Valvoline Inc. (NYSE: VVV)

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Valvoline: Premier Name in Oil Change

A well-known player within the automotive services industry with numerous service offerings and consistent growth

Business Overview

- Wide variety of services offered: **15-minute stay-in-your-car oil changes**; battery, bulb, and wiper replacement; tire rotations; etc.
- Over **1,850 locations** in North America that are operated directly or franchised
- Operate under the names **"Valvoline Instant Oil Change"** and **"Valvoline Great Canadian Oil Change"**

52.7% of Stores Franchised

12+ Services Offered

Recent Divestiture of Global Products

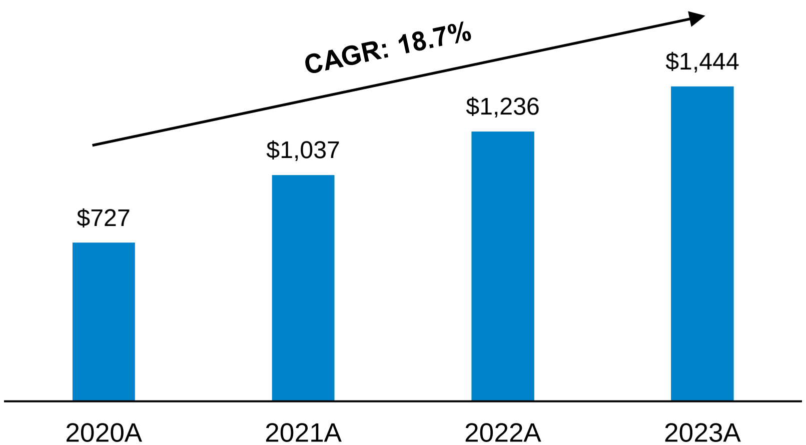
The Valvoline Difference

Brand Awareness – Over 150 Years

Platform Size – Widespread Customer Accessibility

Customer-Focused – Competitively Priced Convenience

Revenue Growth ($mm)



Leverage and Capital Structure

Capital Structure

	Rate	Maturity	Amount	Px	YTM	Market
RCF	7.433%	Apr-24	--	100.00	7.286%	--
Term Loan	7.069%	Apr-24	$463	100.00	6.936%	$463
2031 Notes	3.625%	Jun-31	$535	85.43	6.100%	$457
2030 Notes	4.250%	Feb-30	$600	99.29	4.384%	$596

Leverage Ratio (Lease Adjusted)	Coverage Ratio
4.0x	9.8x

Sources: *Company Filings, 2023 Q4 Earnings Report, CapitalQ*

Breakdown of Retail Service Stores

Valvoline

Not simply an oil change business, Valvoline provides several offerings and has grown their store count substantially

Summary of Services Offered

Fluid Exchange

- Motor Oil
- Transmission & Differential Fluid
- Coolant

Safety

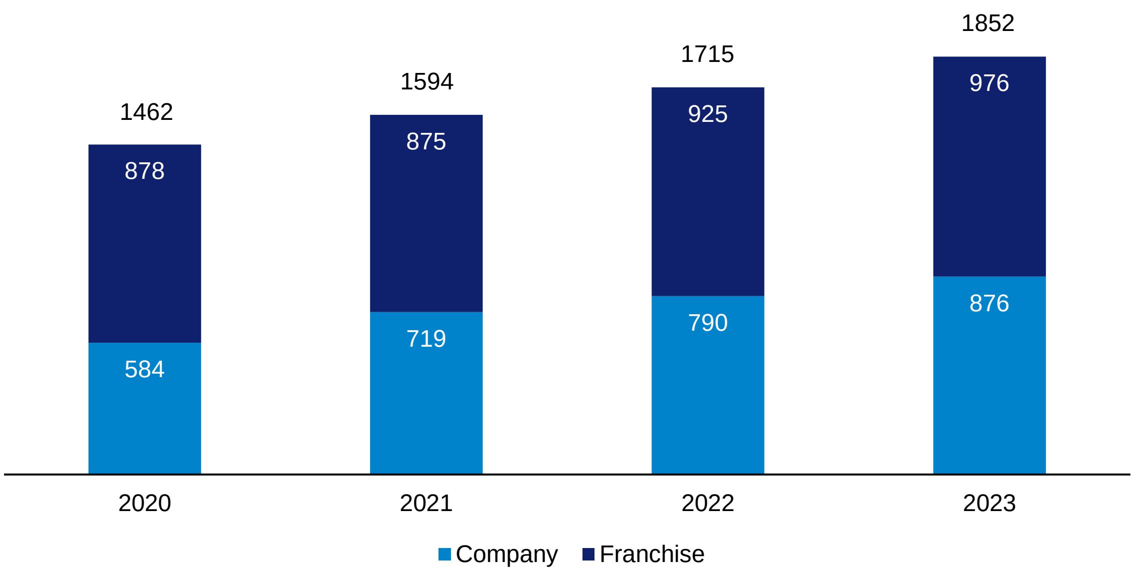
- Tire Inflation
- Tire Rotation
- Safety Check
- Bulbs

