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Leaving Russia: Exit Strategies of Foreign Companies

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Abstract

This study involves the compilation of a database detailing the exit of foreign companies from Russia in 2022 and the identification of their primary exit strategies. The current situation is unprecedented in its scale and has no analogues in the history of the Russian economy, therefore, it has not been sufficiently studied yet. A total of 28 industries across 25 countries were selected for the initial study. Through an analysis of exit patterns, nine primary strategies were identified, including joint venture exits, soft closings, sales to local buyers, suspension, liquidation, management buyouts, selling shares to partners, carving out to local legal entities, and sales to foreign buyers. The subsequent research stage focused on the oil and gas industry and examined the cases of its five leading companies: Shell, TotalEnergies, Equinor, ExxonMobil, and BP. It assessed both financial and non-financial losses incurred by these companies due to their decisions to withdraw from the Russian market. Financial losses were determined using the Discounted Cash Flow method and the Economic-Value-Added valuation method, while non-financial factors were assessed through operational indicators such as reserves and oil and gas production. The fundamental value of the above-mentioned companies was shown to comprise to $20.6 billion, $1.1 billion, $0.5 billion, $17.8 billion, and $36.5 billion, respectively. The study revealed that companies with strategically important and substantial projects in Russia, notably BP and TotalEnergies, pursued a "soft" exit strategy. Despite their decision to exit Russia, these companies continued to receive dividends and effectively retained ownership shares in assets, even though financial statements reflected impairments.

Keywords: discounted cash flow (DCF), economic value added (EVA), losses incurred by foreign companies, exits of foreign companies, oil and gas sector, exit strategies from the market

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Introduction

The year 2022 witnessed significant geopolitical tension, prompting the exit of numerous foreign companies from the Russian market. The political nature of these decisions, coupled with the diversity of the companies involved, resulted in varying outcomes, including the choice of ultimate buyers and transaction structures. Notably, not all companies that announced their exit from the Russian market fully withdrew.

This paper's **relevance** is underscored by the prevailing geopolitical environment, which has compelled foreign companies to disengage from the Russian market. The unprecedented scale of this situation, unique in the history of the Russian economy, has sparked academic interest. We aim to conduct a comprehensive study, classifying the exit strategies adopted by these companies and assessing the impact of their decisions to exit the Russian market on various aspects of their operations, such as operational and financial indicators.

The paper's **objective** is to provide an extensive overview of foreign companies' exits from the Russian market while examining how such exits affect their business. To achieve this, we will use several companies as case studies.

To accomplish our goals, we will:

1) Distinguish between the exit strategies employed by foreign companies leaving the Russian market.
2) Create an exit map based on industries, countries, and exit strategies.
3) Evaluate the impact of exit on oil and gas companies' value using two approaches: Discounted Cash Flow (DCF) and Economic Value Added (EVA).
4) Consider operational metrics relevant to the selected industry.

We have chosen the case study approach as our **research method**, as it allows for a thorough examination of how exiting the Russian market has impacted companies, taking their unique characteristics into account. Our **research focus** is five foreign companies in the oil and gas sector: *Shell, TotalEnergies, Equinor, ExxonMobil,* and *BP.*

We posit the following hypotheses:

1) Some companies that announced their intention to leave the Russian market did not execute a comprehensive exit strategy.
2) Companies deeply integrated into the local market tend to adopt a «soft» exit strategy.
3) Oil and gas companies with strategically significant assets in Russia will experience the most substantial losses compared to their counterparts in the industry.
4) Companies in the selected industry (oil and gas) exhibit mixed results after their exit.
5) Losses arising from the depreciation of Russian business, as disclosed in the financial statements of oil and gas companies, do not provide a complete picture of their losses.

The academic novelty of this paper lies in:

1) The development of an exit strategy map for foreign businesses leaving the Russian market.
2) A detailed examination of the impact of exit decisions on companies' operations, taking into account operational indicators and the assessment of enterprise value using the DCF and EVA models.

Why and How do Companies Exit the Russian Market

The decision for companies to exit a foreign market is influenced by various factors, as outlined in a paper by K.S. Ozkan [1]. These factors include:

1) **Conflict between Company Strategy and External Market Environment**: When a company's strategy is not aligned with the external conditions of the foreign market, it can result in competitive weaknesses and negative financial performance.
2) **High or Unpredictable Market Risks**: Companies may choose to exit a foreign market when the risks in that market are perceived as too high or unpredictable.
3) **Communication Difficulties and Cultural Differences**: Problems related to communication, cultural differences, or difficulties with local personnel can contribute to a decision to exit a foreign market.

Additional reasons for exiting a foreign market, identified in other studies [e.g., 2], encompass low profitability, misalignment between the corporate goals and capabilities and the market requirements, and insufficient experience in international operations.

Once a company decides to exit a foreign market, it has to choose among various exit strategies, which are determined by its specific goals and circumstances. Common exit strategies include company liquidation, selling to a local buyer, or facilitating management buyouts.

Influence of the Geopolitical Conflict in Ukraine

The geopolitical crisis involving Russia and Ukraine has brought about a heightened level of uncertainty and risk concerning political and economic consequences. Many foreign companies have encountered challenges related to sanctions, trade and investment restrictions, as well as the potential deterioration of the business climate.

Although this topic remains underexplored, papers dedicated to the withdrawal of foreign businesses from Russia have already appeared. For instance, according to data from Yale University [3], as of May 2023 over 1,000 major international companies had either withdrawn from Russia or were in the process of winding down their operations. Researchers from the university in their study [4] found that these departures accounted for approximately 40% of Russia's GDP.

Furthermore, a study by economists from the University of St. Gallen and IMD Business School in Switzerland [5] revealed that, by the end of November 2022, 8.5% of companies from the EU and G7 had sold at least one of their Russian subsidiaries. This figure is expected to increase as more companies that have announced their intention to exit the market proceed to do so.

However, foreign institutions were not the only ones interested in this topic. In October 2022, the Center for Strategic Research (CSR) in Russia published a report that examined 5,000 foreign companies [6]. As the CSR researchers noted, by the beginning of September 2022, 34% of the largest foreign companies operating in Russia had downscaled their activities in the country, 15% had ceased operations by transferring their businesses to new owners, and 7% had announced a complete exit. According to the research findings, among the companies that decided to sell their businesses in Russia, 33% had already completed the transfer to new owners, 34% were in the process of doing so, and 33% were actively seeking buyers (Figure 1).

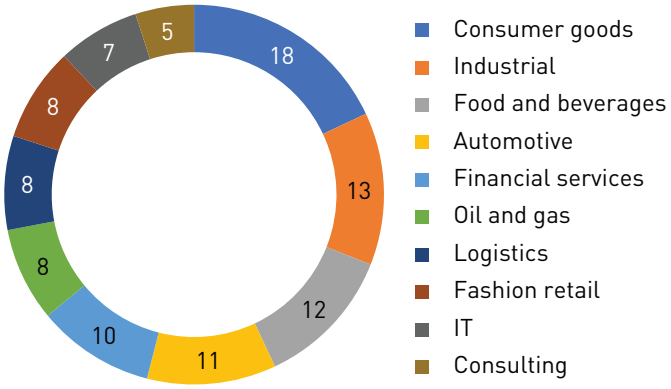
Analysis of Strategies Used by Foreign Companies Exiting Russia

To identify the strategies employed by foreign companies exiting the Russian market, we compiled a database consisting of 489 companies that had announced their intention to withdraw from Russia. Notably, the leading sectors in terms of exit activity were companies involved in consumer goods, food and beverages, as well as those in the industrial and automotive sectors.

These exiting foreign companies stem from 25 different countries, which include Germany, France, the USA, Italy, the Netherlands, Sweden, Finland, the United Kingdom, Denmark, Japan, Switzerland, Austria, Canada, Spain, Australia, China, Lithuania, Norway, Poland, Belgium, the Czech Republic, Ireland, Mexico, South Korea, and Taiwan.

