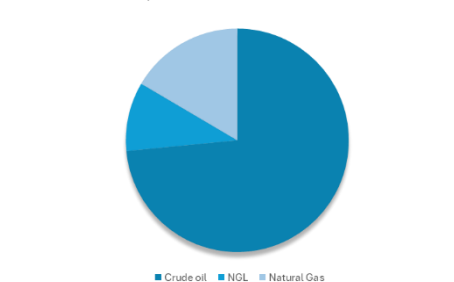


Figure 3: Major oil companies' liquid production (2023)
Source: Statista

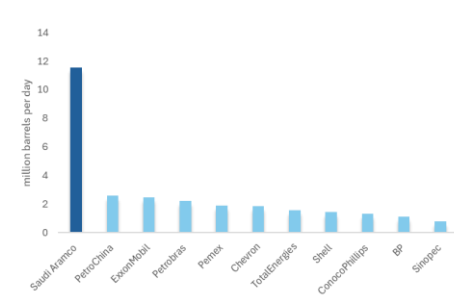
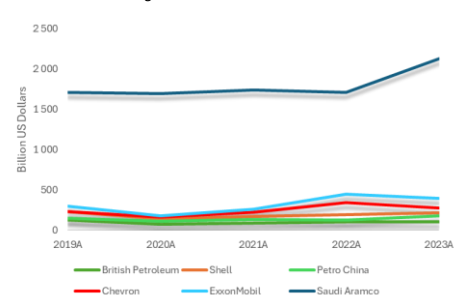


Figure 4: Major oil companies market capitalization
Source: Bloomberg

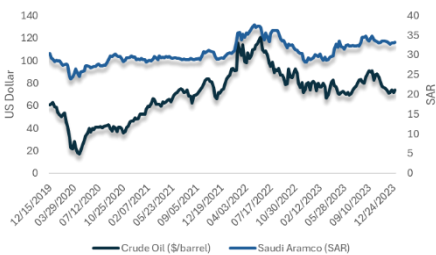


¹ Natural Gas Liquids - NGL

² British Petroleum - BP

³ Saudi Basic Industries Corporation - SABIC

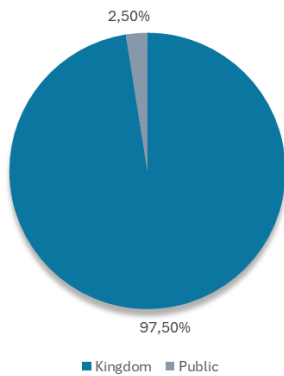
Figure 5: Saudi Aramco share price vs crude oil
Source: Bloomberg



periods of elevated crude oil prices in 2022, Aramco's stock reached historic highs, benefiting from increased revenues and market confidence. Conversely, declines in crude oil prices have been mirrored by downward pressure on its stock. A graphical analysis plotting Aramco's share price performance against global Brent crude oil prices highlights a strong correlation between the two, underscoring the company's sensitivity to fluctuations in the energy market. Quantitatively, a sensitivity analysis reveals that a \$10 per barrel change in crude oil prices results in an estimated 12% change in Aramco's share price according to our model.

Shareholding structure and corporate governance

Figure 6: Saudi Aramco shareholding structure
Source: Saudi Aramco



Saudi Aramco's shareholding structure and governance framework highlight its unique status as a major oil producer and a publicly held company with significant government ownership. As of December 31, 2023, the Saudi Government remained the largest shareholder, controlling 97.50% of the company. This dominant stake underscores the government's substantial influence over Aramco's strategic direction and operations. The remaining 2.50% of shares are publicly traded on the Saudi Stock Exchange (Tadawul), stemming from Aramco's historic 2019 IPO. The IPO offered 3 billion shares at SAR 32 (\$8.53) per share, raising approximately \$25.6 billion, marking the largest initial public offering in history at that time surpassing Alibaba⁴.

Aramco has announced plans for a secondary public offering of its shares, aimed at boosting the company's overall market capitalization and enhancing liquidity in the stock market. By increasing the free float, this offering could attract a broader range of institutional investors, potentially improving Aramco's valuation while providing the Saudi Government with additional capital for domestic economic initiatives such as funding Aramco's mega projects. However, liquidity for Aramco's publicly traded shares remains relatively limited, given the small free float and the government's overwhelming ownership stake. This constrains active trading volumes and may create challenges for new investors seeking to enter or exit positions efficiently.

Aramco's governance structure reflects its dual role as a profit-driven enterprise and a strategic asset of the Saudi Kingdom. The Board of Directors, comprising 11 members, oversees the company's strategic decisions and operational risks. Notably, five board members are independent directors with diverse professional backgrounds, contributing to balanced decision-making. The Chairman of the Board, Saudi Arabia's Minister of Energy Abdulaziz bin Salman Al Saud, highlights the government's pivotal role in Aramco's governance and alignment with national priorities.

⁴ Financial Times. "Saudi Aramco Prices IPO at Top of Range." *Financial Times*, December 5, 2019.

The Board operates through four specialized committees: the Audit Committee, the Sustainability Risk and HSE (Health, Safety, and Environment) Committee, the Nomination Committee, and the Compensation Committee. These committees enhance the board's oversight by addressing specific operational and governance areas. To align the Board's interests with those of the company, directors are compensated through a combination of salary and stock-based incentives, ensuring that their personal financial outcomes are tied to Aramco's performance.

Day-to-day operations are managed by the company's President and CEO, who is appointed by the Board of Directors. The executive team oversees upstream, downstream, and corporate service efficiency, ensuring that production targets and operational goals are met.

Business Model

Saudi Aramco's business model is designed around its position as the world's largest integrated oil and gas company, leveraging its dominance across the hydrocarbon value chain to capture value from both upstream and downstream activities. The company's operations span from exploration and production of crude oil, natural gas, and condensates to refining, petrochemicals, and trading, enabling it to optimize revenue generation and reduce operational risks. This integration allows Aramco to source feedstock internally for downstream operations, minimizing exposure to volatile input costs while enhancing supply chain efficiency. Solar energy-producing facilities, used exclusively to provide electricity and steam for oil and gas facilities, further reduce operational costs and demonstrate Aramco's commitment to energy efficiency.

In the upstream segment, Saudi Aramco's activities focus on exploration, development, and production of crude oil, natural gas, and NGL. With most of its fields located in the central region and eastern provinces of Saudi Arabia, the company benefits from easily accessible reserves and an extensive pipeline network that connects production sites to domestic customers and export terminals. This infrastructure supports efficient processing into refined and petrochemical products while maintaining low operational costs. Aramco extracts five different grades of crude oil, with 68% classified as premium grade. Its production processes are characterized by low carbon intensity compared to other global producers, averaging 10.7 kgCO₂e per barrel of oil equivalent, showcasing a strong environmental performance in a traditionally high-emission industry.

As of December 31, 2023, the upstream segment accounted for approximately 46% of Aramco's total revenues, with an average production of 12.8 million barrels of oil equivalent per day. This includes crude oil, natural gas, and NGL, with crude oil alone contributing 10.62 million barrels per day, nearing the company's

Figure 7: Saudi Aramco revenue breakdown
Source: Annual report

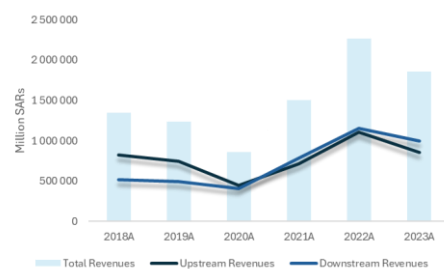


Figure 8: Saudi Aramco's upstream revenue breakdown
Source: Annual report

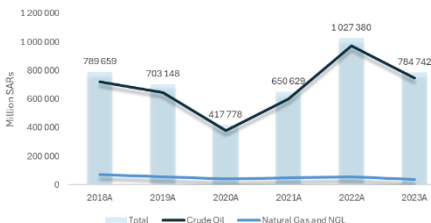


Figure 9: Saudi Aramco's upstream production and lifting costs
Source: Annual report

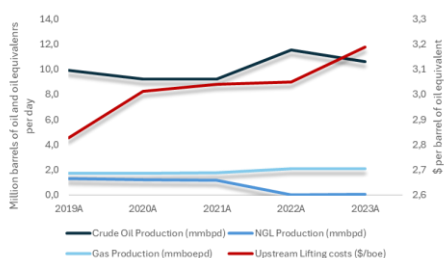


Figure 10: Saudi Aramco's upstream revenue vs crude oil prices
Source: Annual report

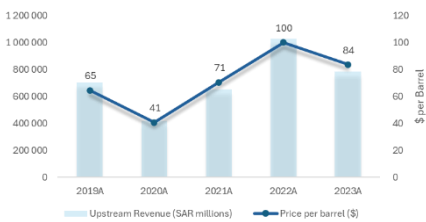


Figure 11: Saudi Aramco's downstream revenue breakdown
Source: Annual report

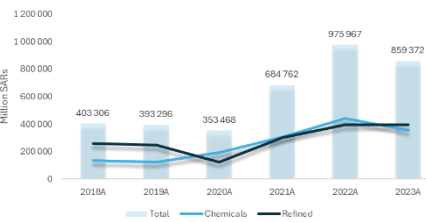


Figure 12: Saudi Aramco's downstream production and refining capacities
Source: Annual report

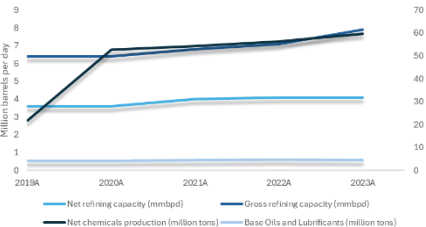
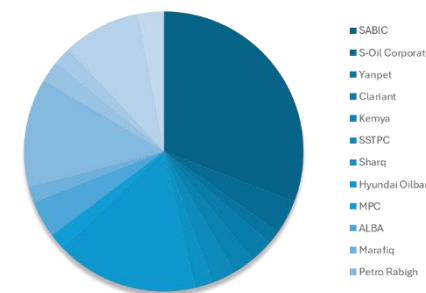


Figure 13: Saudi Aramco's chemical revenue breakdown by company
Source: Annual report



maximum sustainable capacity of 12 million barrels per day. This flexibility allows Aramco to adjust production levels in alignment with OPEC+ quotas and global demand shifts. Revenue generated by the upstream segment is highly correlated with crude oil prices, with a R^2 of 0.87 showing significant sensitivity to price fluctuations. For instance, in 2022, when crude oil prices averaged \$100 per barrel, Aramco achieved its highest-ever upstream revenue of SAR 1.02 trillion (\$274 billion). The company's low production costs further enhance its competitive edge, with lifting costs averaging around SAR 12 (\$3.19) per barrel, among the lowest globally. This cost advantage is a result of its vast reserves, such as the Ghawar and Safaniya fields, economies of scale, and an extensive infrastructure network.

The downstream segment represents a growing component of Saudi Aramco's business model, accounting for approximately 54% of the company's total revenues as of December 31, 2023. This segment includes refining, petrochemicals, base oils, lubricants, retail, distribution, and power generation, offering a diversified revenue stream. Aramco's net refining capacity has steadily increased, reaching approximately 4.1 million barrels per day in 2023, of which 62% originates from wholly owned or affiliated in-Kingdom refineries. The company's chemical production reached 59.6 million tons in 2023, driven by its strategic acquisition of a 70% equity stake in SABIC for SAR 259.13 billion in 2020. This acquisition doubled Aramco's petrochemical revenues in a span of two years, from SAR 191 billion in 2020 to SAR 441 billion in 2022.