Parts Replacement

- 12V Battery
- Filters
- Wiper Blades
- Belts

74% of Revenue from Motor Oil Changes

System Wide Store Count



Takeaway:

- Valvoline has put heavy **emphasis** on **expanding** their store count
- Have increased the number of **wholly owned and operated** stores at a greater rate than franchised stores
- Growth in store count will be positioned to **accelerate** even further **post-divestiture**

Sources: *Company Filings*

Divestiture of Global Products Segment

Valvoline

With the divestiture of their global products segment in '22/'23, Valvoline is poised for strong upside financially in future

Divestiture Structure and Overview

- Prior to late 2022/early 2023, Valvoline was composed of two segments: **retail services and global products**
- The global products segment consisted of **several auto products** such as lubricants, coolants, chemicals, filters, etc.
- In August of 2022, Valvoline announced that they had come to an agreement with Aramco for the purchase of their global products segment for **$2.65B**
- Transaction was **officially completed** in March of 2023; net proceeds from sale were **$2.38B**

Key Benefits of Transaction

1. Global products monetized at attractive valuation with significant capital return to shareholders
2. Creation of pure-play auto services business with increased margins and greater company focus
3. Ability to accelerate retail services evolution as hybrid and EV market grows

Use of Proceeds from Sale

aramco → **$2.38B** → Valvoline

1. Large Returns to Shareholders via Treasury Stock Purchases

$1.6BN

2. Reduction of existing debt & optimization of capital structure

~$600MM

3. Investment into growing the pure-play retail services business

~$200MM

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Sources: *Company Filings, Separation Update 2022*

Industry with Significant Whitespace

Valvoline

With about 5% of the current market share, Valvoline has the opportunity to drastically expand their scope in near future

Total Number of US Oil Changes per Year

25M
VVV Oil Changes

100M
Oil Changes in Quick Lube Market

470M
Total US DIFM Oil Changes

Takeaway:

- Highly **fragmented industry** without major domination from one player
- Valvoline currently holds **~5% of the market share**; with new capital and growth strategy, well-positioned to increase share

Key Competitors

Brand	Ownership	Stores
jiffy lube	Shell PLC	~2,000
MIDAS	TBC Corp	~1,000
TAKE 5	Driven Brands	~850
GREASE MONKEY Oil Changes & More	FullSpeed	~500

Valvoline: 1,852 Stores

Oil Change Industry Characteristics

The oil change industry is characterized by differentiation through three primary factors: brand, speed, and price

Brand + Speed + Price = Competitive Edge

Brand:

- Customers inclined to go with a **name they know**
- **Brand presence** is extremely important in the industry as it often indicates **safety and reliability** to customers
- Key reason why a customer would choose a **large company**

Speed:

- Customers inclined to go with a service center that is **fast and convenient**
- Speed, in this instance, refers **not only to the speed of the oil change** but also to the time it takes for the customer to **travel to the service center**

Price:

- Customers inclined to go with the best option for their **price range**
- There is **not very drastic difference** in pricing amongst competitors
- **Greater volume** allows for service centers to decrease price and attract more customers

"It's convenience, it's speed, and to a certain degree it's the quality of the service and product that's being offered"

Jake Lestan, Senior Director of Marketing and Consumer Engagement

Sources: *Company Filings, NerdWallet*

Investment Thesis

I.