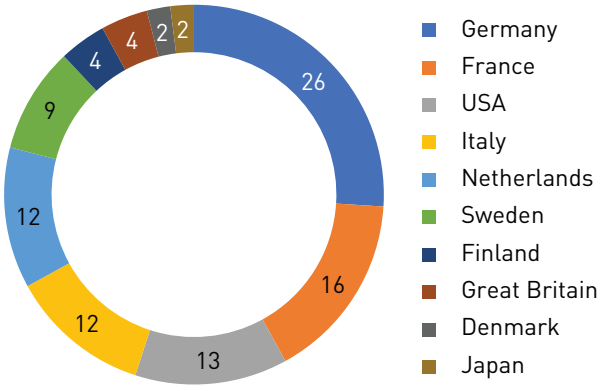
Figure 1. Analysis of Companies' Exit Strategies (%)

Structure of companies' exit by industries (top 10 industries)



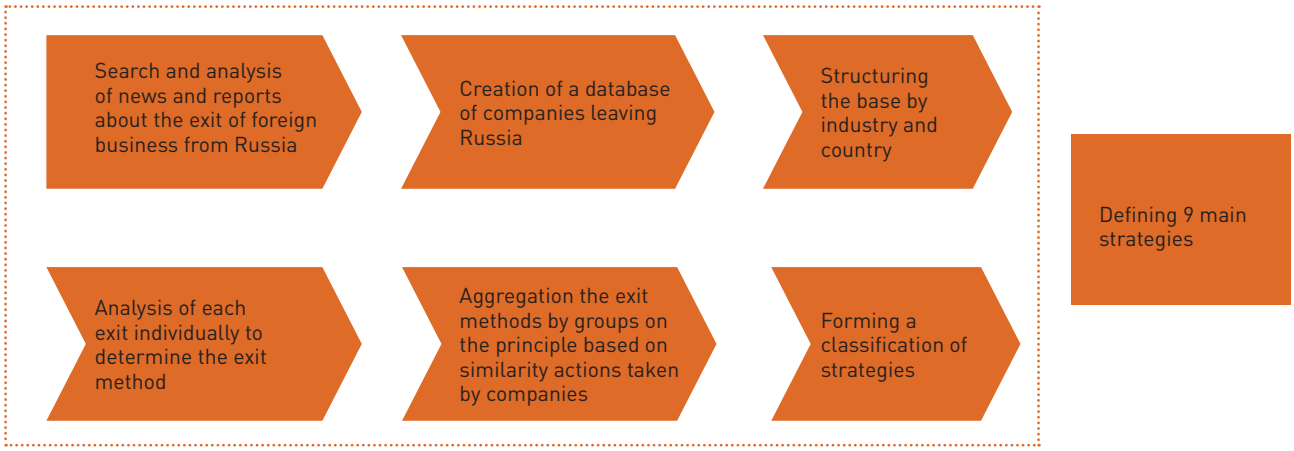
The leading industries in terms of foreign companies' exit are consumer goods, industrial, food & beverages and automotive

Structure of companies' exit by countries (top 10 countries)



The leading countries in terms of foreign companies' exit are Germany, France, USA, Italy

In total, our research identified nine primary exit strategies and developed a methodology for creating a map of them:



1) **Joint Venture (JV) Exit** (159 companies).
2) **Soft Closing** (128 companies) – This category encompasses companies that announced their intention to withdraw from the Russian market but did not take concrete steps toward exit. These companies essentially suspended their marketing and investment operations in their Russian representative offices while continuing their core business activities.
3) **Sale of a Legal Entity to a Local Buyer** (67 companies).
4) **Suspension of Operations in Russia with No Clear Further Steps Regarding Sale or Liquidation** (63 companies).
5) **Liquidation** (28 companies).
6) **Local Management Buyout** (24 companies).
7) **Sale of Shares to a Russian Partner** (11 companies).
8) **Carve-Out to a Local Legal Entity Operating in Russia** (4 companies).
9) **Sale of Russian Business to Another Foreign Company** (3 companies).

In the course of our research, we developed two maps depicting the relationships between exit strategies and industries and between exit strategies and the country of the company's incorporation.

Table 1. Map of Strategies: Correlation between Strategy and Country of Incorporation

Country	Carve-out to local legal entity	Suspend mode	JV exit	Liquidation	MBO	Sale to a local buyer	Sale to a foreign buyer	Sale of the share to the partner	Soft closing	Total
Germany	x	9	50	8	7	12	X	1	33	120
France	x	10	30	4	4	6	X	1	18	73
USA	x	11	7	1	3	11	2	4	20	59
Italy	x	12	25	x	x	4	X	x	13	54
Netherlands	1	9	26	8	1	3	X	1	4	53
Sweden	1	2	17	3	3	5	X	1	9	41
Great Britain	3	2	1	2	x	4	X	1	7	20
Finland	2	2	x	x	1	5	X	1	7	18
Denmark	x	1	x	x	1	3	X	x	5	10
Japan	x	2	x	x	x	1	X	x	4	7
Switzerland	x	1	1	x	1	2	X	x	1	6
Austria	x	x	1	2	x	x	X	x	2	5
Canada	x	1	x	x	1	1	X	x	x	3
Spain	x	x	x	x	1	1	X	x	1	3
Australia	x	x	x	x	x	2	X	x	x	2
China	x	x	x	x	x	1	X	x	1	2
Lithuania	x	x	x	x	x	1	X	x	1	2
Norway	x	x	x	x	1	x	X	x	1	2
Poland	x	x	x	x	x	1	1	x	x	2
Belgium	x	x	x	x	x	x	X	1	x	1
Czech Republic	1	x	x	x	x	x	X	x	x	1
Ireland	x	x	x	x	x	x	X	x	1	1
Mexico	x	1	x	x	x	x	X	x	x	1
South Korea	x	x	x	x	x	x	X	x	1	1
Taiwan	x	x	x	x	x	x	X	x	1	1
Total	8	63	159	28	24	63	3	11	130	489

Specific exit strategies exhibit distinctive patterns based on the country of the exiting company's origin. Notably, Germany, which leads in terms of exits from the Russian market, frequently employs strategies such as JV exit and soft closing. In contrast, companies from Great Britain tend to favor the sale of their legal entity to a local buyer, while the suspension of operations is characteristic of Italian and American companies. Liquidation as an exit strategy is equally common among German and Dutch businesses. Representative offices are most often sold to local companies by American and German businesses. Companies from the USA also tend to utilize strategies like selling to third-party foreign companies and transferring shares to local partners. Furthermore, the strategy of soft closing is not exclusive to German companies but is also adopted by French, American, and Italian firms.

Table 2. Map of Strategies: Correlation of Strategy and Industry

Industry	Carve-out to local legal entity	Suspend mode	JV exit	Liquidation	MBO	Sale to a local buyer	Sale to a foreign buyer	Sale of the share to the partner	Soft closing	Total
Consumer goods	1	5	22	4	4	9	1	1	14	61
Industry	1	7	22	2	2	5	x	x	7	46
Food and beverages	1	7	9	2	3	7	x	3	10	42
Automotive	x	5	15	x	2	6	x	1	10	39
Financial services	1	4	8	2	1	6	x	x	15	37
IT	x	1	13	4	x	2	x	x	9	29
O&G	x	1	12	2	2	4	x	x	8	29
Logistics	x	2	10	2	2	2	x	1	8	27
Fashion retail	x	9	1	1	1	x	1	x	11	24
Consulting	4	1	8	x	2	1	x	1	1	18
Pharmaceuticals	x	6	4	x	x	1	1	x	4	16
Chemical industry	x	1	3	2	x	2	x	x	7	15
Electronics	x	x	9	1	1	1	x	x	2	14
Manufacture	x	x	7	1	x	1	x	1	2	12
TMT	x	3	1	1	x	1	x	x	6	12
Construction	x	1	5	1	x	1	x	x	2	10
Agricultural	x	2	2	x	1	2	x	1	1	9
Construction materials	x	x	x	1	1	2	x	x	4	8
Retail	x	2	x	x	x	3	x	1	2	8
Hotels	x	2	x	x	x	x	x	x	4	6
M&M	x	x	2	x	x	2	x	x	1	5
Paper and package	x	x	x	x	2	3	x	x	x	5
Power generation	x	x	1	x	x	1	x	1	1	4
Real estate	x	x	2	1	x	x	x	x	1	4
Health care	x	2	x	x	x	1	x	x	x	3
Tourism	x	1	1	1	x	x	x	x	x	3
Ecology	x	x	1	x	x	x	x	x	x	1
Forestry	x	1	x	x	x	x	x	x	x	1
Grand total	8	63	158	28	24	63	3	11	130	489

The map of exit strategies reveals that the sale of a legal entity to a local buyer is more prevalent among consulting firms, while the suspension mode is more common in pharmaceutical and fashion retail companies. JV exits tend to be made by firms active in consumer goods, automotive, oil and gas, as well as oilfield services. Soft closing, on the other hand, is favored by companies in the consumer goods, fashion retail, and financial sectors. Liquidation and local management buyouts (MBO) are most frequently associated with consumer goods manufacturers. Additionally, companies producing consumer goods, food and beverages as well as financial institutions prefer selling to a local buyer.