Aramco's vertical integration provides a distinct competitive advantage, particularly in its ability to source 47% of the crude oil utilized in downstream operations from its upstream segment. This reduces the company's reliance on external suppliers and stabilizes margins amid crude oil price volatility. Additionally, Aramco's downstream investments align with global demand trends, particularly the growing demand for petrochemicals driven by increased consumption of plastics, fertilizers, and industrial chemicals. Emerging markets in Asia, Africa, and the Middle East, characterized by rising urbanization and energy needs, are expected to drive future growth in the downstream sector, making it a critical area of focus for the company's long-term strategy.

Saudi Aramco's business model is further strengthened by its focus on sustainability and technological advancements. Investments in carbon capture and storage, green hydrogen, and low-carbon fuel production demonstrate a commitment to aligning with global decarbonization efforts. Additionally, the company leverages digital technologies to enhance operational efficiency across its upstream and downstream activities.

Despite these strengths, Aramco faces challenges inherent to the oil and gas industry, including dependency on crude oil prices, geopolitical risks, and the long-

term threat of energy transition toward renewables. The company's success in addressing these challenges while capitalizing on its integrated value chain and cost advantages will be pivotal in maintaining its dominance in an increasingly competitive and dynamic global energy market.

Overall, Saudi Aramco's business model reflects a balance between operational excellence and strategic diversification. By leveraging its unparalleled scale, low production costs, and vertical integration, the company is well-positioned to navigate short-term market dynamics and invest in long-term growth opportunities. The focus on petrochemicals, sustainability, and emerging market expansion underscores Aramco's adaptability and resilience in a rapidly changing energy landscape, making it a cornerstone of the global energy industry.

Organic and Inorganic Growth

Saudi Aramco pursues a balanced approach to internal growth, leveraging both organic and inorganic strategies to sustain its dominance in the global energy market. The company's approach varies depending on the segment, reflecting its strategic priorities and the specific characteristics of upstream and downstream operations.

In the upstream segment, Saudi Aramco primarily relies on organic growth to optimize production and improve operational efficiency. This focus is exemplified by the company's ongoing investment in research and development (R&D), with approximately 0.30% of upstream revenues allocated toward innovative solutions that enhance drilling and production capabilities. These initiatives help Aramco meet its maximum sustainable capacity (MSC) target of 12 million barrels per day (mmbpd). In 2023, the company advanced key projects at its Marjan, Berri, Dammam, and Zuluf fields, which are expected to collectively add 900,000 to 1 million barrels per day of additional production capacity upon completion⁵⁶. Beyond crude oil, Aramco is pivoting towards meeting Saudi Arabia's increasing demand for natural gas, with significant progress in the Jafurah Gas Plant. This flagship project is expected to sustainably produce an additional 2.0 billion standard cubic feet per day (bscf) of gas from 2025 to 2030, reinforcing the company's role in the Kingdom's transition toward cleaner energy sources.

In addition to organic growth, Aramco pursues selective inorganic initiatives to strengthen its upstream capabilities, particularly in natural gas. In 2023, the company acquired a minority stake in Midocean Energy, a global LNG producer, for SAR 1.88 billion. This investment signals Aramco's strategic intent to expand

Figure 14: Saudi Aramco's % of upstream crude oil utilized in downstream operations
Source: Annual report

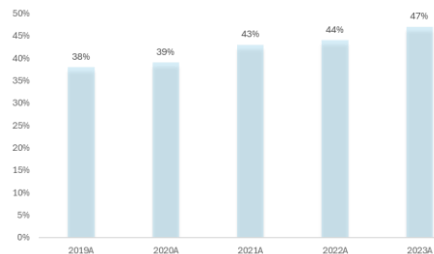


Figure 15: Saudi incremental upstream capacity by new project
Source: S&P Global & Saudi Aramco

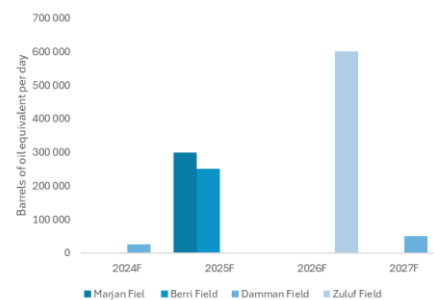
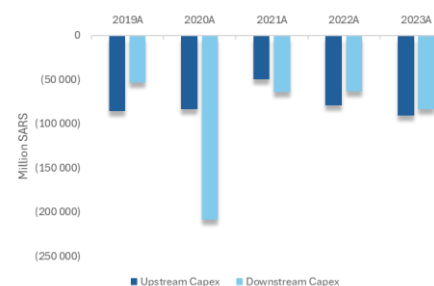


Figure 16: Saudi Aramco CAPEX
Source: Annual report & own estimate



⁵ S&P Global Commodity Insights. "Saudi Aramco Gets Directive to Keep Maximum Sustained Crude Capacity at 12 Mil b/d." January 30, 2024

⁶ Saudi Aramco. "Aramco Signs Contracts Worth \$18 Billion to Boost Capacity at Marjan and Berri Oilfields." News Release, July 9, 2019

its presence in the LNG market, a segment with growing demand as the world shifts toward lower-carbon energy solutions.

In the downstream segment, Aramco relies heavily on inorganic growth through joint ventures and acquisitions to solidify its position as a leading global producer, particularly in petrochemicals. The company's refining operations boast a capacity of 4.1 (mmbpd), supported by a combination of wholly owned and affiliated refinery stations, both domestically and internationally. In 2023, Aramco invested SAR 44.4 billion in a joint project through HAPCO in collaboration with North Huajin and Panjin Xincheng. This investment enhances Aramco's ability to meet global refining demand while diversifying its geographic footprint.

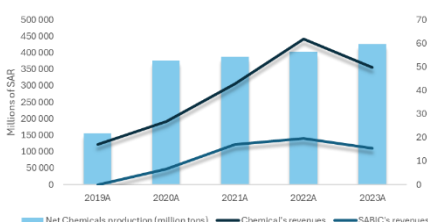
Aramco's chemical operations have also benefited from its inorganic strategy. The 2020 acquisition of a 70% stake in SABIC for SAR 259.1 billion was a transformative move. This acquisition increased the company's chemical production from 21.7 million metric tons in 2020 to 52.6 million metric tons in 2021, representing a remarkable 242% growth. The integration of SABIC has not only expanded Aramco's product portfolio, but also enabled the company to capitalize on the rising global demand for industrial chemicals and plastics.

To complement its refining and petrochemical operations, Aramco has been expanding its global retail presence, often through the acquisition of local retailers. These initiatives have enhanced Aramco's ability to distribute refined products and access new markets. Notably, the company is set to enter the Chilean and Pakistani ⁷markets in 2024, further solidifying its international presence.

Vertical integration remains a cornerstone of Aramco's downstream strategy. By constructing advanced pipeline infrastructure and implementing innovative energy technologies, the company aims to streamline its supply chain while improving sustainability. In collaboration with the Public Investment Fund (PIF) and ACWA⁸ Power Company, Aramco is developing two photovoltaic projects to supply renewable energy to its operations, reinforcing its commitment to environmental stewardship. Additionally, the establishment of Aramco Trading Americas, an affiliate of Aramco Trading Company (ATC), enhances the operational efficiency of the downstream segment. This subsidiary focuses on trading crude oil directly produced by Aramco, ensuring optimized resource allocation and value capture.

Through its dual focus on organic and inorganic growth, Saudi Aramco has demonstrated its ability to adapt to evolving market dynamics while maintaining its competitive edge. The upstream segment benefits from organic investments that enhance operational efficiency and production capacity, while the downstream

Figure 17: Saudi Aramco's chemical revenue & production
Source: Annual report



⁷ Aramco. "Aramco Completes Acquisition of Stake in Gas and Oil Pakistan." *Aramco Newsroom*.

⁸ ACWA Power. "ACWA Power, PIF Company Badeel, and Aramco Subsidiary SAPCO Reach Financial Close for Haden, Muwayh, and Al Khushaybi Solar PV Projects." *ACWA Power Newsroom*

segment thrives on acquisitions and joint ventures that diversify revenue streams and expand market reach. Together, these strategies position Aramco for continued growth and resilience in a rapidly changing energy landscape.

Financial Analysis

This financial analysis aims to evaluate the intrinsic value and growth potential of Saudi Aramco. By examining key financial metrics such as revenues, profitability KPIs, this analysis seeks to provide a comprehensive understanding of the company's financial health and its potential for long-term investment returns. The analysis will also assess how the company's current market position aligns with broader industry trends and macroeconomic conditions.

Revenues

From 2018 to 2023, Saudi Aramco's revenue demonstrated significant resilience and adaptability, with a performance closely tied to fluctuations in global oil prices and strategic diversification across segments. The upstream and downstream operations showed distinct contributions to overall revenue growth, reflecting the company's ability to capitalize on macroeconomic trends and its structural advantages.

The upstream segment, including crude oil and natural gas/NGL revenues, remained the dominant contributor to Aramco's total revenue. Crude oil revenues ranged from SAR 720 billion in 2018 to SAR 746.7 billion in 2023, with a notable dip to SAR 377 billion in 2020 during the COVID-19 pandemic, reflecting the global decline in oil demand and prices (Brent crude averaged \$41 per barrel). However, the segment rebounded strongly, peaking at SAR 971 billion in 2022 as oil prices surged due to supply constraints and geopolitical tensions, including the Russia-Ukraine war.

Natural gas and NGL revenues followed a similar trend, with a peak of SAR 69.6 billion in 2018, declining to SAR 40.6 billion in 2020, and recovering to SAR 56 billion in 2022. Despite their relatively smaller contribution compared to crude oil, these revenues highlighted the growing role of natural gas in Aramco's portfolio, driven by increasing global energy demand for cleaner fuels.

The downstream segment exhibited steady growth, particularly in refined and chemical products, underscoring Aramco's successful diversification efforts. Refined product revenues grew from SAR 258.8 billion in 2018 to SAR 395.57 billion in 2023, reflecting a compound annual growth rate (CAGR) of approximately 7.32% whereas chemicals grew from SAR 134.05 billion in 2018 to SAR 354.79 billion in 2023, presenting a CAGR of 17.61%. The downstream segment accounted for an increasing share of total revenues, mitigating the impact of

Figure 18: Industry revenues
Source: Companies annual reports

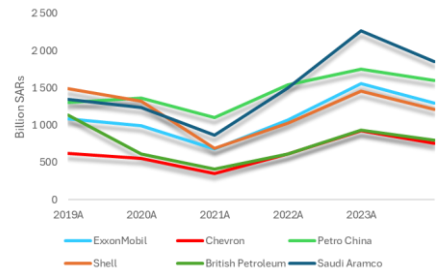
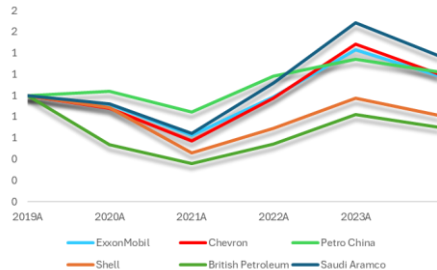


Figure 19: Industry revenues - rebased
Source: Own estimate



volatile crude oil prices on the company's overall performance.

Revenues from crude oil within the downstream segment also increased significantly, rising from SAR 8.3 billion in 2018 to SAR 91.9 billion in 2023, indicating Aramco's capacity to optimize value through its integrated operations. Additionally, other product lines, including natural gas, NGLs, and metals, contributed to downstream revenue growth, albeit at a smaller scale.

Saudi Aramco's ability to recover from the pandemic-induced downturn and achieve record revenues in 2022 and 2023 reflects its structural advantages, including low lifting costs (\$3-\$5 per barrel) and reliable supply chains. Furthermore, the company's strategic emphasis on downstream operations and petrochemicals enabled it to diversify revenue streams, reduce dependency on crude oil, and capture growth opportunities in high-demand markets like Asia.