VVV will consistently outperform consensus expectations using a new growth strategy

II.

The possibility of EV under-penetration creates significant option value

3-Pronged Approach to Topline Enhancement

Increases in store count, number of customers, and ticket value poise Valvoline for revenue expansion

3 Factors Drive Strong Growth

1

Store Count

- Significant store count growth expected to be key contributor to compounding revenue
- Future potential for 3,500+ stores as store count growth should increase every year

2

Number of Customers

- Poaching from competitors in multiple markets
- Greater volume = greater convenience = more customers
- Increasing car park year over year leads to greater number of customers

3

Ticket Value

- More stores, more customers leads to more pricing power and increased ticket size
- Enhanced focus on cross-selling multiple services per customer visit

Sources: *Company Filings, Equity Research*

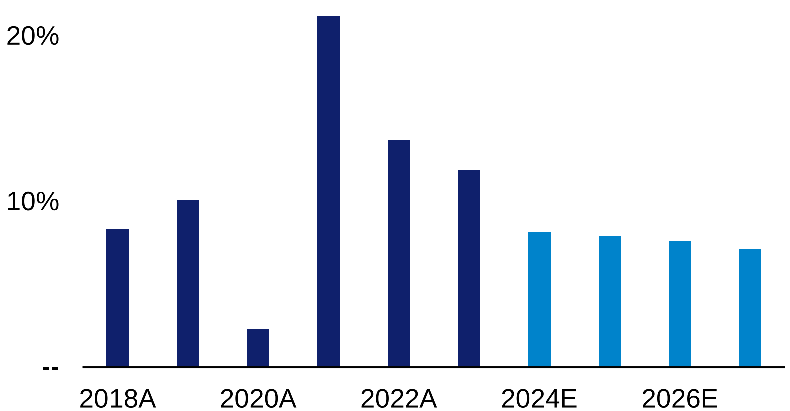
Key Growth Assumptions

Our growth assumptions are based on strong historical SSS growth and management's store count growth plans

SSS Growth

SSS Growth is driven by two factors: ticket and customer growth

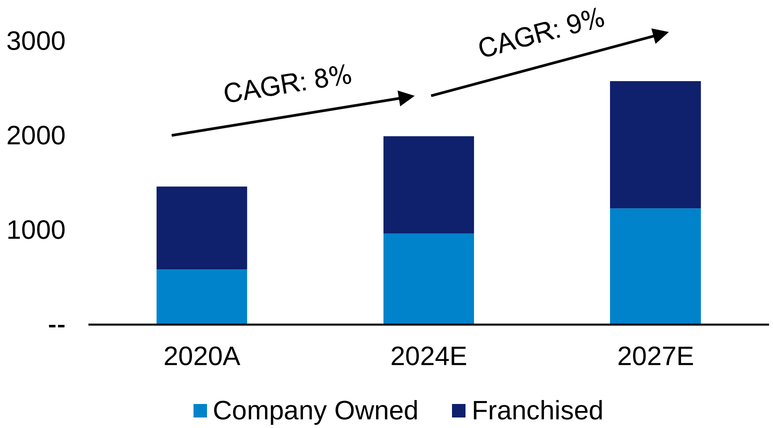
1. VVV has demonstrated 17 consecutive years of SSS growth due to both ticket and customer growth
2. We modeled customer growth to continue through 2030, though slowing towards the end of the decade as market saturation increases
3. Ticket growth will increase as VVV becomes dominant industry player and has increased pricing power



Store Count Expansion

Management's plan for aggressive post-divestiture store count growth will come to fruition

1. VVV has a wide-ranging toolkit that enables superior growth in a variety of markets using greenfield construction, acquisition, and franchise
2. Post-divestiture capital will enable store count growth acceleration