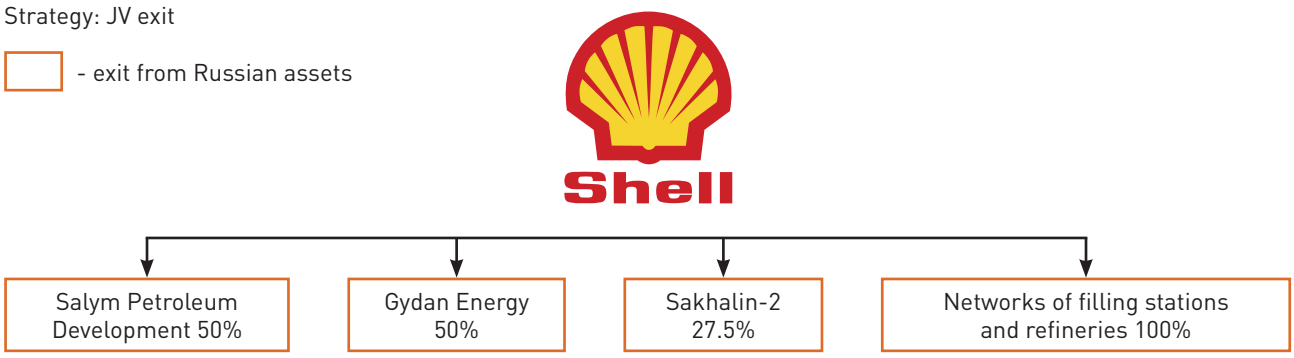
For our further research, we opted to focus on industries favoring the two most common strategies – JV exit and soft closing. We also aimed to explore an industry of significant importance to Russia's economy. Consequently, we chose the oil and gas sector, as the ambiguity surrounding the exit of certain oil and gas companies is a pertinent topic that warrants examination.

Within the oil and gas industry, we selected the two largest companies, *TotalEnergies* and *BP*, for the analysis of the soft closing strategy. To study the JV exit strategy, we chose the companies *Shell, Equinor*, and *ExxonMobil*.

Evaluating the Influence of the Exit of Oil and Gas Companies on Their Business

Shell

Figure 2. Structure of Assets in the Russian Federation and Strategy for Exiting the Russian Market



Following its withdrawal from the Russian Federation, Shell reported a loss of $3.9 billion. In addition to divesting its Russian assets in early March 2023, Shell announced its intention to refrain from purchasing Russian oil in the spot market and extending fixed-term contracts. At the same time, the company emphasized that it still holds long-term contracts for LNG purchases.

The Anglo-Dutch oil giant made the strategic decision to completely sever its business ties with Russia by employing the strategies of JV exit and asset sales to local entities.

Evaluating the Influence of Shell's Exit from the Russian Market on the Enterprise Value: DCF and EVA Models

To assess the impact of the chosen strategy, we constructed DCF and EVA models for Shell and other companies under two scenarios. In the first scenario, the results obtained consider enterprise value (EV) while including revenue from the Russian business. In the second scenario, EV is calculated without factoring in this revenue.

The discounted cash flow model (DCF) is employed for evaluating the company based on the present value principle. Using this model, we made forecasts of corporate cash flows for various business areas, taking into account financial statements, our own market analysis, and reports from investment banks. Future cash flows were then discounted using the calculated discount rate, which considers risks and the cost of equity.

The enterprise value can be calculated using the discounted cash flow method with the following formula:

$$DCF = \frac{CF_1}{(1+r)^2} + \frac{CF_2}{(1+r)^2} + \ldots + \frac{CF_n}{(1+r)^n}, \quad (1)$$

where *DCF* is the discounted cash flow, CF_1, CF_2, CF_n are the cash flows for specific periods, and r is the discount rate.

We also used the economic value added (EVA) method as an alternative approach to assessing enterprise value. This method is based on the notion that enterprise value is determined by the company's ability to generate economic profit that surpasses the cost of invested capital. To calculate EVA, it is necessary to determine the net operating profit adjusted for the cost of invested capital.

The formula for calculating economic value added is as follows:

$$EVA = NOPAT - (Capital\ Invested * WACC), \quad (2)$$

where *NOPAT* is the net operating profit after taxes, *Capital Invested* is the invested capital, and *WACC* is the weighted average cost of capital.

Revenue forecasts were calculated by breaking down the company's activities into areas, including exploration and production, gas and energy, oil products, and chemicals. Growth rates were determined based on market analysis and reports from investment banks. The estimated share of Shell's Russian business (including ownership stakes of 50% in Salym Petroleum Development LLC, 50% in Gydan Energy LLC, 27.5 % in Sakhalin-2, 100% in filling stations and oil refineries networks) accounts for approximately 5% of corporate operating profit.

Average historical turnover indicators were used to calculate working capital, while capital expenditures were assessed based on corporate operating segments (exploration and production, gas and energy, oil products, and chemicals) at historical average levels.

For calculating Shell's weighted average cost of capital (WACC), we used the yield to maturity of 10-year US Treasury bonds, country risk factors, industry average beta, capital structure data from A. Damodaran, and the yield of the company's 10-year bonds (see Table 3).

Table 3. Calculation of the Weighted Average Capital Cost of Shell

Indicator	Value	Source
Risk-Free Rate	3.40%	10-Y US Treasury
Unlevered Beta	0.90	Damodaran
D/E	11.50%	Damodaran
Tax Rate	25%	Marginal Tax Rate
Levered Beta	0.98	Calculations
ERP	5.94%	Damodaran
Cost of Equity	9.21%	**Calculations**
Pre-tax Cost of Debt	4.55%	10-Y Corp Bond
After-tax Cost of Debt	3.41%	**Calculations**
We	89.68%	Calculations
Wd	10.32%	Calculations
WACC	8.61%	Calculations

The results of calculating enterprise value using two models for the scenario in which the company maintains its business in Russia are presented in Table 4.

Table 4. DCF and EVA Models for Shell Before Exiting the Russian Market

DCF approach, USD mn	2022	2023E	2024E	2025E	2026E	2027E
	0	0.5	1.5	2.5	3.5	4.5
EBIT (excl. Russia)	42,674	36,455	33,635	34,109	34,783	35,582
EBIT Russia (retail & factory)	2,246	1,919	1,770	1,795	1,831	1,873
As % of Total EBIT	5.0%					
Total EBIT	44,920	38,373	35,406	35,904	36,614	37,454
Tax rate	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%
NOPAT	33,690	28,780	26,554	26,928	27,460	28,091
D&A	21,019	20,825	21,050	21,629	22,199	22,750
Change in NWC	8,913	(1,227)	(1,898)	-	-	-
Capex	(22,600)	(26,106)	(29,614)	(31,623)	(33,133)	(34,146)
FCFF	41,022	22,272	16,093	16,935	16,526	16,694
WACC	8.6%					
Discount factor by year	1.00	0.96	0.88	0.81	0.75	0.69
DCF	X	21,371	14,218	13,776	12,378	11,512
NPV, USD bn	73					
Terminal Value, USD bn	178					
TGR	2%					
EV, USD bn	250.9					
EVA approach, USD mn	**2022**	**2023E**	**2024E**	**2025E**	**2026E**	**2027E**
	0	0.5	1.5	2.5	3.5	4.5
NOPAT	33,690	28,780	26,554	26,928	27,460	28,091
Capital Invested	239,141	279,354	284,925	297,184	309,655	322,424
Total IC	239,141	279,354	284,925	297,184	309,655	322,424

EVA approach, USD mn	2022	2023E	2024E	2025E	2026E	2027E
EVA	X	**4,729**	**2,024**	**1,342**	**801**	**332**
	236,145	239,108	244,679	253,573	263,403	273,688
WACC	8.6%					
Discount factor by year	1.00	0.96	0.88	0.81	0.75	0.69
Discounted EVA	X	4,538	1,788	1,092	600	229
NPV,USD bn	8					
Terminal Value, USD bn	4					
Invested capital, USD bn	239					
TGR	2%					
EV, USD bn	250.9					

The data in Table 4 shows that Shell's value for the first scenario amounts to $250.9 billion. We then calculated the enterprise value for the second scenario (Table 5).