Compared to its peers Saudi Aramco was behind in revenues from 2018 to 2020 averaging around SAR 1.15 trillion per year but after the rebound of crude oil prices and their new downstream acquisition, they gained some terrain.

Profitability Measures

Aramco's profitability metrics show its ability to consistently generate higher profits compared to its peers, even when oil prices go significantly down. Saudi Aramco has beaten every major competitor by a significant amount regarding Gross, EBITDA, EBIT and Net Margins. Saudi Aramco has consistently outperformed its peers in profitability metrics due to its cost leadership, vast low-cost reserves, and integrated operations. Its gross margin low break-even points, far exceeding peers like BP and Shell, which face higher costs and have been shifting towards lower margin projects such as renewable energies. Aramco's EBITDA and EBIT margins are strengthened by economies of scale and strategic investments in high margin downstream projects.

One can observe from the graphics presented in the left, that Aramco possesses some of the lowest lifting costs in the industry, averaging in 2023 around \$3.9 per barrel, this allows the company to achieve higher margins and generate great profitability. Its net margin is driven by high oil prices, efficient cost management, and favourable tax policies.

Between 2018 and 2023, Saudi Aramco's profitability was directly influenced by the fluctuations in global oil prices. In 2018, Aramco's profitability was robust, with net income of approximately SAR 417 billion reaching a net income margin of 22%, driven by crude oil prices averaging around \$70 per barrel. In 2019, despite a slight drop in oil prices and market challenges, Aramco posted a net income of SAR 331 billion (net margin of 13%), which still made it the most profitable company amongst its peers.

Figure 20: Industry Gross Margin
Source: Own estimate

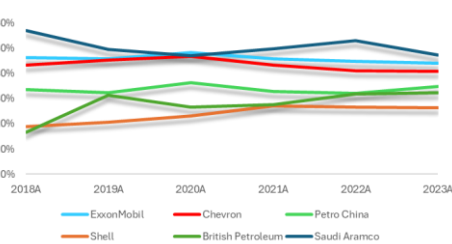


Figure 21: Industry lifting costs
Source: Own estimate

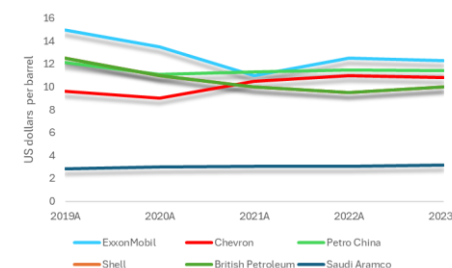


Figure 22: Industry EBITDA margin
Source: Own estimate

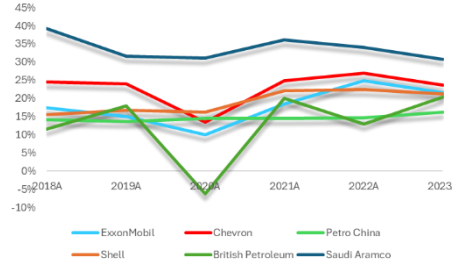
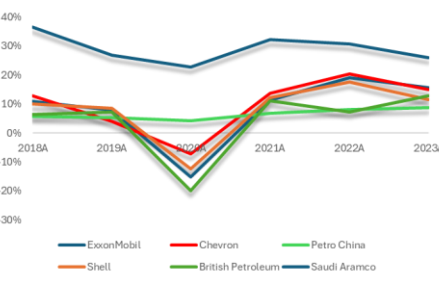
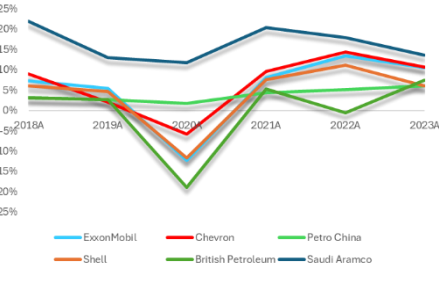


Figure 23: Industry EBIT margin
Source: Own estimate



In 2020, the COVID-19 pandemic caused a historic collapse in oil demand, leading to a significant reduction in Aramco's revenues and profitability. Net income dropped to SAR 183 billion which made the net margin drop to 12%, less than half of the previous year, as oil prices fell dramatically (Brent crude averaged around \$41 per barrel). Despite this, Aramco managed to remain profitable, supported by cost-cutting measures and its industry-leading production efficiency. As oil demand recovered in 2021, Aramco's net income surged to SAR 412 billion (net margin of 22%), largely due to a recovery in crude oil prices (Brent crude averaged around \$71 per barrel). The company's profitability was further sustained by increased production levels as OPEC+ eased output cuts.

Figure 24: Industry Net margin
Source: Own estimate

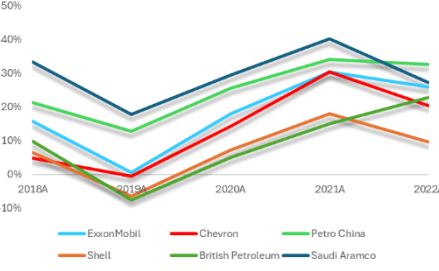


In 2022, Saudi Aramco recorded a staggering net income of SAR 604 billion, the highest in its history, driven by a surge in oil prices following Russia's invasion of Ukraine. Brent crude prices averaged above \$100 per barrel for much of the year, and the tightening of global oil supply significantly boosted Aramco's profit margins. By 2023, although oil prices had stabilized, Aramco's net income remained strong, though slightly lower than 2022, with the company continuing to focus on operational efficiency and strategic investments in downstream sectors and petrochemicals. The company also made moves to diversify its revenue base, although its core profitability remained tied to crude oil prices.

Return on Invested Capital

Return on invested capital measures how efficiently the company is generating returns from its capital. Saudi Aramco's ROIC is the highest amongst its peers mainly because of minimum costs of production, vertically integrated operations, and an extensive resource base.

Figure 25: Industry core return on invested capital
Source: Own estimate



Between 2019 and 2023, Aramco's ROIC ranged from 18% (2020) to 40% (2022), reflecting its ability to generate superior returns even during market downturns. In comparison, ExxonMobil's ROIC averaged 18% and Shell's 7% during the same period.

The dip in 2020 ROIC to 18% was a direct result of the pandemic's impact on oil demand. However, Aramco's disciplined cost management and reduced capital expenditures mitigated the decline. By 2022, surging oil prices and increased production levels drove ROIC to 40%, underscoring the company's capital efficiency. In 2023, despite a stabilization in oil prices, Aramco sustained a healthy ROIC of 27% through diversification and operational optimization.

Debt Structure

Saudi Aramco's debt structure reflects its financial strategy and market conditions, particularly its approach to leveraging debt while maintaining a strong balance

Figure 26: Saudi Aramco debt structure
Source: Annual report & own estimate



sheet.

In 2018, Saudi Aramco had minimal debt with a conservative Net debt-to book value of equity ratio of approximately -1.43% with more cash than debt. This low leverage allowed the company to maintain flexibility and incur significant capital expenditures for growth and infrastructure projects without compromising financial stability.

However, as global market conditions evolved, particularly during the COVID-19 pandemic in 2020, Aramco began to increase its debt levels to enhance liquidity. By the end of 2020, after the SABIC acquisition, which was funded with a mix of cash and debt (70% debt and 30% cash) its total debt reached SAR 536 billion (Net debt SAR 365 million), reflecting a Net debt-to book value of equity ratio of 33.16%. In 2021, with the recovery of oil prices, Aramco reduced its debt to SAR 510 billion (Net debt 259 billion) whilst increasing their cash reserves significantly.

In 2022, Aramco’s debt levels decreased, with total debt around SAR 393 billion and a debt-to-equity ratio of 27%. In 2023 the debt levels decreased to SAR 290 billion with a debt-to-equity ratio of 19%.

Methodology

Discounted Cash Flow Method

The target share price for Saudi Aramco was determined using the Discounted Cash Flow (DCF) method, a valuation approach that discounts the company’s forecasted future cash flows at its Weighted Average Cost of Capital (WACC). Forecasts were made from 2024 to 2034 to capture Saudi Aramco’s medium-term performance and intrinsic value, with terminal values calculated for the periods beyond.

Discount rate (WACC) calculation

The weighted average cost of capital is the discount rate that represents the company’s average cost of capital form all its sources, i.e., the return demanded by equity and debt holders according to its respective risk. Under a target Net Debt/Enterprise Value, it is projected that the company’s capital structure will remain constant and all future cashflows will be discounted at the same rate.

Market values & Target Net debt/Enterprise Value

For the WACC calculations, the market values of debt and equity were needed. Because the market conditions have been stable, the market value of debt is assumed to be the same as its book value. In contrast, information about the number of shares outstanding and the closing prices of the shares as of December

31st for the previous five years were obtained to determine the market value of equity. Market value of equity is then calculated by multiplying the closing prices by the total number of outstanding shares. Adding up the market value of debt and equity we reached the Enterprise Value of Saudi Aramco.

Building on the assumption that Saudi Aramco will maintain its historically low debt levels, the target Net Debt/Enterprise Value of 0.25% reflects its conservative capital structure pre-COVID and post-COVID. This low leverage is supported by strong cash flows from upstream operations and government backing, allowing Aramco to fund growth without relying heavily on debt. Compared to peers, Saudi Aramco's minimal debt provides resilience and flexibility, especially during market shocks.

Growth Analysis

The terminal growth rate was determined by multiplying the reinvestment rate (RR) and the return on new invested capital (RONIC), capturing how efficiently reinvested capital is driving future cash flow growth. The reinvestment rate reflects the percentage of operating cash flows reinvested into new capital projects and is calculated by dividing the change of the invested capital by the segments' result, while RONIC measures the return on these new investments.

For each of the segments, the terminal growth rate was calculated and values of -1.29%, 0.26% and -0.25% were reached respectively for upstream, downstream and corporate segment.

$$F1: CI_{95\%} = \bar{\theta} \pm 1,96 \times SD$$

Figure 27: Upstream and Downstream company raw Betas
Source: Bloomberg

Initial Betas			
Upstream	Upper range	Raw Beta	Lower Range
ConocoPhillips	0,655	0,651	0,647
OxyCapital	0,611	0,608	0,605
Kosmos Energy	1,137	1,130	1,123
Tullow Oil	1,698	1,691	1,684
Downstream			
Valero	0,636	0,632	0,628
Marathon	0,543	0,539	0,535
Reliance	1,207	1,204	1,201
Petrobras	1,199	1,195	1,191
Neste	1,218	1,213	1,208

Cost of equity

To account for the varying risks profiles across Saudi Aramco's business segments—upstream, downstream, and corporate—separate equity betas for upstream and downstream operations were calculated. While the risks in these segments are similar, they are not the same due to the nature of each operation and we thought to be best do try and calculate a different discount rate for each of the segments.