What the Street is Missing on VVV Growth

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The street does not appreciate the growth potential of Valvoline based on a group of factors

Factor:	**Industry**	**Divestiture**	**Store Count**
The Street	• View that industry is in serious decline for a variety of factors • Do not see any significant growth coming out of the industry in the long term	• Not appreciating or fully understanding Valvoline's business model and growth strategy as it comes off of the divestiture of their Global Products Segment	• View store count growth expectations from management as aggressive • Belief of over-aggression enforced by conceptions about industry and divestiture
Our Case	• Valvoline is being valued as an aftermarket automotive services company when they have much in common with a high growth retailer • They should be trading at a much higher multiple	• Massive capital enhancement coming off of divestiture should enable Valvoline to grow their store count extremely aggressively • Divested a lower growth business	• Toolkit of options for continued store count growth • Markets for growth include tier 1, tier 2, and rural communities • Robust plan for growth moving forward

Execution of growth strategy will drive earnings beats which will lead to share price appreciation

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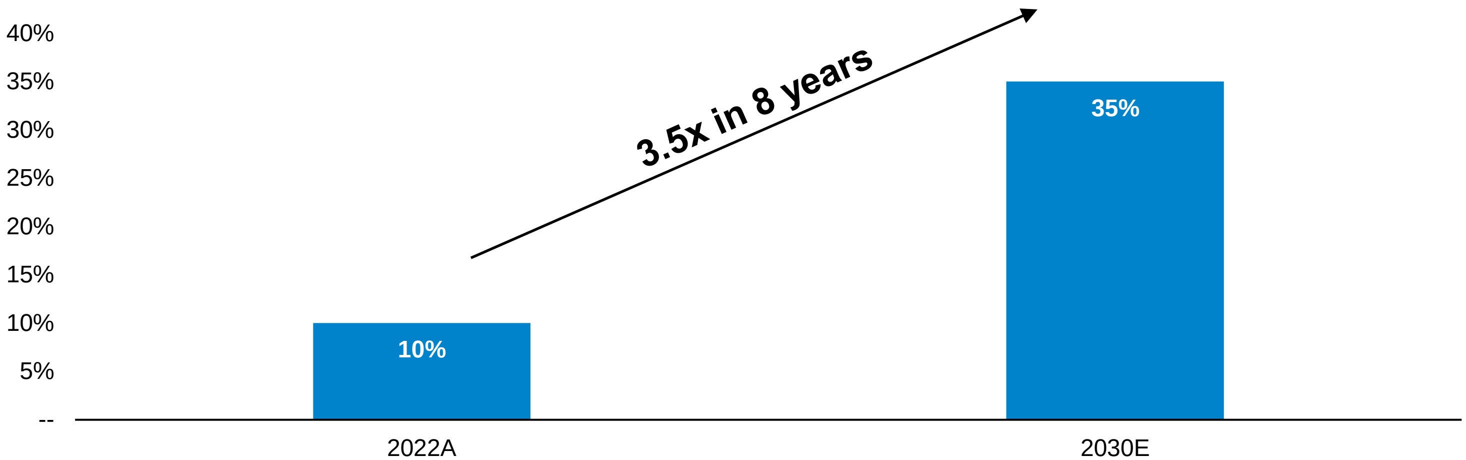
Street Consensus

Wall Street maintains a very optimistic outlook on EVs and expects significant adoption in coming years

US EV Adoption



Consensus projection of a 250% increase in EV adoption in only 8 years

Morningstar is projecting 4x growth in EV adoption by 2030

Consensus Catalysts

1

Government

- Government mandates and incentives could force or at least heavily encourage an uptick in EV adoption

2

Technology

- Technological enhancement in both range capabilities and charging time could decrease some buyer anxiety

3

Environmentalism

- Trends in environmental awareness and sudden focus in favor of zero emission vehicles on a macro level

Sources: *Morningstar, Inc.*

Reverse DCF Suggests Market Belief in EVs

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Our Reverse DCF model shows that the market is pricing VVV with low terminal value, largely due to EV risk