Table 5. DCF and EVA Models for Shell After Exiting the Russian Market

DCF approach, USD mn	2022	2023E	2024E	2025E	2026E	2027E
	0	0.5	1.5	2.5	3.5	4.5
EBIT (excl. Russia)	42,674	36,455	33,635	34,109	34,783	35,582
Gain / loss from exit	176					
Total EBIT	42,850	36,455	33,635	34,109	34,783	35,582
Tax rate	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%
NOPAT	32,138	27,341	25,226	25,582	26,087	26,686
D&A	21,019	20,825	21,050	21,629	22,199	22,750
Change in NWC	8,913	(1,227)	(1,898)	-	-	-
Capex	(22,600)	(26,106)	(29,614)	(31,623)	(33,133)	(34,146)
FCFF	39,470	20,833	14,765	15,588	15,153	15,290
WACC	8.6%					
Discount factor by year	1.00	0.96	0.88	0.81	0.75	0.69
DCF	x	19,990	13,045	12,680	11,349	10,544
NPV, USD bn	68					
Terminal Value, USD bn	163					
TGR	2%					
EV, USD bn	230.3					
EVA approach, USD mn	**2022**	**2023E**	**2024E**	**2025E**	**2026E**	**2027E**
	0	0.5	1.5	2.5	3.5	4.5
NOPAT	32,138	27,341	25,226	25,582	26,087	26,686
Capital Invested	239,141	279,354	284,925	297,184	309,655	322,424
Total IC	239,141	279,354	284,925	297,184	309,655	322,424
EVA	x	3,290	696	(4)	(572)	(1,073)

EVA approach, USD mn	2022	2023E	2024E	2025E	2026E	2027E
WACC	8.6%					
Discount factor by year	1.00	0.96	0.88	0.81	0.75	0,69
Discounted EVA	x	3,157	615	(3)	(429)	(740)
NPV, USD bn	3					
Terminal Value, USD bn	(11)					
Invested capital, USD bn	239					
TGR	2%					
EV, USD bn	230.3					

The obtained results indicate that the enterprise value decreased after exiting the Russian market by $20.6 billion, dropping from $250.9 billion to $230.3 billion.

Evaluating the Influence of Shell's Exit from the Russian Market on Operational and Other Indicators

1) Reserves

As of the end of 2021, Shell's proven and probable oil reserves totaled 9.4 billion barrels of oil equivalent (BOE). These reserves decreased by approximately 2 billion BOE, which accounts for about 21% of the company's total reserve volume.

2) Extraction Volume

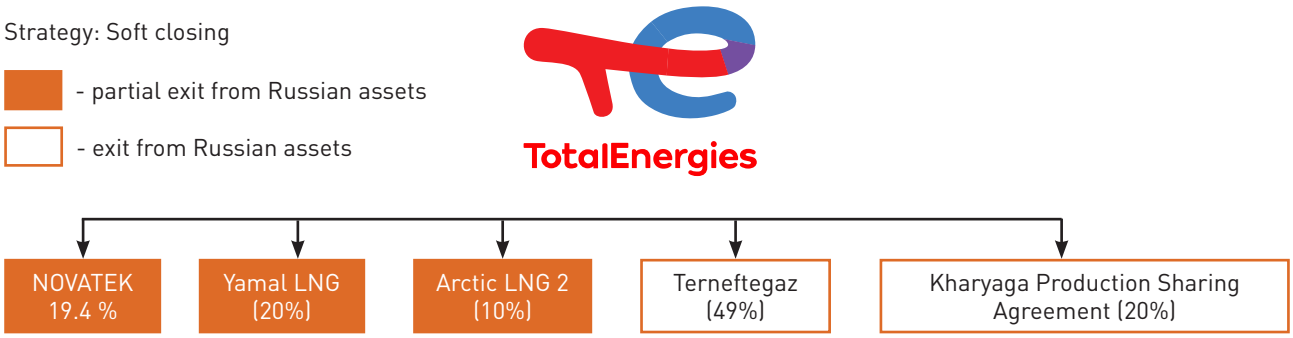
In 2021, Shell's oil output amounted to 344 million BOE, with about 4 million BOE produced in the Russian Federation. **As a result, the losses in oil production were relatively low, approximately 1%.**

3) Premium Asian Market

Since the majority of the gas produced by the Sakhalin-2 project is directed to the Asian market, primarily to Japan, Shell has experienced a 23% reduction in its LNG supplies to the Asian market. However, considering the geographical proximity of Sakhalin Island to the main LNG market in Japan, the logistic costs for transportation from Sakhalin to Japan are approximately four times lower than from Qatar and more than two times lower than from Malaysia and Brunei, where Shell has substantial gas assets.

TotalEnergies

Figure 3. Structure of Assets in the Russian Federation and Strategy for Exiting the Russian Market



Following its withdrawal from a portion of Russian assets, TotalEnergies reported a loss of $4 billion. The company also announced that it had ceased investments in the Russian Federation, halted purchases of Russian oil and LNG in the spot market, but continued to procure LNG under long-term contracts with Yamal LNG. TotalEnergies still maintains shares in Russian assets, from which the company continues to receive dividends. In 2022, these dividends amounted to 60 billion RUB.

TotalEnergies adopted the soft closing strategy, as it retained ownership of its key assets, including PAO Novatek, Yamal LNG, and Arctic LNG 2. The company only exited from less significant assets.

Evaluating the Influence of TotalEnergies' Exit from the Russian Market on the Enterprise Value: DCF and EVA Models

To assess the impact of TotalEnergies' exit from Russian assets, such as CJSC Terneftegaz and the Kharyaga Production Sharing Agreement, on the enterprise value, DCF and EVA models were employed. A revenue forecast was calculated, considering the geographical position and breaking down by the company's business areas, which include exploration and production, refining and chemicals, and integrated gas. The growth rates were determined based on market analysis and investment banks' reports. The share of the Russian business (CJSC Terneftegaz and the Kharyaga Production Sharing Agreement) constitutes approximately 0.3% of TotalEnergies' operating profit, accounting for its share in these projects (49% and 20%, respectively).

The calculated results for the weighted average capital cost (WACC) for TotalEnergies are provided in Table 6.

Table 6. Calculation of the Weighted Average Capital Cost for TotalEnergies

Indicator	Value	Source
Risk-Free Rate	3.40%	10-Y US Treasury
Unlevered Beta	0.90	Damodaran
D/E	11.50%	Damodaran
Tax Rate	33%	Marginal Tax Rate
Levered Beta	0.97	Calculations
ERP	5.94%	Damodaran
Cost of Equity	9.16%	Calculations
Pre-tax Cost of Debt	4.90%	10-Y Corp Bond
After-tax Cost of Debt	3.28%	Calculations
We	89.68%	Calculations
Wd	10.32%	Calculations
WACC	8.55%	Calculations

Now, let us analyze the results of evaluating the enterprise value for the first scenario, as shown in Table 7.

Table 7. DCF and EVA Models for TotalEnergies Before Exiting the Russian Market

DCF approach, USD mn	2022	2023E	2024E	2025E	2026E	2027E
	0	0.5	1.5	2.5	3.5	4.5
EBIT (excl. Russia)	50,522	32,944	31,024	32,692	32,740	33,252
EBIT Russia (Russia)	166	108	102	108	108	109
As % of Total EBIT (average)	0.33%					
Total EBIT	50,688	33,052	31,127	32,799	32,848	33,361
Tax rate	33.0%	33.0%	33.0%	33.0%	33.0%	33.0%
NOPAT	33,961	22,145	20,855	21,975	22,008	22,352
D&A	12,316	12,175	12,121	12,130	12,128	12,131
Change in NWC	7,620	(1,026)	-	-	-	-
Capex	(9,773)	(11,589)	(13,008)	(13,405)	(13,330)	(13,588)
FCFF	44,124	21,706	19,967	20,701	20,806	20,896
WACC	8.6%					
Discount factor by year	1.00	0.96	0,88	0,81	0.75	0.69
DCF	x	20,833	17,655	16,862	15,612	14,444
NPV, USD bn	85					
Terminal Value, USD bn	225					
TGR	2%					
EV, USD bn	310.3					1.08
EVA approach, USD mn	**2022**	**2023E**	**2024E**	**2025E**	**2026E**	**2027E**
	0	0.5	1.5	2.5	3.5	4.5
NOPAT	33,961	22,145	20,855	21,975	22,008	22,352
Capital Invested	242,824	183,347	190,874	198,222	204,259	210,592
Total IC	242,824	183,347	190,874	198,222	204,259	210,592
EVA	x	6,465	4,531	5,024	4,540	4,343
	236,145	239,108	244,679	253,573	263,403	273,688

EVA approach, USD mn	2022	2023E	2024E	2025E	2026E	2027E
WACC	8.6%					
Discount factor by year	1.00	0.96	0.88	0.81	0.75	0.69
Discounted EVA	x	6,205	4,007	4,092	3,407	3,002
NPV, USD bn	21					
Terminal Value, USD bn	47					
Invested capital, USD bn	243					
TGR	2%					
EV, USD bn	310.3					

Table 7 indicates that TotalEnergies' enterprise value for the first scenario is $310.3 billion.

Now, let us calculate the enterprise value of TotalEnergies for the scenario in which it exits CJSC Terneftegaz and the Kharyaga Production Sharing Agreement, as shown in Table 8.