To capture these differences, we gathered the equity betas from Bloomberg for four different companies of the upstream segment (ConocoPhillips, Oxy Capital, Kosmos energy and Tullow oil) and for five downstream companies (Valero Energy Company, Marathon Petroleum Company, Reliance Industries Limited, Petrobras and Neste). After gathering the information relative to the equity betas of each of these companies and their respective standard errors, we calculated what would be the interval in which the betas would fall with a confidence of 95% using the formula **F1** – results in **figure 27**. Afterwards, we unlevered the betas of each companies using their respective capital structures plugging in the values in

$$F2: \beta_u = \beta_e \times \frac{E}{EV} + \beta_d \times \frac{D}{EV}$$

Figure 28: Upstream and Downstream company unlevered Betas
Source: own estimate

Unlevered Betas			
Upstream	Upper range	Raw Beta	Lower Range
ConocoPhillips	0,605	0,601	0,598
OxyCapital	0,498	0,496	0,493
Kosmos Energy	0,762	0,758	0,754
Tullow Oil	0,619	0,617	0,616
Downstream			
Valero	0,514	0,510	0,507
Marathon	0,442	0,439	0,435
Reliance	1,116	1,114	1,111
Petrobras	0,881	0,878	0,876
Neste	1,116	1,112	1,107

F3: $\beta_e = \beta_u + \frac{D}{E} \times (\beta_u - \beta_d)$

Figure 29: Upstream and Downstream company re-levered Betas
Source: own estimate

Relevered Betas			
Upstream	Upper range	Raw Beta	Lower Range
ConocoPhillips	0,609	0,605	0,602
OxyCapital	0,502	0,499	0,496
Kosmos Energy	0,767	0,763	0,759
Tullow Oil	0,623	0,621	0,620
Downstream			
Valero	0,518	0,515	0,511
Marathon	0,445	0,442	0,439
Reliance	1,126	1,123	1,121
Petrobras	0,889	0,886	0,883
Neste	1,126	1,121	1,117

Figure 30: Upstream and Downstream and Saudi Aramco Betas
Source: own estimate

Outcomes			
Betas	Upstream	Downstream	Stock returns
Upper range	0,62	0,89	0,67
Raw Beta	0,61	0,89	0,66
Lower Range	0,61	0,88	0,66

F4: $R_d = YTM - PD \times LGD$

formula **F2** and reached the values presented in **figure 28**. To compare our results with Saudi Aramco’s, we had to re-lever the betas using our estimate to what the capital structure of Aramco will be in 2025 using the formula **F3** reaching the values presented in **figure 29**. To reach the final values of the betas, we made a median of these betas per segment – results in **figure 30**.

To judge if our method is going to yield similar betas of Aramco’s actual beta, we calculated our beta, standard error, and confidence interval based on Aramco’s weakly stock returns from 19th of December 2019 to 28th of December 2023 and reached the values presented in **figure 30**.

Comparing the results, one can infer that even though the upstream beta is lower than the actual Aramco’s beta, the downstream beta is superior and so, given the weights in the value of the operation, it is a reasonable assumption to proceed with the per-segment betas.

Given the minimal contribution of corporate cash flows to the overall cash flows, the beta we will be using to value this operation will be the beta calculated from the stock returns of Saudi Aramco.

Cost of debt

When determining the cost of debt for Saudi Aramco, the company’s outstanding debt for the foreseeable future was considered. Firstly, all the existing issued debt was extracted from the Moody’s database. Since the projected valuation timeframe was of 10 years, we considered as a proxy for the company’s future debt its *Senior Unsecured (Foreign)* debt, which was issued on June 16th, 2024, and will mature on June 16th, 2034, the same time horizon as our valuation. According to the formula **F4**, the company’s projected annualized probability of Default (PD), its Loss Given Default (LGD) and yield to maturity of the debt must be considered when calculating the expected return to debtholders. According to Moody’s, Saudi Aramco possesses a credit rating of A1, which in turn implies an annualized probability of default of 0,22% and a LGD of 52.69%. This culminates in an expected cost of debt of 4,73% attributed to Saudi Aramco.

Weighted average cost of capital

After gathering and calculating all the information necessary to calculate the WACC, we proceeded with the calculation of the three individual WACCs needed for this valuation. Using the appropriate formula **F5** and respective inputs, we got the results presented on table 5.

For the sake of the reliability of our model, with the WACCs calculated for the upstream and downstream segments, we calculated a “company-wide” WACC

F5: $WACC = \beta_e \times \frac{E}{EV} + \beta_d \times \frac{D}{EV} \times (1 - T)$

using a weighted average of the value of operations generated by each segment. The WACC derived from this equation totalled 6,81% which is only 43bp different from the WACC calculated using the stock returns from the company. We believe this small difference arises from the non-integrated companies we used for upstream and downstream betas. Since the purpose of the different betas for the different segments was to capture the risks associated with each segment individually, it failed to capture the vertical integration that Saudi Aramco uses in its business, driving the WACC upwards. Still, since the insignificance of the difference, we decided to proceed with per-segment WACCs.

Valuation

With the WACCs and terminal growth rates calculated, the next step was to discount each segment's projected free cash flows (FCFs) using their respective discount rates. For the downstream and corporate segments, the terminal value was calculated using a perpetuity formula based on their respective terminal growth rates, reflecting the assumption of indefinite operation and growth.

In contrast, for the upstream segment, where operations depend on finite commodity reserves, a different approach was taken. Based on 2023 production levels, the estimated "lifetime" of reserves was calculated to be 73 years. Consequently, the terminal value for upstream operations was determined using an annuity formula, representing 73 years of cash flows discounted at the segment's WACC and incorporating the respective terminal growth rate.

Once the future free cash flows and terminal values for each segment were discounted, their sum provided the total value of operations per year. Adjustments were made to account for non-operating items, resulting in the calculation of Saudi Aramco's Enterprise Value.

To derive the shareholders' equity value, net debt and non-controlling interests were subtracted from the Enterprise Value. The target share price was then calculated by dividing the equity value by the total number of outstanding shares for 2025, which was assumed to remain constant at the 2023 level. This resulted in a share price of SAR 28.48.

Finally, to calculate the total shareholder return per share, dividends per share were estimated under the assumption that the only transactions with shareholders in the future would be equity changes and dividends paid. Dividends of SAR 345 billion were projected, which, when divided by the total shares outstanding, resulted in SAR 1.43 per share. Adding this to the target share price produced a total shareholder return of SAR 29.90 See **figure 32**.

Sensitivity Analysis

Figure 31: Saudi Aramco FY2025 waterfall
Source: own estimate

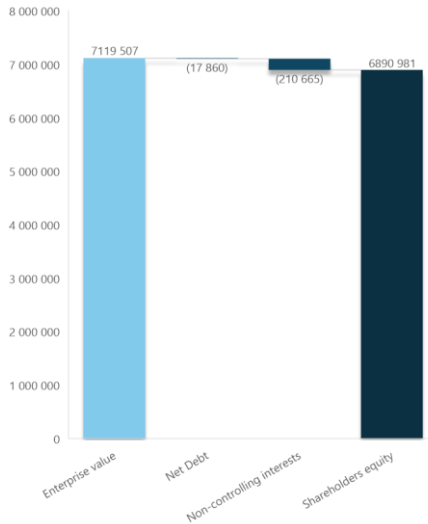


Figure 32: Valuation outcomes
Source: own estimate

Valuation outcomes	
Share Price	28,48 SAR
Total Dividends	345 078 SAR
Dividends per share	1,43 SAR
Shareholder return per share	29,90 SAR

When conducting a sensitivity analysis on Saudi Aramco's share price, we performed these procedures on both Upstream and Downstream variables, as well as on variables impacting the company's discount rate. Throughout this analysis, we focused on the sales value driver's impact on the company share price, as these drivers have been historically volatile and most likely will continue to be. By varying these inputs, we were able to infer share price sensitivity to each variable individually and on a simultaneous basis.

Upstream Variables

In the upstream segment, we analysed the impact of changes in market prices and production quantities for both crude oil and natural gas on Saudi Aramco's share price. The results indicate that crude oil prices are the most significant driver of the company's valuation. Specifically, a 15% increase or decrease in crude oil prices results in a ~13% change in the share price. Similarly, a 15% change in the quantities of crude oil sold leads to a ~12% shift in the share price. In contrast, variations in natural gas prices and production quantities have a minimal impact on the company's valuation. This is because natural gas revenues contribute a smaller proportion to the firm's total upstream revenues and are therefore less influential on the overall share price. These findings align with Saudi Aramco's and the OPEC+ strategy of managing crude oil production cuts⁹ to stabilize and increase market prices. By supporting higher oil prices, production adjustments directly enhance Saudi Aramco's revenues and, consequently, its share price.

Downstream Variables

When it comes to the Downstream segment, the two main drivers of share price shares were the revenue growth of the chemicals sector, which has become a motor for this segment's revenues since 2020 and the purchase margins in relation to the revenues of the downstream operations. When changing the chemical products projected growth rate for its revenues by 15%, the share price varies by ~0.24%, showing that, despite the downstream segment comprising more than 50% of total sales, the impact of the growth rate for the future of chemical revenues on share price is not very significant. Furthermore, when varying the purchase margins by 200bp the change in share price is ~1.9%. Hence, if Saudi is determined to perform its liquids-to-chemicals transition, it must undergo projects that yield above average returns and benefit from profitable margins. Further, the analysis shows the company's reliability on crude oil sales for expected earnings and a representative share price.

Figure 33: Sensitivity Analysis on upstream variables
Source: own estimate

Upstream Variables			
	Values in 2024		Share Price 2025
28,48 SAR			
Worst	Crude Oil - Price per barrel	60,4	24,77 SAR
	Crude Oil - Quantity of mmbpd sold	5,6	25,03 SAR
	Natural Gas - Price per mscfd	14376,8	28,39 SAR
	Natural Gas - mmscfd sold	1,8	28,39 SAR
Base	Crude Oil - Price per barrel	71,0	28,48 SAR
	Crude Oil - Quantity of mmbpd sold	6,6	28,48 SAR
	Natural Gas - Price per mscfd	16913,8	28,48 SAR
	Natural Gas - mmscfd sold	2,2	28,48 SAR
Best	Crude Oil - Price per barrel	81,7	32,17 SAR
	Crude Oil - Quantity of mmbpd sold	7,5	31,90 SAR
	Natural Gas - Price per mscfd	19450,9	28,56 SAR
	Natural Gas - mmscfd sold	2,5	28,56 SAR

Figure 34: Sensitivity Analysis on downstream variables
Source: own estimate

Downstream Variables			
	Values in 2024		Share Price 2025
27,93 SAR			
Worst	Chemicals - revenue growth	4,80%	28,41 SAR
	Purchases in relation to its revenues	40,55%	27,93 SAR
Base	Chemicals - revenue growth	5,65%	28,48 SAR
	Purchases in relation to its revenues	38,55%	28,48 SAR
Best	Chemicals - revenue growth	6,50%	28,54 SAR
	Purchases in relation to its revenues	36,55%	29,02 SAR

⁹ S&P Global Commodity Insights. "OPEC Delays Plan to Ease Crude Oil Output Cuts by One Month." *S&P Global Commodity Insights*, November 3, 2024.

Macroeconomic variables

Figure 35: Sensitivity Analysis on debt and equity instruments
Source: own estimate

Debt and Equity instruments			
28,48 SAR	Values in 2024		Share Price 2025
Worst	Risk free	3,16%	26,53 SAR
	Market risk premium	6,13%	27,04 SAR
Base	Risk free	2,66%	28,48 SAR
	Market risk premium	5,63%	28,48 SAR
Best	Risk free	2,16%	30,69 SAR
	Market risk premium	5,13%	30,06 SAR

As a final remark, sensitivity tests were conducted on WACC related variables. These variables affect remarkably the company's terminal value of operations, which is the main driver of its share price. As shown, a small variation in these inputs causes a big price correction in the company's share price. This goes to show the impact of market conditions and interest rate policies on asset values, as, when market conditions worsen, investor are less likely to accrue risky assets and these assets' valuations worsen. Regardless, Saudi Aramco's outstanding liquidity position, coupled with the lack of seasonality associated with the oil and chemical's industries, are set to maintain the company's discount rate at stable levels.

Appendix

Year ended December 31	Reformulated Income statement												steady state					
	2018A	2019A	2020A	2021A	2022A	2023A	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F	2032F	2033F	2034F	
All numbers in million SAR																		
Core Business																		
Upstream																		
Revenue from contracts with customers	789 659	703 148	417 778	650 629	1 027 380	784 742	682 954	752 610	741 771	761 696	775 452	789 498	803 839	793 403	783 134	773 030	763 090	
<i>Crude oil</i>	720 010	645 499	377 094	600 673	971 325	746 689	637 240	692 416	674 690	696 786	708 109	719 617	731 311	720 378	709 608	699 000	688 550	
<i>Natural gas and NGLs</i>	69 649	57 649	40 684	49 956	56 055	38 053	45 714	60 194	67 081	64 910	67 343	69 881	72 528	73 024	73 525	74 030	74 540	
Movement between provisional and final prices	(1 756)	5 405	(7 286)	5 026	(3 142)	(475)	(371)	(371)	(371)	(371)	(371)	(371)	(371)	(371)	(371)	(371)	(371)	
Other revenue	569	697	464	411	390	375	491	541	533	547	557	567	577	570	562	555	548	
External revenue	788 472	709 250	410 956	656 066	1 024 628	784 642	683 073	752 779	741 932	761 872	775 638	789 693	804 045	793 601	783 325	773 214	763 267	
Other income related to sales	37 189	34 446	38 878	58 905	85 475	71 361	55554	61220	60338	61959	63078	64220	65387	64538	63703	62881	62072	
Revenue and other income related to sales	825 661	743 696	449 834	714 971	1 110 103	856 003	738 627	813 999	802 270	823 830	838 716	853 913	869 432	858 139	847 027	836 095	825 339	
Royalties and other taxes	(127 930)	(109 643)	(47 017)	(69 003)	(167 398)	(106 997)	(92 218)	(101 628)	(100 164)	(102 856)	(104 714)	(106 612)	(108 549)	(107 139)	(105 752)	(104 387)	(103 044)	
Producing and manufacturing	(34 483)	(35 064)	(38 857)	(36 455)	(49 954)	(44 555)	(41 595)	(45 839)	(45 178)	(46 393)	(47 231)	(48 087)	(48 961)	(48 325)	(47 699)	(47 083)	(46 478)	
Exploration	(7 928)	(7 291)	(7 293)	(7 285)	(8 447)	(9 416)	(8 098)	(8 924)	(8 795)	(9 032)	(9 195)	(9 361)	(9 532)	(9 408)	(9 286)	(9 166)	(9 048)	
Selling, administrative and general	(19 155)	(22 036)	(24 509)	(28 325)	(40 997)	(35 455)	(29 853)	(32 899)	(32 425)	(33 296)	(33 898)	(34 512)	(35 139)	(34 683)	(34 234)	(33 792)	(33 357)	
Research and development	(1 359)	(1 293)	(1 477)	(1 844)	(2 164)	(2 396)	(1 959)	(2 159)	(2 128)	(2 185)	(2 225)	(2 265)	(2 306)	(2 276)	(2 247)	(2 218)	(2 189)	
Depreciation and amortization	(27 495)	(30 855)	(39 702)	(42 503)	(44 209)	(48 997)	(47 731)	(50 716)	(53 701)	(56 686)	(57 710)	(58 755)	(59 823)	(59 046)	(58 282)	(57 530)	(56 790)	
Operating costs	(218 351)	(206 183)	(158 854)	(185 415)	(313 170)	(247 817)	(221 453)	(242 165)	(242 392)	(250 448)	(254 973)	(259 592)	(264 310)	(260 877)	(257 499)	(254 176)	(250 907)	
Upstream EBIT																		
Statutory taxes	607 310	537 513	290 980	529 556	796 933	608 186	517 174	571 833	559 878	573 382	583 743	594 321	605 122	597 262	589 528	581 919	574 432	
Zakat expense	(786)	0	(402)	(938)	(970)	(668)	(596)	(596)	(596)	(596)	(596)	(596)	(596)	(596)	(596)	(596)	(596)	
Other comprehensive income	22	(212)	(157)	154	711	(482)	0	0	0	0	0	0	0	0	0	0	0	
Cash flow hedge and other	22	(212)	(157)	154	711	(482)	0	0	0	0	0	0	0	0	0	0	0	
Upstream result	302 892	268 544	144 931	263 994	398 207	302 943	257 991	285 321	279 343	286 095	291 276	296 565	301 965	298 035	294 168	290 364	286 620	
Downstream																		
Revenue from contracts with customers	403 306	393 296	353 468	684 762	975 967	859 372	780 767	845 075	866 957	914 581	958 092	1 003 956	1 052 308	1 055 871	1 059 761	1 063 980	1 068 531	
<i>Crude oil</i>	8 268	22 049	31 400	60 208	105 401	91 945	78 468	85 262	83 079	85 800	87 194	88 611	90 051	88 705	87 379	86 073	84 786	
<i>Refined and chemical products</i>	392 882	369 478	314 066	607 771	835 884	750 355	684 925	740 653	763 869	809 039	850 856	894 990	941 575	946 424	951 578	957 041	962 816	
<i>Natural gas and NGLs</i>	2 156	1 769	2 287	3 992	19 292	4 018	5 637	7 423	8 272	8 004	8 304	8 617	8 944	9 005	9 067	9 129	9 192	
<i>Metal Products</i>	0	0	5 715	12 791	15 390	13 054	11 738	11 738	11 738	11 738	11 738	11 738	11 738	11 738	11 738	11 738	11 738	
Movement between provisional and final prices	(514)	245	(58)	273	(255)	(74)	26	26	26	26	26	26	26	26	26	26	26	
Other Revenue	1 783	1 558	2 377	4 342	4 969	7 390	4 797	5 192	5 326	5 619	5 886	6 168	6 465	6 487	6 511	6 537	6 565	
External Revenue	404 575	395 099	355 787	689 377	980 681	866 688	785 590	850 293	872 310	920 226	964 004	1 010 150	1 058 799	1 062 384	1 066 298	1 070 543	1 075 122	
Other income related to sales	115 452	96 643	55 104	95 923	173 943	131 731	122 481	132 569	136 002	143 473	150 299	157 493	165 079	165 637	166 248	166 910	167 624	
Revenue and other income related to sales	520 027	491 742	410 891	785 300	1 154 624	998 419	908 071	982 863	1 008 312	1 063 698	1 114 303	1 167 643	1 223 878	1 228 021	1 232 545	1 237 452	1 242 745	
Royalties and other taxes	(80 575)	(72 498)	(42 947)	(75 790)	(174 112)	(124 798)	(113 373)	(122 711)	(125 888)	(132 804)	(139 122)	(145 781)	(152 802)	(153 319)	(153 884)	(154 497)	(155 158)	
Purchases	(201 176)	(225 170)	(181 116)	(352 377)	(490 690)	(471 225)	(410 008)	(339 473)	(353 109)	(369 298)	(387 344)	(406 361)	(426 406)	(428 464)	(430 646)	(432 954)	(435 387)	
<i>Refined and Chemical products</i>	(160 045)	(157 438)	(122 011)	(226 649)	(291 696)	(277 022)	(264 042)	(285 526)	(294 476)	(311 889)	(328 010)	(345 023)	(362 982)	(364 851)	(366 838)	(368 944)	(371 171)	
<i>Crude oil</i>	(41 131)	(67 732)	(47 911)	(93 418)	(152 556)	(162 236)	(113 057)	(10 615)	(10 344)	(10 682)	(10 856)	(11 032)	(11 212)	(11 044)	(10 879)	(10 716)	(10 556)	
<i>NGL and other products</i>	0	0	(11 194)	(32 310)	(46 438)	(31 967)	(32 909)	(43 332)	(48 290)	(46 727)	(48 479)	(50 306)	(52 211)	(52 569)	(52 929)	(53 293)	(53 660)	
Producing and manufacturing	(21 719)	(23 185)	(35 493)	(40 040)	(51 958)	(51 968)	(51 136)	(55 348)	(56 781)	(59 900)	(62 750)	(65 754)	(68 921)	(69 154)	(69 409)	(69 685)	(69 983)	
Selling, administrative and general	(12 064)	(14 571)	(22 387)	(31 112)	(42 642)	(41 354)	(36 701)	(39 724)	(40 753)	(42 991)	(45 036)	(47 192)	(49 465)	(49 632)	(49 815)	(50 014)	(50 228)	
Research and development	(856)	(855)	(1 349)	(2 025)	(2 251)	(2 795)	(2 409)	(2 428)	(2 490)	(2 627)	(2 752)	(2 884)	(3 023)	(3 033)	(3 044)	(3 056)	(3 069)	
Depreciation and amortization	(11 941)	(14 350)	(30 888)	(37 764)	(41 425)	(42 352)	(47 710)	(52 659)	(57 607)	(62 555)	(65 531)	(68 668)	(71 975)	(72 219)	(72 485)	(72 774)	(73 085)	
Operating costs	(328 330)	(350 628)	(314 180)	(539 109)	(803 078)	(734 492)	(661 338)	(612 343)	(636 629)	(670 176)	(702 536)	(736 641)	(772 591)	(775 822)	(779 284)	(782 979)	(786 909)	
Share of results of joint ventures and associates																		
	(1 415)	(9 455)	(3 554)	7 874	2 873	(4 001)	(1 253)	(1 253)	(1 253)	(1 253)	(1 253)	(1 253)	(1 253)	(1 253)	(1 253)	(1 253)	(1 253)	
Downstream EBIT																		
Statutory taxes	190 282	131 659	93 157	254 065	354 419	259 926	245 481	369 267	370 430	392 270	410 515	429 750	450 034	450 947	452 009	453 221	454 583	
Tax adjustments	(38 056)	(26 332)	(18 631)	(50 813)	(70 884)	(51 985)	(49 096)	(73 853)	(74 086)	(78 454)	(82 103)	(85 950)	(90 007)	(90 189)	(90 402)	(90 644)	(90 917)	
Zakat expense	(38 324)	(41 446)	(26 111)	(42 384)	(77 304)	(71 785)	(63 162)	(97 725)	(98 214)	(104 224)	(109 257)	(114 566)	(120 174)	(120 549)	(120 964)	(121 420)	(121 918)	
Other comprehensive income	(495)	0	(367)	(1 030)	(1 009)	(779)	(637)	(765)	(844)	(807)	(766)	(764)	(789)	(794)	(784)	(780)	(782)	
Cash flow hedge and other	14	(141)	(143)	169	739	(562)	0	0	0	0	0	0	0	0	0	0	0	
Downstream result	113 421	63 741	47 904	160 007	205 962	134 815	132 585	196 924	197 286	208 785	218 389	228 468	239 064	239 415	239 859	240 377	240 967	
Corporate																		
Other Revenue	1 329	1 347	1 366	1 487	1 646	1 951	2 016	2 200	2 217	2 311	2 391	2 475	2 563	2 554	2 546	2 539	2 532	
External Revenue	1 329	1 347	1 366	1 487	1 646	1 951	2 016	2 200	2 217	2 311	2 391	2 475	2 563	2 554	2 546	2 539	2 532	
Revenue and other income related to sales	1 329	1 347	1 366	1 487	1 646	1 951	2 016	2 200	2 217	2 311	2 391	2 475	2 563	2 554	2 546	2 539	2 532	
Selling, administrative and general	(31)	(40)	(74)	(59)	(61)	(81)	(81)	(89)	(90)	(93)	(97)	(100)	(104)	(103)	(103)	(103)	(102)	
Research and development	(2)	(2)	(4)	(4)	(3)	(5)	(5)	(5)	(5)	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)	
Depreciation and amortization	(1 898)	(5 061)	(5 618)	(5 254)	(5 984)	(5 691)	(5 833)	(6 365)	(6 413)	(6 686)	(6 918)	(7 161)	(7 415)	(7 390)	(7 366)	(7 345)	(7 326)	
Operating costs	(1 931)	(5 103)	(5 697)	(5 317)	(6 048)	(5 777)	(5 919)	(6 459)	(6 509)	(6 785)	(7 021)	(7 267)	(7 525)	(7 499)	(7 475)	(7 454)	(7 434)	
Corporate EBIT																		
Statutory taxes	(602)	(3 756)	(4 331)	(3 830)	(4 402)	(3 826)	(3 903)	(4 259)	(4 292)	(4 474)	(4 629)	(4 792)	(4 962)	(4 945)	(4 929)	(4 915)	(4 902)	
Zakat expense	120	751	866	766	880	765	781	852	858	895	926	958	992	989	986	983	980	
Corporate result	(1)	0	(1)	(2)	(1)	(2)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	
Corporate result																		