Table 8. DCF and EVA Models for TotalEnergies After Exiting the Russian Market

DCF approach, USD mn	2022	2023E	2024E	2025E	2026E	2027E
	0	0.5	1.5	2.5	3.5	4.5
EBIT (excl. Russia)	50,522	32,944	31,024	32,692	32,740	33,252
Gain / loss from exit	45					
Total EBIT	50,567	32,944	31,024	32,692	32,740	33,252
Tax rate	33.0%	33.0%	33.0%	33.0%	33.0%	33.0%
NOPAT	33,880	22,072	20,786	21,903	21,936	22,279
D&A	12,316	12,175	12,121	12,130	12,128	12,131
Change in NWC	7,620	(1,026)	-	-	-	-
Capex	(9,773)	(11,589)	(13,008)	(13,405)	(13,330)	(13,588)
FCFF	44,043	21,633	19,899	20,629	20,734	20,823
WACC	8.6%					
Discount factor by year	1.00	0.96	0.88	0.81	0.75	0.69
DCF	x	20,764	17,594	16,803	15,558	14,393
NPV, USD bn	85					
Terminal Value, USD bn	224					
TGR	2%					
EV, USD bn	309.2					
EVA approach, USD mn	**2022**	**2023E**	**2024E**	**2025E**	**2026E**	**2027E**
	0	0.5	1.5	2.5	3.5	4.5
NOPAT	33,880	22,072	20,786	21,903	21,936	22,279
Capital Invested	242,824	183,347	190,874	198,222	204,259	210,592
Total IC	242,824	183,347	190,874	198,222	204,259	210,592
EVA	x	6,393	4,463	4,952	4,468	4,269
WACC	8.6%					
Discount factor by year	1.00	0.96	0.88	0.81	0.75	0.69
Discounted EVA	x	6,136	3,946	4,033	3,352	2,951

EVA approach, USD mn	2022	2023E	2024E	2025E	2026E	2027E
NPV, USD bn	20					
Terminal Value, USD bn	46					
Invested capital, USD bn	243					
TGR	2%					
EV, USD bn	309.2					

The results show that TotalEnergies' enterprise value decreased by $1.08 billion after its exit from two Russian projects, falling from $310.3 billion to $309.2 billion. This relatively small loss in value is primarily attributed to the limited contribution of the Russian assets to the company's overall revenue structure.

Evaluating the Influence of TotalEnergies' Exit from the Russian Market on Its Operational and Other Indicators

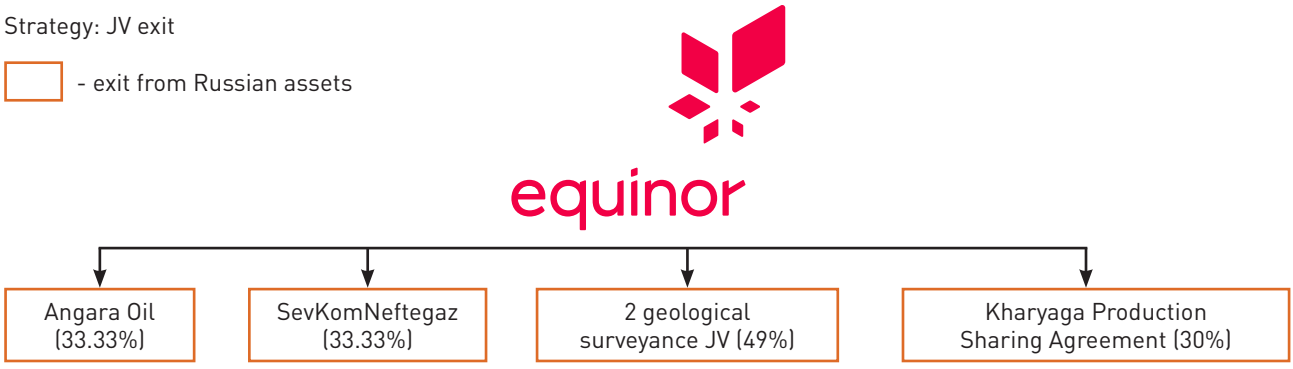
1) **Reserves**: As of the end of 2021, TotalEnergies' total reserves were approximately 12 billion barrels of oil equivalent (BOE). The reserves associated with its Russian assets, specifically CJSC Terneftegaz and the Kharyaga Production Sharing Agreement, accounted for about 0.5 billion BOE, representing roughly 4% of TotalEnergies' proven reserves.

2) **Extraction Volume**: In 2021, TotalEnergies' total extraction volume was around 193 million BOE. The extraction volume attributable to the Russian assets from which the company withdrew in the same year, in proportion to its participation share, was about 14 million BOE, equivalent to approximately 7% of the company's overall extraction volume.

3) **Logistic Costs**: TotalEnergies procured a significant portion of its oil from Russia, which was transported to the Leuna oil refinery in East Germany at a rate of 240-250 barrels per day through the Druzhba pipeline owned by PJSC Transneft. It is expected that TotalEnergies will replace the Russian oil with oil from the Middle East. However, it is worth noting that the transportation of oil through the Druzhba pipeline incurred lower costs than sea transport from the Middle East.

Equinor

Figure 4. Structure of Assets in the Russian Federation and Strategy for Exiting the Russian Market



The Norwegian company Equinor took the initiative to exit the Russian market by transferring its Russian assets to PJSC Rosneft for a nominal amount of 1 Euro. This strategic move allowed Equinor to free itself from obligations to invest $1 billion as stipulated in their agreements. In 2022, Equinor became the first oil and gas company to completely withdraw from Russia.

In this exit, Equinor followed the joint venture (JV) exit strategy. While the specific recipient of Equinor's shares in the Kharyaga Production Sharing Agreement was not disclosed, it is likely to be the project's operator, JSC Zarubezhneft.

Evaluating the Influence of Equinor's Exit from the Russian Market on the Enterprise Value

To evaluate the impact of Equinor's exit from its Russian assets, such as Angara Oil LLC, SevComNeftegaz LLC, and two geological surveyance joint ventures, we employed the discounted cash flow (DCF) and economic value added (EVA) models. These models allowed us to forecast revenues, considering the geographical location and breaking down for Equinor's business areas, which include exploration, production, refining, and liquefied natural gas (LNG) production. The growth rates were determined based on market analysis and data from investment banks.

In 2021, the revenue generated from Equinor's Russian business represented approximately 0.3% of the company's operating profit, taking into account Equinor's varying share percentages in these projects (33.3%, 33.3%, 49%, and 30%, respectively).

We calculated the weighted average capital cost for Equinor as shown in Table 9.

Table 9. Calculation of the Weighted Average Capital Cost for Equinor

Indicator	Value	Source
Risk-Free Rate	3.40%	10-Y US Treasury
Unlevered Beta	0.90	Damodaran
D/E	11.50%	Damodaran
Tax Rate	33%	Marginal Tax Rate
Levered Beta	0.97	Calculations
ERP	5.94%	Damodaran
Cost of Equity	9.16%	Calculations
Pre-tax Cost of Debt	4.60%	10-Y Corp Bond
After-tax Cost of Debt	3.08%	Calculations
We	89.68%	Calculations
Wd	10.32%	Calculations
WACC	8.53%	Calculations

Table 10 displays the enterprise value of Equinor for the first scenario.

Table 10. DCF and EVA Models for Equinor Before Exiting the Russian Market

DCF approach, USD mn	2022	2023E	2024E	2025E	2026E	2027E
	0	0.5	1.5	2.5	3.5	4.5
EBIT (excl. Russia)	74,941	47,397	47,793	41,743	37,971	37,044
EBIT Russia	205	130	131	114	104	101
As % of Total EBIT (average)	0.27%					
Total EBIT	75,146	47,526	47,924	41,857	38,075	37,146
Tax rate	70.0%	70.0%	70.0%	70.0%	70.0%	70.0%
NOPAT	22,544	14,258	14,377	12,557	11,423	11,144
D&A	8,879	9,061	9,132	9,269	9,250	9,212
Change in NWC	692	405	-	-	-	-
Capex	(7,772)	(9,998)	(11,800)	(12,284)	(12,164)	(12,007)
FCFF	24,343	13,726	11,710	9,542	8,509	8,348
WACC	8.5%					
Discount factor by year	1.00	0.96	0.88	0.81	0.75	0.69
DCF	x	13,176	10,356	7,776	6,389	5,775
NPV, USD bn	43					
Terminal Value, USD bn	90					
TGR	2%					
EV, USD bn	133.7					0,47
EVA approach, USD mn	**2022**	**2023E**	**2024E**	**2025E**	**2026E**	**2027E**
	0	0.5	1.5	2.5	3.5	4.5
NOPAT	22,544	14.258	14,377	12,557	11,423	11,144
Capital Invested	79,156	83,344	86,546	90,082	92,633	95,053

EVA approach, USD mn	2022	2023E	2024E	2025E	2026E	2027E
Total IC	79,156	83,344	86,546	90,082	92,633	95,053
EVA	x	7,148	6,994	4,872	3,520	3,035
	236,145	239,108	244,679	253,573	263,403	273,688
WACC	8.5%					
Discount factor by year	1.00	0.96	0.88	0.81	0.75	0.69
Discounted EVA	x	6,861	6,186	3,970	2,643	2,099
NPV, USD bn	22					
Terminal Value, USD bn	33					
Invested capital, USD bn	79					
TGR	2%					
EV, USD bn	133.7					

Table 10 illustrates that TotalEnergies' value for the first scenario is $133.7 billion. Next, we calculated its enterprise value for the second scenario, as presented in Table 11.