Year ended December 31	Reformulated Balance Sheet						steady state											
	2018A	2019A	2020A	2021A	2022A	2023A	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F	2032F	2033F	2034F	
All numbers in million SAR																		
Upstream																		
Operating cash	41 283	37 185	22 492	35 749	55 505	42 800	36 931	40 700	40 114	41 192	41 936	42 696	43 472	42 907	42 351	41 805	41 267	
Inventories	16 897	14 793	15 435	15 468	25 430	18 100	17 746	19 557	19 275	19 793	20 151	20 516	20 889	20 617	20 350	20 088	19 829	
Trade receivables	57 506	56 238	44 448	66 830	80 546	75 586	63 339	69 802	68 796	70 645	71 922	73 225	74 556	73 587	72 634	71 697	70 775	
Due from the government	29 951	22 117	15 077	19 671	26 717	22 769	20 894	23 026	22 694	23 304	23 725	24 155	24 594	24 274	23 960	23 651	23 346	
Other current assets and receivables:	6 393	6 565	10 169	15 224	14 005	14 494	12 370	13 308	13 300	13 659	13 973	14 295	14 626	14 689	14 761	14 839	14 925	
Trade and other payables:	(27 133)	(26 496)	(26 742)	(27 638)	(32 731)	(30 933)	(29 445)	(32 449)	(31 982)	(32 841)	(33 435)	(34 041)	(34 659)	(34 209)	(33 766)	(33 330)	(32 902)	
Net Working Capital	124 898	110 403	80 879	125 303	169 473	142 816	121 835	133 943	132 197	135 752	138 272	140 846	143 476	141 866	140 291	138 749	137 241	
Property, plant and equipment	608 560	663 566	707 460	714 877	750 207	791 836	843 661	896 423	949 186	1 001 948	1 020 044	1 038 519	1 057 385	1 043 656	1 030 148	1 016 858	1 003 782	
Intangible assets	15 962	17 980	14 893	13 119	12 929	13 821	16 537	17 560	18 401	19 311	19 629	19 954	20 286	20 027	19 772	19 521	19 274	
Other net operating assets	(106 105)	(125 337)	(116 851)	(155 917)	(189 821)	(191 348)	(183 466)	(196 072)	(204 178)	(213 997)	(217 845)	(221 777)	(225 795)	(223 181)	(220 619)	(218 108)	(215 648)	
Provisions	(9 566)	(9 612)	(13 153)	(12 494)	(13 606)	(13 006)	(12 865)	(14 178)	(13 974)	(14 350)	(14 609)	(14 874)	(15 144)	(14 947)	(14 754)	(14 563)	(14 376)	
Upstream non-operating capital	508 850	546 597	592 349	559 583	559 709	601 303	663 867	703 733	749 436	792 913	807 219	821 822	836 732	825 554	814 547	803 707	793 032	
Total Upstream Invested Capital	633 748	657 000	673 228	684 887	729 182	744 118	785 702	837 676	881 632	928 665	945 490	962 668	980 208	967 421	954 838	942 456	930 274	
Downstream																		
Operating cash	26 001	24 587	20 545	39 265	57 731	49 921	45 404	49 143	50 416	53 185	55 715	58 382	61 194	61 401	61 627	61 873	62 137	
Inventories	30 103	31 227	43 001	64 237	80 724	72 861	71 844	64 718	67 000	70 279	73 682	77 269	81 049	81 401	81 776	82 176	82 600	
Trade receivables	36 219	37 186	40 600	73 404	83 776	88 161	77 869	84 283	86 465	91 214	95 554	100 128	104 950	105 305	105 693	106 114	106 568	
Due from the government	18 864	14 624	13 772	21 606	27 788	26 557	25 687	27 802	28 522	30 089	31 520	33 029	34 620	34 737	34 865	35 004	35 154	
Other current assets and receivables:	(3 699)	(4 424)	(8 144)	(12 820)	(18 424)	(18 106)	(16 841)	(18 053)	(18 909)	(20 297)	(21 625)	(23 041)	(24 551)	(24 733)	(24 924)	(25 124)	(25 333)	
Trade and other payables:	(43 565)	(49 316)	(65 181)	(89 071)	(87 766)	(106 299)	(101 204)	(92 592)	(95 776)	(100 516)	(105 376)	(110 497)	(115 896)	(116 388)	(116 915)	(117 477)	(118 074)	
Net Working Capital	63 924	53 883	44 593	96 620	143 830	113 095	102 758	115 301	117 717	123 954	129 471	135 269	141 366	141 723	142 123	142 566	143 052	
Property, plant and equipment	230 246	268 908	447 201	473 413	495 435	536 872	590 792	652 067	713 342	774 617	811 469	850 313	891 265	894 282	897 577	901 150	905 005	
Intangible assets	10 931	12 138	149 648	147 546	146 396	150 729	151 417	152 565	153 652	154 783	155 500	156 254	157 048	157 115	157 188	157 266	157 350	
Investments in joint ventures and associates	22 579	19 738	65 976	69 559	72 196	69 474	70 736	72 022	73 331	74 663	76 020	77 401	78 808	80 240	81 698	83 183	84 694	
Other net operating assets	(42 395)	(48 159)	(66 138)	(68 376)	(114 130)	(121 647)	(114 685)	(119 721)	(129 471)	(136 033)	(142 140)	(148 207)	(154 597)	(157 215)	(157 897)	(158 627)	(159 408)	
Provisions	(6 025)	(6 205)	(7 619)	(13 182)	(13 370)	(14 939)	(15 535)	(15 689)	(17 430)	(17 772)	(18 758)	(19 649)	(20 587)	(21 463)	(21 537)	(21 617)	(21 703)	
Downstream non-operating capital	215 336	246 420	589 069	608 960	586 527	620 489	682 725	741 245	793 424	850 259	882 090	916 112	951 937	952 960	957 029	961 355	965 937	
Total Downstream Invested Capital	279 260	300 303	633 662	705 580	730 358	733 583	785 483	856 546	911 142	974 212	1 011 560	1 051 381	1 093 303	1 094 683	1 099 153	1 103 921	1 108 989	
Corporate																		
Operating cash	66	67	68	74	82	98	101	110	111	116	120	124	128	128	127	127	127	
Net Working Capital	7 628	8 675	15 998	21 912	24 999	27 876	25 190	27 419	28 420	30 202	31 883	33 667	35 562	37 428	38 603	38 688	38 783	
Property, plant and equipment	35 021	49 539	54 799	56 027	57 624	56 009	57 876	63 154	63 636	66 341	68 643	71 051	73 573	73 322	73 091	72 879	72 687	
Intangible assets	4	4	6	3	3	4	5	5	5	5	6	6	6	6	6	6	6	
Other operating net assets	33 611	47 969	61 061	31 543	61 942	89 425	72 944	73 070	80 689	83 450	85 224	86 676	88 152	89 200	88 284	87 388	86 513	
Provisions	(15)	(168)	(4 436)	(568)	(801)	(260)	(317)	(1 469)	(172)	(796)	(692)	(733)	(775)	29	24	18	13	
Total Corporate invested capital	76 248	106 020	127 428	108 917	143 767	173 055	155 698	162 179	172 579	179 203	185 062	190 668	196 518	199 984	200 007	198 979	198 001	
Non-core																		
Other current assets and receivables:	1 727	2 472	2 867	3 598	6 735	7 354	6 145	6 856	7 669	8 597	9 657	10 867	12 248	13 826	15 629	17 687	20 039	
Assets held for sale	81	81	85	78	0	15 424	0	0	0	0	0	0	0	0	0	0	0	
Other non-current assets and receivables:	9 402	9 684	21 717	22 671	22 862	27 878	24 936	26 289	26 412	27 106	27 696	28 313	28 960	28 895	28 836	28 782	28 733	
Post-employment benefits	0	0	0	0	23 034	24 661	23 848	23 848	23 848	23 848	23 848	23 848	23 848	23 848	23 848	23 848	23 848	
Deferred income tax assets	8 961	12 591	14 284	13 897	11 090	9 674	12 550	12 550	12 550	12 550	12 550	12 550	12 550	12 550	12 550	12 550	12 550	
Deferred income tax liabilities	10 326	9 029	24 318	16 965	(11 515)	(1 132)	375	375	375	375	375	375	375	375	375	375	375	
Investments in securities	17 214	19 956	22 861	24 161	26 758	33 974	38 995	44 757	51 371	58 963	67 676	77 677	89 156	102 331	117 454	134 811	154 733	
Post-employment benefit obligations	(23 209)	(21 174)	(54 207)	(40 729)	(26 923)	(26 147)	(33 836)	(33 836)	(33 836)	(33 836)	(33 836)	(33 836)	(33 836)	(33 836)	(33 836)	(33 836)	(33 836)	
Liabilities associated with assets classified as held for sale	0	0	0	0	0	(5 701)	0	0	0	0	0	0	0	0	0	0	0	
Non-core Invested Capital	24 502	32 639	31 925	40 641	62 041	85 985	73 012	80 839	88 390	97 602	107 965	119 794	133 301	147 990	164 855	184 217	206 441	
Total Invested Capital	1 013 758	1 095 961	1 466 243	1 540 025	1 665 348	1 736 742	1 799 895	1 937 240	2 053 743	2 179 683	2 250 078	2 324 511	2 403 330	2 410 077	2 418 852	2 429 573	2 443 706	
Financing																		
Short-term investments	(194)	(45 467)	(6 801)	(27 073)	(281 215)	(184 343)	No need for valuation purposes, not saying it will be 0, but not needed											
Excess Cash	(115 801)	(115 967)	(164 127)	(224 491)	(112 728)	(106 154)												
Obligations to the government:	0	35 475	0	0	0	0												
Current Borrowings	29 989	24 895	99 157	74 550	74 764	63 666												
Non-current Borrowings	71 329	150 690	436 920	436 371	318 380	226 481	17 550	17 860	18 153	18 444	18 578	18 693	18 785	18 712	18 645	18 585	18 535	
Net financial Debt	(14 677)	49 726	365 149	259 357	(799)	(350)	17 550	17 860	18 153	18 444	18 578	18 693	18 785	18 712	18 645	18 585	18 535	
Equity																		
Share capital	60 000	60 000	60 000	60 000	75 000	90 000	No need for valuation purposes, not saying it will be 0, but not needed											
Additional paid-in capital	26 981	26 981	26 981	26 981	26 981	26 981												
Treasury shares	0	(3 750)	(3 264)	(2 828)	(2 236)	(1 362)												
Retained earnings	926 625	949 758	901 273	1 024 443	1 345 892	1 417 474												
Other reserves	3 176	2 076	5 858	4 661	3 279	1 514												
Shareholders equity	1 016 782	1 035 065	990 848	1 113 257	1 448 916	1 534 607	1 575 810	1 708 714	1 820 711	1 942 063	2 007 941	2 077 787	2 151 953	2 158 774	2 167 616	2 178 396	2 192 579	
Non-controlling interests	11 653	11 170	110 246	167 411	217 231	202 485	206 535	210 665	214 879	219 176	223 560	228 031	232 592	232 592	232 592	232 592	232 592	
Total equity	1 028 435	1 046 235	1 101 094	1 280 668	1 666 147	1 737 092	1 782 345	1 919 380	2 035 590	2 161 239	2 231 501	2 305 818	2 384 544	2 391 366	2 400 207	2 410 988	2 425 170	