Table 11. DCF and EVA Models for Equinor After Exiting the Russian Market

DCF approach, USD mn	2022	2023E	2024E	2025E	2026E	2027E
	0	0.5	1.5	2.5	3.5	4.5
EBIT (excl. Russia)	74,941	47,397	47,793	41,743	37,971	37,044
Total EBIT	74,941	47,397	47,793	41,743	37,971	37,044
Tax rate	70.0%	70.0%	70.0%	70.0%	70.0%	70.0%
NOPAT	22,482	14,219	14,338	12,523	11,391	11,113
D&A	8,879	9,061	9,132	9,269	9,250	9,212
Change in NWC	692	405	-	-	-	-
Capex	(7,772)	(9,998)	(11,800)	(12,284)	(12,164)	(12,007)
FCFF	24,282	13,687	11,670	9,507	8,478	8,318
WACC	8.5%					
Discount factor by year	1.00	0.96	0.88	0.81	0.75	0.69
DCF	x	13,138	10,322	7,748	6,366	5,754
NPV, USD bn	43					
Terminal Value, USD bn	90					
TGR	2%					
EV, USD bn	133.2					
EVA approach, USD mn	**2022**	**2023E**	**2024E**	**2025E**	**2026E**	**2027E**
	0	0.5	1.5	2.5	3.5	4.5
NOPAT	22,482	14,219	14,338	12,523	11,391	11,113
Capital Invested	79,156	83,344	86,546	90,082	92,633	95,053

EVA approach, USD mn	2022	2023E	2024E	2025E	2026E	2027E
Total IC	79,156	83,344	86,546	90,082	92,633	95,053
EVA	x	7,109	6,955	4,838	3,489	3,004
WACC	8.5%					
Discount factor by year	1.00	0.96	0.88	0.81	0.75	0.69
Discounted EVA	x	6,824	6,151	3,943	2,620	2,078
NPV, USD bn	22					
Terminal Value, USD bn	32					
Invested capital, USD bn	79					
TGR	2%					
EV, USD bn	133.2					

The results obtained from evaluating the enterprise value for the scenarios of exiting and continuing business in Russia indicate that **the enterprise value decreased by $0.47 billion after exiting four Russian projects, resulting in a total value of $133.2 billion**. This minor decline in value is attributed to the relatively small share of Russian assets within the company's overall revenue structure.

Evaluating the Influence of Equinor's Exit from the Russian Market on Operational and Other Indicators

1) **Reserves:** At the end of 2021, Equinor's proven reserves totaled approximately 5.4 billion barrels of oil equivalent (BOE). The Russian assets of the Norwegian company jointly accounted for roughly 90 billion BOE. Therefore, the decrease in the reserve volume amounted to about 1.7% of the total volume of proven reserves.

2) **Extraction Volume:** In 2021, Equinor produced approximately 760 billion BOE. The Russian assets accounted for about 1% of the total extraction volume of the company. **Thus, Equinor's exit from the Russian market should not have a significant impact on its financial performance due to the small reserves and extraction volumes in the Russian Federation.**

ExxonMobil

Figure 5. Structure of Assets in the Russian Federation and Strategy for Exiting from the Russian Market

ExxonMobil opted for the JV exit strategy and publicly announced its complete withdrawal from Russia, revealing a loss of $2.3 billion.

Evaluating the Influence of ExxonMobil's Exit from the Russian Market on the Enterprise Value: DCF and EVA Models

To assess the impact on the enterprise value resulting from the decision to exit the Russian project Sakhalin-1, we began by using the DCF and EVA models to calculate a revenue forecast. This forecast considered the geographical location and breakdown by the company's business areas, including oil and gas production, refining and sales, and the chemical industry. Growth rates were determined based on the market analysis conducted by the research team and reports from investment banks. The revenues generated from Russian business (Sakhalin-1) account for approximately 2.9% of the operating profit for the group of companies, taking into account ExxonMobil's 30% share in the project.

Table 12 presents the calculation of the weighted average capital cost for ExxonMobil.

Table 12. Calculation of the Weighted Average Capital Cost for ExxonMobil

Indicator	Value	Source
Risk-Free Rate	3.40%	10-Y US Treasury
Unlevered Beta	0.90	Damodaran

Indicator	Value	Source
D/E	11.50%	Damodaran
Tax Rate	33%	Marginal Tax Rate
Levered Beta	0.97	Calculations
ERP	5.94%	Damodaran
Cost of Equity	9.16%	Calculations
Pre-tax Cost of Debt	4.10%	10-Y Corp Bond
After-tax Cost of Debt	2.75%	Calculations
We	89.68%	Calculations
Wd	10.32%	Calculations
WACC	8.50%	Calculations

Now, let us examine the results of assessing the enterprise value for the first scenario, as presented in Table 13.

Table 13. DCF and EVA Models for ExxonMobil Before Exiting the Russian Market

DCF approach, USD mn	2022	2023E	2024E	2025E	2026E	2027E
	0	0.5	1.5	2.5	3.5	4.5
EBIT (excl. Russia)	91,230	60,471	57,451	57,863	57,154	57,725
EBIT Russia	2,594	1,719	1,634	1,645	1,625	1,641
As % of Total EBIT (average)	2.8%					
Total EBIT	93,824	62,190	59,084	59,508	58,779	59,367
Tax rate	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%
NOPAT	67,553	44,777	42,541	42,846	42,321	42,744
D&A	23,740	20,324	21,127	21,966	22,653	22,880
Change in NWC	(194)	(196)	(198)	(200)	(202)	(204)
Capex	(22,472)	(21,136)	(21,460)	(21,470)	(21,470)	(21,685)
FCFF	68,628	43,769	42,009	43,143	43,302	43,735
WACC	8.5%					
Discount factor by year	1.00	0.96	0.88	0.82	0.75	0.69
DCF	x	42,020	37,173	35,186	32,550	30,301
NPV, USD bn	177.2					
Terminal Value, USD bn	475.7					
TGR	2%					
EV, USD bn	653.0					
EVA approach, USD mn	**2022**	**2023E**	**2024E**	**2025E**	**2026E**	**2027E**
	0	0.5	1.5	2.5	3.5	4.5
NOPAT	67,553	44,777	42,541	42,846	42,321	42,744
Capital Invested	318,445	242,247	240,713	240,347	239,299	241,692

EVA approach, USD mn	2022	2023E	2024E	2025E	2026E	2027E
Total IC	318,445	242,247	240,713	240,347	239,299	241,692
EVA	x	24,194	22,088	22,425	21,988	22,208
	236,145	239,108	244,679	253,573	263,403	273,688
WACC	8.5%					
Discount factor by year	1.00	0.96	0.88	0.82	0.75	0.69
Discounted EVA	x	23,228	19,545	18,289	16,529	15,387
NPV, USD bn	93.0					
Terminal Value, USD bn	241.6					
Invested capital, USD bn	318.4					
TGR	2%					
EV, USD bn	653.0					

Table 13 indicates that ExxonMobil's value for the first scenario is $653 billion. Next, we calculated the enterprise value for the second scenario, as shown in Table 14.