Year ended December 31	2018A	2019A	2020A	2021A	2022A	2023A	Steady state										
All numbers in million SAR							2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F	2032F	2033F	2034F
Upstream																	
EBIT	607 310	537 513	290 980	529 556	796 933	608 186	517 174	571 833	559 878	573 382	583 743	594 321	605 122	597 262	589 528	581 919	574 432
Statutory Taxes	(303 655)	(268 757)	(145 490)	(264 778)	(398 466)	(304 093)	(258 587)	(285 917)	(279 939)	(286 691)	(291 871)	(297 160)	(302 561)	(298 631)	(294 764)	(290 959)	(287 216)
Zakat expenses	(786)	0	(402)	(938)	(970)	(668)	(596)	(596)	(596)	(596)	(596)	(596)	(596)	(596)	(596)	(596)	(596)
Recurrent NOPLAT	302 869	268 757	145 087	263 840	397 496	303 425	257 991	285 321	279 343	286 095	291 276	296 565	301 965	298 035	294 168	290 364	286 620
Depreciation and amortization	27 495	30 855	39 702	42 503	44 209	48 997	47 731	50 716	53 701	56 686	57 710	58 755	59 823	59 046	58 282	57 530	56 790
Other comprehensive income	22	(212)	(157)	154	711	(482)	0	0	0	0	0	0	0	0	0	0	0
Other non-cash adjustments to shareholders	0	0	278	92	144	216	0	0	0	0	0	0	0	0	0	0	0
Upstream Gross Cash Flow	330 387	299 399	184 910	306 590	442 559	352 156	305 722	336 037	333 044	342 782	348 986	355 320	361 788	357 081	352 450	347 893	343 410
Change in Net Working Capital		14 495	29 524	(44 424)	(44 170)	26 657	20 981	(12 108)	1 746	(3 555)	(2 520)	(2 574)	(2 630)	1 610	1 576	1 542	1 508
Net Capex-PPE	(85 862)	(83 596)	(49 920)	(79 539)	(90 626)	(99 556)	(99 556)	(103 478)	(106 464)	(109 449)	(75 805)	(77 230)	(78 688)	(45 317)	(44 774)	(44 239)	(43 714)
Investment in intangibles	(2 018)	3 087	1 774	190	(892)	(2 716)	(2 716)	(1 023)	(841)	(910)	(318)	(325)	(332)	259	255	251	247
Change in Provisions	46	3 541	(659)	1 111	(600)	(140)	(140)	1 313	(204)	376	259	265	270	(197)	(194)	(190)	(187)
Change in Other Operating Net Assets	19 232	(8 487)	39 066	33 904	1 527	(7 882)	(7 882)	12 606	8 105	9 819	3 848	3 932	4 018	(2 614)	(2 562)	(2 511)	(2 460)
Upstream Unlevered Free Cash Flow	245 292	128 980	252 428	354 055	288 223	216 408	233 347	235 387	239 063	274 450	279 387	284 426	310 823	310 823	306 751	302 745	298 803
Downstream																	
EBIT	190 282	131 659	93 157	254 065	354 419	259 926	245 481	369 267	370 430	392 270	410 515	429 750	450 034	450 947	452 009	453 221	454 583
Statutory Taxes	(38 056)	(26 332)	(18 631)	(50 813)	(70 884)	(51 985)	(49 096)	(73 853)	(74 086)	(82 454)	(82 103)	(85 950)	(90 007)	(90 189)	(90 402)	(90 644)	(90 917)
Tax adjustments	(38 324)	(41 446)	(26 111)	(42 384)	(77 304)	(71 785)	(63 162)	(97 725)	(98 214)	(104 224)	(109 257)	(114 568)	(120 174)	(120 549)	(120 964)	(121 420)	(121 918)
Zakat expenses	(495)	0	(367)	(1 030)	(1 009)	(779)	(637)	(765)	(844)	(807)	(766)	(764)	(789)	(794)	(784)	(780)	(782)
Recurrent NOPLAT	113 407	63 881	48 047	159 838	205 223	135 377	132 585	196 924	197 286	208 785	218 389	228 468	239 064	239 415	239 859	240 377	240 967
Depreciation and amortization	11 941	14 350	30 888	37 764	41 425	42 352	47 710	52 659	57 607	62 555	65 531	68 668	71 975	72 219	72 485	72 774	73 085
Other comprehensive income	14	(141)	(143)	169	739	(562)	0	0	0	0	0	0	0	0	0	0	0
Other non-cash adjustments to shareholders	0	0	254	101	149	252	0	0	0	0	0	0	0	0	0	0	0
Movements to unappropriated reserves	0	0	0	(415)	885	119	0	0	0	0	0	0	0	0	0	0	0
Downstream Gross Cash Flow	125 362	78 091	79 045	197 458	248 421	177 537	180 296	249 583	254 893	271 341	283 920	297 137	311 040	311 634	312 344	313 150	314 052
Change in Net Working Capital		10 041	9 290	(52 027)	(47 210)	30 735	10 337	(12 543)	(2 416)	(6 236)	(5 517)	(5 799)	(6 097)	(357)	(400)	(443)	(486)
Net Capex-PPE	(53 012)	(209 181)	(63 976)	(63 447)	(83 789)	(101 630)	(101 630)	(113 934)	(118 882)	(123 830)	(102 383)	(107 512)	(112 927)	(75 237)	(75 780)	(76 374)	(76 940)
Investment in intangibles	(1 207)	(137 510)	2 102	1 150	(4 332)	(688)	(688)	(1 148)	(1 088)	(1 131)	(716)	(754)	(794)	(67)	(73)	(78)	(84)
Change in Provisions	180	1 414	5 563	188	1 569	595	595	154	1 741	343	986	890	938	876	74	80	87
Change in Other Operating Net Assets	5 764	17 978	2 239	45 754	7 517	(6 962)	(6 962)	5 035	9 750	6 562	6 107	6 067	6 389	2 618	682	731	781
Change in Investments in joint ventures and associates	2 841	(46 238)	(3 583)	(2 637)	2 722	(1 262)	(1 262)	(1 285)	(1 309)	(1 333)	(1 357)	(1 381)	(1 407)	(1 432)	(1 458)	(1 485)	(1 512)
Downstream Unlevered Free Cash Flow	42 697	(285 201)	87 776	182 218	131 960	80 685	80 685	125 862	142 690	145 714	181 041	188 647	197 143	238 035	235 389	235 609	235 898
Corporate																	
EBIT	(602)	(3 756)	(4 331)	(3 830)	(4 402)	(3 826)	(3 903)	(4 259)	(4 292)	(4 474)	(4 629)	(4 792)	(4 962)	(4 945)	(4 929)	(4 915)	(4 902)
Statutory taxes	120	751	866	766	880	765	781	852	858	895	926	958	992	989	986	983	980
Zakat expenses	(1)	0	(1)	(2)	(1)	(2)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Recurrent NOPLAT	(483)	(3 005)	(3 466)	(3 066)	(3 523)	(3 063)	(3 124)	(3 409)	(3 435)	(3 581)	(3 705)	(3 835)	(3 971)	(3 957)	(3 945)	(3 933)	(3 923)
Depreciation and amortization	1 898	5 061	5 618	5 254	5 984	5 691	5 833	6 365	6 413	6 686	6 918	7 161	7 415	7 390	7 366	7 345	7 326
Other non-cash adjustments to shareholders	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Corporate Gross Cash Flow	1 415	2 056	2 153	2 188	2 461	2 629	2 709	2 956	2 979	3 105	3 213	3 326	3 444	3 432	3 421	3 412	3 403
Change in Net Working Capital		(1 047)	(7 323)	(5 914)	(3 087)	(2 877)	2 686	(2 229)	(1 001)	(1 782)	(1 681)	(1 785)	(1 894)	(1 866)	(1 176)	(85)	(95)
Net CAPEX - PPE	(19 579)	(10 878)	(6 482)	(7 581)	(4 076)	(7 700)	(7 700)	(11 643)	(6 896)	(9 390)	(9 220)	(9 570)	(9 937)	(7 133)	(7 135)	(7 133)	(7 134)
Investments in intangibles	(1)	(2)	3	0	(1)	(1)	(1)	(0)	(0)	(0)	(0)	(0)	(0)	0	0	0	0
Change in Provisions	153	4 268	(3 688)	233	(541)	58	58	1 152	(1 297)	624	(103)	40	43	(804)	5	5	5
Change in Other Operating Net Assets	(14 358)	(13 093)	29 518	(30 398)	(27 483)	16 481	16 481	(1 125)	(7 620)	(2 761)	(1 773)	(1 452)	(1 476)	(1 048)	916	896	875
Corporate Unlevered Free Cash Flow	(32 776)	(24 874)	15 445	(38 372)	(32 356)	14 233	14 233	(9 889)	(13 835)	(10 204)	(9 564)	(9 440)	(9 821)	(7 423)	(3 968)	(2 906)	(2 945)
Non-Core EBIT	1 084	1 986	1 336	992	6 939	9 692	4 189	4 189	4 189	4 189	4 189	4 189	4 189	4 189	4 189	4 189	4 189
Statutory Taxes	(217)	(397)	(267)	(198)	(1 388)	(1 938)	(838)	(838)	(838)	(838)	(838)	(838)	(838)	(838)	(838)	(838)	(838)
Change in Non-Core IC	(8 137)	714	(8 716)	(21 400)	(23 944)	12 973	12 973	(7 827)	(7 550)	(9 213)	(10 363)	(11 828)	(13 507)	(14 689)	(16 865)	(19 362)	(22 225)
Other comprehensive income	3 835	1 109	(3 556)	7 540	17 176	(665)	0	0	0	0	0	0	0	0	0	0	0
Total Unlevered FCF	249 774	(182 868)	355 266	499 228	370 977	327 650	327 650	344 843	360 043	368 712	438 915	450 117	461 591	530 096	524 658	519 437	512 883
Finance Income	2 781	5 365	1 846	795	7 955	22 275	7 640	7 640	7 640	7 640	7 640	7 640	7 640	7 640	7 640	7 640	7 640
Finance costs	(2 959)	(6 026)	(10 564)	(12 058)	(8 882)	(8 186)	(831)	(845)	(859)	(873)	(879)	(885)	(889)	(886)	(882)	(880)	(877)
Tax shield	36	132	1 744	2 253	185	(2 818)	(1 362)	(1 359)	(1 356)	(1 353)	(1 352)	(1 351)	(1 350)	(1 351)	(1 352)	(1 352)	(1 353)
Change in Net Debt	64 403	315 422	(105 782)	(260 156)	449	17 901	17 901	310	293	291	134	115	93	(74)	(67)	(60)	(50)
Transactions with shareholders	(313 613)	(225 709)	(280 956)	(280 764)	(366 007)	(347 214)	(347 214)	(345 078)	(360 445)	(368 827)	(438 665)	(449 629)	(460 854)	(524 705)	(519 344)	(514 197)	(507 716)
Transactions with non-controlling interests	(36)	100 129	40 492	42 434	(16 680)	(3 785)	(3 785)	(5 511)	(5 316)	(5 590)	(5 793)	(6 007)	(6 231)	(10 721)	(10 654)	(10 589)	(10 527)
Financing Parties FCF	(249 774)	182 868	(355 266)	(499 228)	(370 977)	(327 650)	(327 650)	(344 843)	(360 043)	(368 712)	(438 915)	(450 117)	(461 591)	(530 096)	(524 658)	(519 437)	(512 883)

Discounted Cash Flow Model												
Year ended December 31	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F	2032F	2033F	2034F	2035F
All numbers in million SAR												
Upstream												
Operating FCF	216 408	233 347	235 387	239 063	274 450	279 387	284 426	310 823	306 751	302 745	298 803	4 013 634
Terminal Value												
Value of Operations	4 212 137	4 235 769	4 258 802	4 279 565	4 266 207	4 247 097	4 221 783	4 168 528	4 116 094	4 064 468	4 013 634	
WACC		6,10%	6,10%	6,10%	6,10%	6,10%	6,10%	6,10%	6,10%	6,10%	6,10%	
Downstream												
NOPLAT												241 236
Operating FCF	80 685	125 862	142 690	145 714	181 041	188 647	197 143	238 035	235 389	235 609	235 898	
Value of operations	2 790 060	2 877 264	2 954 300	3 034 194	3 084 864	3 131 796	3 173 817	3 178 155	3 185 470	3 193 124	3 201 073	
WACC		7,64%	7,64%	7,64%	7,64%	7,64%	7,64%	7,64%	7,64%	7,64%	7,64%	
Corporate												
NOPLAT												28 214
Operating FCF	14 233	(9 889)	(13 835)	(10 204)	(9 564)	(9 440)	(9 821)	(7 423)	(3 968)	(2 906)	(2 945)	
Value of operations	(79 205)	(74 366)	(65 273)	(59 231)	(53 443)	(47 411)	(40 613)	(35 780)	(34 094)	(33 362)	(32 544)	
WACC		6,38%	6,38%	6,38%	6,38%	6,38%	6,38%	6,38%	6,38%	6,38%	6,38%	
Non-Operating Items	73 012	80 839	88 390	97 602	107 965	119 794	133 301	147 990	164 855	179 244	190 446	
EV	6 996 004	7 119 507	7 236 219	7 352 131	7 405 593	7 451 276	7 488 288	7 458 893	7 432 326	7 408 447	7 388 605	

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ExxonMobil						
Exchange rate (USD/SAR)						
	3,75	3,75	3,75	3,75	3,76	3,75
Year	2018A	2019A	2020A	2021A	2022A	2023A
Returns						
Return on Equity		7%	-12%	15%	33%	18%
Return on Assets		4%	-6%	7%	16%	10%
Return on Invested Capital - Core		16%	1%	18%	30%	26%
Margins						
Gross Margin	46%	46%	48%	46%	45%	44%
EBITDA Margin	17%	15%	10%	18%	25%	22%
EBIT Margin	11%	8%	-15%	11%	19%	16%
Net Income Margin	7%	5%	-12%	8%	13%	10%

Data						
Lifting cots (\$/per barrel)		15	14	11	13	12
Total production of hydrocarbons in million boe/d						3 738
Proved reserves of crude oil						6 847
Proved reserves of natural gas in (billion cubic feet)						34 464
Total proved reserves in mmboe						16 928
EV						397 021
EBIT						53 632
Multiples						
EV/EBIT						7,4x
EV/Revenues						1,2x
Price/earnings						10,5x
Price to Book						1,9x
EV(in million SARs)/million boe produced						398,3x
Field Netback						53,8x
EV/Reserves						88,0x

Liquidity Analysis						
Current Ratio	0,8x	0,8x	0,8x	1,0x	1,4x	1,5x
Quick Ratio	0,5x	0,5x	0,5x	0,7x	1,1x	1,1x
Cash Ratio	0,1x	0,0x	0,1x	0,1x	0,4x	0,5x
Cash Conversion Cycle	(3)	(10)	(6)	(19)	(15)	(12)
Average Collection Period	31	37	41	41	37	40
Average Holding Period	36	37	55	36	33	40
Average Payable Period	70	84	102	96	85	92

Petro China						
Exchange rate (CNY/SAR)						
	0,55	0,54	0,57	0,59	0,54	0,53
Year	2018A	2019A	2020A	2021A	2022A	2023A
Returns						
Return on Equity		6%	3%	9%	13%	13%
Return on Assets		3%	1%	5%	7%	7%
Return on Invested Capital - Core		21%	13%	26%	34%	33%
Margins						
Gross Margin	34%	32%	36%	33%	32%	35%
EBITDA Margin	14%	14%	14%	15%	15%	16%
EBIT Margin	6%	5%	4%	7%	8%	9%
Net Income Margin	3%	3%	2%	4%	5%	6%

Data						
Lifting cots (\$/per barrel)		12	11	11	12	11
Total production of hydrocarbons in million boe/d						1 759
Proved reserves of crude oil						6 219
Proved reserves of natural gas in (billion cubic feet)						72 794
Total proved reserves in mmboe						19 322
EV						1 380 000
EBIT						255 568
Multiples						
EV/EBIT						5,4x
EV/Revenues						0,5x
Price/earnings						5,3x
Price to Book						0,6x
EV(in million SARs)/million boe produced						415,8x
Field Netback						77,0x
EV/Reserves						37,9x

Liquidity Analysis						
Current Ratio	0,7x	0,7x	0,8x	0,9x	1,0x	1,0x
Quick Ratio	0,4x	0,4x	0,6x	0,7x	0,7x	0,7x
Cash Ratio	0,2x	0,2x	0,2x	0,3x	0,4x	0,4x
Cash Conversion Cycle	(7)	(7)	(17)	(11)	(12)	(12)
Average Collection Period	9	9	10	8	8	8
Average Holding Period	42	39	37	30	28	33
Average Payable Period	58	56	63	49	48	53

Chevron						
Exchange rate (USD/SAR)						
	3,75	3,75	3,75	3,75	3,76	3,75
Year	2018A	2019A	2020A	2021A	2022A	2023A
Returns						
Return on Equity		2%	-4%	12%	26%	13%
Return on Assets		1%	-2%	7%	15%	8%
Return on Invested Capital - Core		5%	-1%	14%	30%	20%
Margins						
Gross Margin	43%	45%	47%	43%	41%	41%
EBITDA Margin	24%	24%	13%	25%	27%	24%
EBIT Margin	13%	4%	-7%	14%	20%	15%
Net Income Margin	9%	2%	-6%	10%	14%	11%

Data						
Lifting cots (\$/per barrel)		10	9	11	11	11
Total production of hydrocarbons in million boe/d						1 139
Proved reserves of crude oil						4 777
Proved reserves of natural gas in (billion cubic feet)						31 610
Total proved reserves in mmboe						10 647
EV						293 230
EBIT						30 053
Multiples						
EV/EBIT						9,8x
EV/Revenues						1,5x
Price/earnings						11,8x
Price to Book						1,7x
EV(in million SARs)/million boe produced						965,4x
Field Netback						98,9x
EV/Reserves						103,3x

Liquidity Analysis						
Current Ratio	1,3x	1,1x	1,2x	1,3x	1,5x	1,3x
Quick Ratio	1,0x	0,8x	0,9x	1,0x	1,2x	1,0x
Cash Ratio	0,3x	0,2x	0,3x	0,2x	0,5x	0,3x
Cash Conversion Cycle	2	(4)	7	1	4	0
Average Collection Period	33	33	44	41	30	36
Average Holding Period	22	26	40	25	21	26
Average Payable Period	53	64	77	65	47	62

Shell						
Exchange rate (USD/SAR)						
	3,75	3,75	3,75	3,75	3,76	3,75
Year	2018A	2019A	2020A	2021A	2022A	2023A
Returns						
Return on Equity		8%	-11%	11%	22%	11%
Return on Assets		4%	-5%	5%	10%	5%
Return on Invested Capital - Core		7%	-6%	7%	18%	10%
Margins						
Gross Margin	19%	21%	23%	27%	26%	26%
EBITDA Margin	16%	17%	16%	22%	22%	21%
EBIT Margin	10%	9%	-12%	12%	18%	12%
Net Income Margin	6%	5%	-12%	8%	11%	6%

Data						
Lifting cots (\$/per barrel)		13	11	10	10	10
Total production of hydrocarbons in million boe/d						3 427
Proved reserves of crude oil						3 567
Proved reserves of natural gas in bscf						29 729
Total proved reserves in mmboe						9 787
EV						252 640
EBIT						27 348
Multiples						
EV/EBIT						9,2x
EV/Revenues						0,8x
Price/earnings						11,4x
Price to Book						1,1x
EV(in million SARs)/million boe produced						276,4x
Field Netback						29,9x
EV/Reserves						96,8x

Liquidity Analysis						
Current Ratio	1,3x	1,2x	1,4x	1,4x	1,3x	1,2x
Quick Ratio	1,0x	0,9x	1,1x	1,1x	1,1x	1,0x
Cash Ratio	0,3x	0,2x	0,4x	0,3x	0,4x	0,4x
Cash Conversion Cycle	32	37	68	66	38	21
Average Collection Period	39	45	106	89	50	38
Average Holding Period	48	56	136	121	68	51
Average Payable Period	55	64	174	145	81	68

British Petroleum						
Exchange rate (USD/SAR)	3,75	3,75	3,75	3,75	3,76	3,75
Year	2018A	2019A	2020A	2021A	2022A	2023A
Returns						
Return on Equity		4%	-21%	10%	-2%	19,1%
Return on Assets		1%	-7%	3%	0%	6%
Return on Invested Capital - Core		10%	-8%	5%	15%	23%
Margins						
Gross Margin	17%	31%	26%	28%	32%	32%
EBITDA Margin	11%	18%	-6%	20%	13%	20%
EBIT Margin	6%	7%	-20%	11%	7%	13%
Net Income Margin	3%	3%	-19%	5%	-1%	7%

Data						
Lifting costs (\$/per barrel)		13	11	10	10	10
Total production of hydrocarbons in million boe/d						2 313
Proved reserves of crude oil						3 321
Proved reserves of natural gas in bscf						17 471
Total proved reserves in mmboe						6 759
EV						129 670
EBIT						37 300

Multiples						
EV/EBIT						3,5x
EV/Revenues						0,6x
Price/earnings						4,3x
Price to Book						1,4x
EV/million boe produced						210,2x
Field Netback						60,5x
EV/Reserves						71,9x

Liquidity Analysis						
Current Ratio	1,0x	1,0x	1,2x	1,1x	1,1x	1,2x
Quick Ratio	0,8x	0,7x	0,9x	0,8x	0,8x	0,9x
Cash Ratio	0,3x	0,3x	0,5x	0,4x	0,3x	0,4x
Cash Conversion Cycle	(11)	(29)	(17)	(28)	(27)	(43)
Average Collection Period	29	55	60	60	50	53
Average Holding Period	26	67	68	73	60	57
Average Payable Period	66	151	145	161	137	154

Saudi Aramco						
Year	2018A	2019A	2020A	2021A	2022A	2023A
Returns						
Return on Equity		32%	16%	33%	37%	26%
Return on Assets		25%	12%	22%	28%	18%
Return on Invested Capital - Core		33%	18%	29%	40%	27%
Margins						
Gross Margin	57%	49%	47%	50%	53%	47%
EBITDA Margin	39%	32%	31%	36%	34%	31%
EBIT Margin	37%	27%	23%	32%	31%	26%
Net Income Margin	22%	13%	12%	20%	18%	14%

Data						
Lifting costs (\$/per barrel)		2,83	3,01	3,04	3,05	3,19
Total production of hydrocarbons in million boe/d						4 672
Proved reserves of crude oil						191 349
Proved reserves of natural gas in bscf						207 450
Total proved reserves in mmboe						251 195
EV						7 985 650
EBIT						868 287

Multiples						
EV/EBIT						9,2x
EV/Revenues						4,3x
Price/earnings						17,6x
Price to Book						4,6x
EV/million boe produced						1709,3x
Field Netback						185,8x
EV/Reserves						31,8x

Liquidity Analysis						
Current Ratio	2,1x	1,9x	1,6x	2,0x	2,6x	2,3x
Quick Ratio	1,8x	1,7x	1,4x	1,8x	2,3x	2,0x
Cash Ratio	1,0x	1,0x	0,9x	1,1x	1,5x	1,2x
Cash Conversion Cycle	34	31	54	47	41	39
Average Collection Period	25	28	36	34	26	32
Average Holding Period	36	36	60	50	41	41
Average Payable Period	27	32	43	37	27	34

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