Table 14. DCF and EVA Models for ExxonMobil After Exiting the Russian Market

DCF approach, USD mn	2022	2023E	2024E	2025E	2026E	2027E
	0	0.5	1.5	2.5	3.5	4.5
EBIT (excl. Russia)	91,230	60,471	57,451	57,863	57,154	57,725
Total EBIT	91,230	60,471	57,451	57,863	57,154	57,725
Tax rate	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%
NOPAT	65,685	43,539	41,364	41,661	41,151	41,562
D&A	23,740	20,324	21,127	21,966	22,653	22,880
Change in NWC	(194)	(196)	(198)	(200)	(202)	(204)
Capex	(22,472)	(21,136)	(21,460)	(21,470)	(21,470)	(21,685)
FCFF	66,760	42,531	40,833	41,958	42,132	42,553
WACC	8.5%					
Discount factor by year	1.00	0.96	0.88	0.82	0.75	0.69
DCF	x	40,831	36,132	34,220	31,670	29,482
NPV, USD bn	172.3					
Terminal Value, USD bn	462.9					
TGR	2%					
EV, USD bn	635.2					
EVA approach, USD mn	**2022**	**2023E**	**2024E**	**2025E**	**2026E**	**2027E**
	0	0.5	1.5	2.5	3.5	4.5
NOPAT	65,685	43,539	41,364	41,661	41,151	41,562
Capital Invested	318,445	242,247	240,713	240,347	239,299	241,692
Total IC	318,445	242,247	240,713	240,347	239,299	241,692
EVA	x	22,956	20,912	21,240	20,818	21,026
WACC	8.5%					
Discount factor by year	1.00	0.96	0.88	0.82	0.75	0.69
Discounted EVA	x	22,039	18,504	17,323	15,649	14,568
NPV, USD bn	88.1					
Terminal Value, USD bn	228.7					
Invested capital, USD bn	318.4					

EVA approach, USD mn	2022	2023E	2024E	2025E	2026E	2027E
TGR	2%					
EV, USD bn	635.2					

The data in Table 14 reveals that **ExxonMobil's enterprise value decreased by $17.75 billion after exiting the Russian market, specifically the Sakhalin-1 project, falling from $653.0 billion to $635.2 billion.**

Evaluating the Influence of ExxonMobil's Exit from the Russian Market on Operational and other Indicators

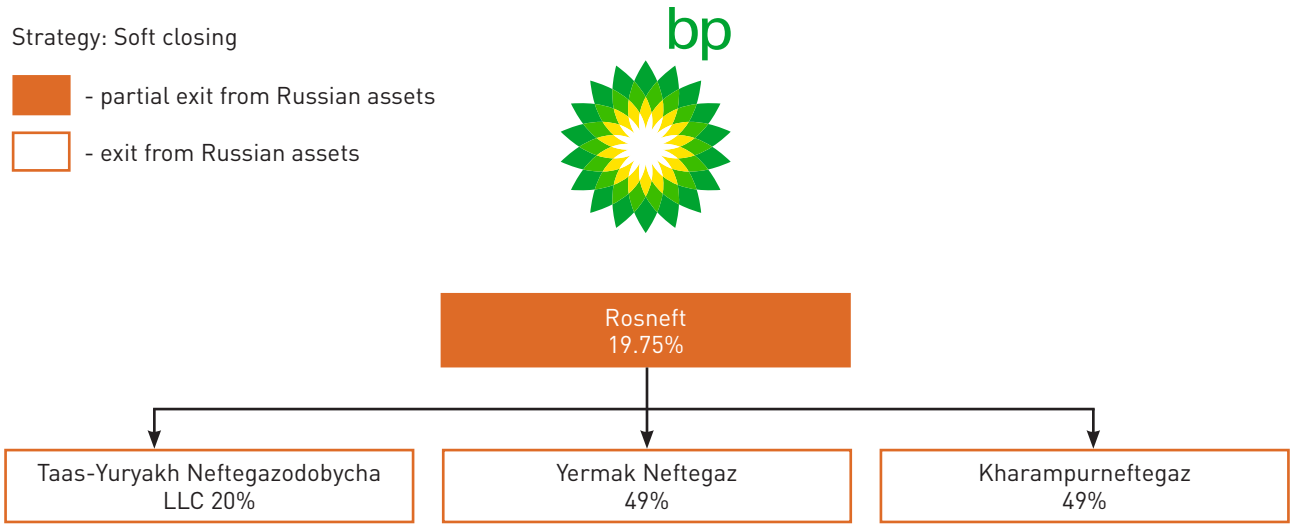
1) **Reserves:** As of the beginning of 2022, ExxonMobil's proven reserves totaled approximately $18.6 billion barrels of oil equivalent (BOE). The reserves associated with the Sakhalin-1 project, considering the company's ownership share, amounted to approximately 1.7 billion BOE, representing about 9% of the company's total proven reserves.

2) **Extraction Volume:** In 2021, ExxonMobil had a daily production rate of 4 million barrels of oil equivalent, which translates to an annual output of 1.5 billion BOE. The reduction in production resulting from the company's withdrawal from the Sakhalin-1 project amounted to 40,000 BOE per day, roughly 1% of the company's total production.

According to the Russian government, ExxonMobil discontinued the operations of the Sakhalin-1 project by decreasing the daily extraction volume from 220,000 to 10,000 barrels of oil equivalent. The estimated losses incurred by the Russian Federation due to this reduction amounted to RUB 20 billion. Therefore, this loss could potentially be subtracted from the final compensation to be received by the American company for its share in the project.

BP

Figure 6. Structure of Assets in the Russian Federation and Strategy for Exiting from the Russian Market



BP chose a soft closing strategy and, as a consequence of its exit from Russia, incurred losses of $24.4 billion [27], which have been documented in its first-quarter 2022 company performance report. Additionally, the company continues to receive dividends from its Russian assets [28-29], although it does not include them in its financial statements.

Evaluating the Influence of BP's Exit from the Russian Market on the Enterprise Value: DCF and EVA Models

To evaluate the impact of BP's decision to exit Rosneft and its associated projects on the company's value, we began by using the DCF and EVA models. This entailed generating a revenue forecast, factoring in geographical considerations, and breaking down the forecast across BP's various business sectors. These sectors encompassed oil and gas production, low-carbon energy, filling stations, and a joint venture with Rosneft. The growth rates were established through market analysis and input from investment banks. The revenue from BP's Russian operations constituted approximately 9.9% of its overall operating profit, considering BP's shares in Rosneft projects (20%, 49%, and 49%, respectively). Table 15 details the calculation of BP's weighted average capital cost.

Table 15. Calculation of the Weighted Average Capital Cost for BP

Indicator	Value	Source
Risk-Free Rate	3.40%	10-Y US Treasury
Unlevered Beta	0.90	Damodaran
D/E	11.50%	Damodaran
Tax Rate	33%	Marginal Tax Rate
Levered Beta	0.97	Calculations
ERP	5.94%	Damodaran
Cost of Equity	9.16%	Calculations
Pre-tax Cost of Debt	4.70%	10-Y Corp Bond
After-tax Cost of Debt	3.15%	Calculations
We	89.68%	Calculations
Wd	10.32%	Calculations
WACC	8.54%	Calculations

Now, let us analyze the results obtained from evaluating the enterprise value for the first scenario, as presented in Table 16.

Table 16. DCF and EVA Models for BP Before Exiting the Russian Market

DCF approach, USD mn	2022	2023E	2024E	2025E	2026E	2027E
	0	0.5	1.5	2.5	3.5	4.5
EBIT (excl. Russia)	47,076	40,410	38,489	38,376	37,571	36,759
EBIT Russia	5,171	4,439	4,228	4,216	4,127	4,038
As % of Total EBIT	9.9%					
Total EBIT	52,247	44,849	42,717	42,592	41,698	40,798
Tax rate	34.3%	40.0%	40.0%	40.0%	40.0%	40.0%
NOPAT	34,307	26,909	25,630	25,555	25,019	24,479
D&A	15,163	15,219	14,505	15,584	15,457	17,780
Change in NWC	8,128	4,809	3,343	214	2,417	-8,568
Capex	(22,892)	(18,748)	(18,440)	(16,501)	(15,140)	(15,238)
FCFF	34,706	28,189	25,038	24,852	27,753	18,453
WACC	8.5%					
Discount factor by year	1.00	0.96	0.88	0.81	0.75	0.69
DCF	x	27,058	22,143	20,249	20,834	12,762
NPV, USD bn	103					
Terminal Value, USD bn	199					
TGR	2%					
EV, USD bn	302.2					
EVA approach, USD mn	**2022**	**2023E**	**2024E**	**2025E**	**2026E**	**2027E**
	0	0.5	1.5	2.5	3.5	4.5
NOPAT	34,307	26,909	25,630	25,555	25,019	24,479
Capital Invested	125,733	139,895	140,573	144,601	149,096	154,049

EVA approach, USD mn	2022	2023E	2024E	2025E	2026E	2027E
Total IC	125,733	139,895	140,573	144,601	149,096	154,049
Econ profit	x	14,965	13,628	13,209	12,289	11,326
WACC	8.5%					
Discount factor by year	1.00	0.96	0.88	0.81	0.75	0.69
Discounted econ profit	x	14,364	12,052	10,762	9,225	7,833
NPV, USD bn	54					
Terminal Value, USD bn	122					
Invested capital, USD bn	126					
TGR	2%					
EV, USD bn	302.2					

Table 16 reveals that BP's value for the first scenario is $302.2 billion. We then calculated the enterprise value for the second scenario, as shown in Table 17.

Table 17. DCF and EVA Models for BP After Exiting the Russian Market

DCF approach, USD mn	2022	2023E	2024E	2025E	2026E	2027E
	0	0.5	1.5	2.5	3.5	4.5
EBIT (excl. Russia)	47,076	40,410	38,489	38,376	37,571	36,759
Tax rate	34.3%	40.0%	40.0%	40.0%	40.0%	40.0%
NOPAT	30,911	24,246	23,094	23,026	22,542	22,056
D&A	15,163	15,219	14,505	15,584	15,457	17,780
Change in NWC	8,128	4,809	3,343	214	2,417	-8,568
Capex	(22,892)	(18,748)	(18,440)	(16,501)	(15,140)	(15,238)
FCFF	31,310	25,526	22,502	22,323	25,276	16,030
WACC	8.5%					
Discount factor by year	1.00	0.96	0.88	0.81	0.75	0.69
DCF	x	24,501	19,899	18,188	18,975	11,087
NPV, USD bn	93					
Terminal Value, USD bn	173					
TGR	2%					
EV, USD bn	265.6					
EVA approach, USD mn	**2022**	**2023E**	**2024E**	**2025E**	**2026E**	**2027E**
	0	0.5	1.5	2.5	3.5	4.5
NOPAT	30,911	24,246	23,094	23,026	22,542	22,056

EVA approach, USD mn	2022	2023E	2024E	2025E	2026E	2027E
Capital Invested	125,733	139,895	140,573	144,601	149,096	154,049
Total IC	125,733	139,895	140,573	144,601	149,096	154,049
EVA	x	12,301	11,091	10,679	9,812	8,903
WACC	8.5%					
Discount factor by year	1.00	0.96	0.88	0.81	0.75	0.69
Discounted econ profit	x	11,808	9,809	8,701	7,366	6,158
NPV, USD bn	44					
Terminal Value, USD bn	96.06					
Invested capital, USD bn	125.73					
TGR	2%					
EV, USD bn	265.6					

According to Table 17, **BP's enterprise value decreased by $36.5 billion after exiting two Russian projects, falling from $302.2 billion to $265.6 billion**. These significant losses are primarily attributed to BP's substantial involvement in Russian projects, notably its 19.75% share in Rosneft, accounting for approximately 10% of the overall company's operational profit.

Evaluating the Influence of BP's Exit from the Russian Market on Operational and Other Indicators

1) Reserves: At the end of 2021, the company's proven reserves stood at 16,954 billion barrels of oil equivalent (BOE). However, in 2022, the company did not include information about its joint ventures with Rosneft in its operating results. Consequently, the reserves decreased to 7,183 billion BOE, marking a 55% decline. Similarly, at the end of 2021, the proven gas reserves amounted to 39,615 billion cubic meters (billion m^3). However, the company did not record the joint ventures with Rosneft in its 2022 operating results, resulting in reserves declining to 18,481 billion m^3, a decrease of 53%.

2) Extraction Volume: At the end of 2021, the company's extraction volume was 3,316 billion BOE. In 2022, the reported extraction volume decreased to 2,438 billion BOE, representing a 26% reduction. Furthermore, in 2021, the company produced 7,915 billion m^3 of gas. By the end of 2022, the reported gas extraction volume had decreased to 7,101 billion m^3, indicating a 10% reduction in production.

Conclusion

Our research has successfully achieved its intended purpose by compiling a comprehensive database related to the exit of foreign companies from the Russian market. We have analyzed key trends, including the industries from which companies withdrew and the countries of incorporation of exiting companies. Furthermore, we identified nine primary exit strategies employed by these companies.

Our analysis reveals that the majority of exits were carried out by German, French, and American companies. Sectors such as consumer goods, commodities, food and beverages, and automotive manufacturing saw the highest number of withdrawals. The most common exit strategies included joint venture exits and soft closings, characterized by a reduction in investment project funding, marketing termination, and a lack of a clear and unambiguous exit plan from Russia. This trend was particularly prominent in the oil and gas industry, Russia's largest and most strategically significant sector.

Our study of selected companies resulted in the following conclusions:

1. Shell's decision to withdraw from the Russian market led to a substantial decrease in enterprise value, amounting to $20.6 billion when assessed using two valuation models (DCF and EVA). This loss exceeded the write-off of Russian assets reported in the corporate financial statements. Shell employed a strategy involving the exit from a joint venture and the sale of assets to a local player. Operationally, the company experienced significant losses in reserves, approximately 21% of the total volume, while extraction volumes were only minimally impacted (1%). The loss of approximately 23% of gas supplies to Asia had a significant impact due to the low transportation costs of LNG to Japan from Shell's Russian assets.

2. TotalEnergies' fundamental value decreased by $1.1 billion following its decision to exit Russia. The company adopted a soft closing strategy, retaining its key assets such as PAO Novatek, Yamal LNG, and Arctic LNF 2 while divesting less significant assets, including the Kharyaga Production Sharing Agreement and CJSC Terneftegaz. The exit resulted in a 4% decrease in reserves and a 7% reduction in extraction volumes compared to 2021 figures.

3. Equinor's withdrawal from the Russian market resulted in the smallest decrease in enterprise value, amounting to

$0.5 billion. This exit is not expected to significantly impact the company's financial performance due to its small reserves and extraction volumes in the Russian Federation: the company's total reserves decreased by approximately 1.7% of the total amount, while its extraction volumes decreased by only 1%. Equinor applied a joint venture exit strategy.

4. ExxonMobil lost $17.8 billion in value as determined by the DCF and EVA models. Lost reserves, proportionate to the company's participation share, accounted for approximately 1.7 billion barrels of oil equivalent or about 9% of ExxonMobil's total volume of reserves. Extraction volume decreased by just 1%. The company employed a strategy of exiting from the Russian joint venture.

5. BP utilized a soft closing strategy, declaring its withdrawal from Rosneft's capital while still retaining its status as a shareholder. However, BP cannot record dividends received from Rosneft in its cash flows. As a consequence of this exit, the company reported losses of $24.4 billion. The decision of leaving Russia cost the company $36.5 billion of fundamental value, the largest amount among the oil and gas companies considered here. BP also incurred significant losses in oil reserves (55%) and gas reserves (26%) as a percentage of the company's total reserves. Oil production decreased by 53%, and gas production by 10% of the total amount, indicating substantial strategic losses related to the company's exit from its joint venture with Rosneft, which has implications for the company's future reserves (Table 18).

Table 18. Comparison of Company Losses Caused by Exiting the Russian Federation

#	Criterion	BP	Shell	ExxonMobil	TotalEnergies	Equinor
1	Loss caused by withdrawal from Russia, as reflected in company reports, $ billion	(24.4)	(3.9)	(2.3)	(4)	(1)
2	Evaluation of company losses by the DCF and EVA methods, $ billion	(36.5)	(20.6)	(17.7)	(1.1)	(0.5)
3	Decrease in the reserves volume in o.e., %	(≈ 50%)	(≈ 21%)	(≈ 9%)	(≈ 4%)	(≈ 1.7%)
4	Decrease in the extraction volume in o.e., %	(≈ 30%)	(≈ 1%)	(≈ 1%)	(≈ 7%)	(≈ 1%)
5	Loss of convenient logistics in strategically important markets	YES	YES	YES	NO	NO

Based on a comprehensive analysis of the strategies employed by Western oil and gas companies when exiting the Russian market, the evaluation of their value before and after withdrawal, and an examination of the impact on their operational indicators, the following conclusions can be drawn:

The Norwegian company Equinor incurred the least significant losses as a result of its exit from Russia. This can be attributed to its limited engagement in Russian operations compared to other Western oil and gas companies. This validates the hypothesis that companies with stronger ties to the local market experienced more substantial losses.

BP recorded the most substantial reduction in value. At the same time, companies involved in strategically important projects, such as BP and TotalEnergies, adopted a soft exit strategy from the Russian market. This finding aligns with one of our hypotheses. Despite their decision to withdraw from Russia, these companies continue to receive dividends and maintain ownership stakes in assets, the impairment reflected in their financial statements notwithstanding.

Some companies refrained from procuring Russian hydrocarbons in the spot market after their exit, but they still engage in long-term contracts for such procurement. For instance, TotalEnergies continues to purchase LNG from the Yamal LNG project, and Shell, even after exiting the Sakhalin-2 project, still acquires LNG from the Sakhalin Field.

In summary, our research confirms the hypotheses proposed at the beginning of the study. In fact, the actual losses incurred by oil and gas companies exceed the losses reported in their financial statements. The overall impact of exiting the Russian market on these companies is complex and multifaceted.

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