1. Slower growth represents skepticism over management's plan to rapidly expand store count
2. Lower terminal growth rate is largely due to EV risk, which could result in significant market contraction
3. 10x exit multiple is significantly lower than current trading and comps

			FYE Sept. 30		FYE Sept. 30					
			2022A	**2023A**	**2024E**	**2025E**	**2026E**	**2027E**	**2028E**	**2029E**
Revenue			$1,236	$1,444	$1,624	$1,827	$2,055	$2,312	$2,601	$2,926
Growth %	YOY Growth %	13%		*17%*	*13%*	*13%*	*13%*	*13%*	*13%*	*13%*
EBIT			213	308	357	402	452	509	572	644
Margin %	Margin %	22%	*17%*	*21%*	*22%*	*22%*	*22%*	*22%*	*22%*	*22%*
Less: Taxes	Tax, % of Revenue	3%	(35)	(37)	(41)	(46)	(51)	(58)	(65)	(73)
NOPAT			**$179**	**$271**	**$317**	**$356**	**$401**	**$451**	**$507**	**$571**
Plus: D&A	% of CAPEX	55%	71	89	98	111	124	140	157	177
Less: ΔNWC	% of Revenue	2%	273	(802)	(32)	(37)	(41)	(46)	(52)	(59)
Less: CAPEX	% of Revenue	11%	(132)	(181)	(179)	(201)	(226)	(254)	(286)	(322)
Free Cash Flow			**$391**	**($623)**	**$204**	**$229**	**$258**	**$290**	**$326**	**$367**
Period					0.75	1.75	2.75	3.75	4.75	5.75
Discount Factor	WACC	8.886%			0.938	0.862	0.791	0.727	0.667	0.613
Present Value of Free Cash Flow					**$191**	**$198**	**$204**	**$211**	**$218**	**$225**

Implied Share Price	**$35.32**
Current Share Price	$36.18

Implied Metrics

Growth Rate	13%
Terminal Growth Rate	3.5%
Exit Multiple	10x

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Primary Discovery on EVs

Dealers across a wide range of brands and price points are not as sold on EVs as the street may think

Ray Huffines, Huffines Dealerships – Hyundai, Chevrolet, Etc.

- “The supply exceeds the demand” – Much easier to move ICE vehicles
- “In order to sell EVs, they’re going to lose money” – Government incentives encourage manufacturers to push EVs despite taking a loss
- “It’s only going to work if you have a house” – Not sustainable to only use public chargers
- “More of an early adapter” – Primary buyers are those who want to look innovative
- “Some of these chargers are inoperable” – Number of issues with charging stations and often overcrowded with other EV drivers

Jonathan Webb, Porsche St. Louis

- “We’re sold out of most models and our electric stuff is piling up” – Oversupply of EVs
- “They’re not reliable; people have range anxiety” – Concerns from consumers about range/reliability
- “It’s getting forced on us by the manufacturer and the government” – Manufacturers subsidized to promote EVs
- “Having to go to market sooner than would normally like” – Dealerships not in favor
- “Clients don’t necessarily want a silent engine” – Buyers of high performance cars against EVs

Sources: *Primary Research*

What We Believe

Valvoline

Wall Street is far too optimistic on EV adoption rates for a plethora of different factors

EVs Do Not Work for Many Groups

What We Think vs. the Street

Our Case

- 35% critical mass is reached in **2035**
- Saturation of the auto market will be at **50%** total vehicles
- Our catalysts come to fruition
- Street catalysts are not fully realized

Street Case

- 35% critical mass is reached in **2030**
- Street consensus sees near total saturation at a number greater than **80%**
- Street catalysts come to fruition
- Our catalysts are not fully realized

Catalysts for Our Case

1

Range Anxiety

- Buyers continue to be worried about distance capability for EVs and no significant improvements are made to enhance range

2

Price

- It continues to be drastically more costly to produce and purchase EVs in comparison to standard ICE vehicles

3

Infrastructure

- Grid capabilities continue to be unable to support mass EV adoption and not enough charging stations are developed

Long-Term Upside for VVV

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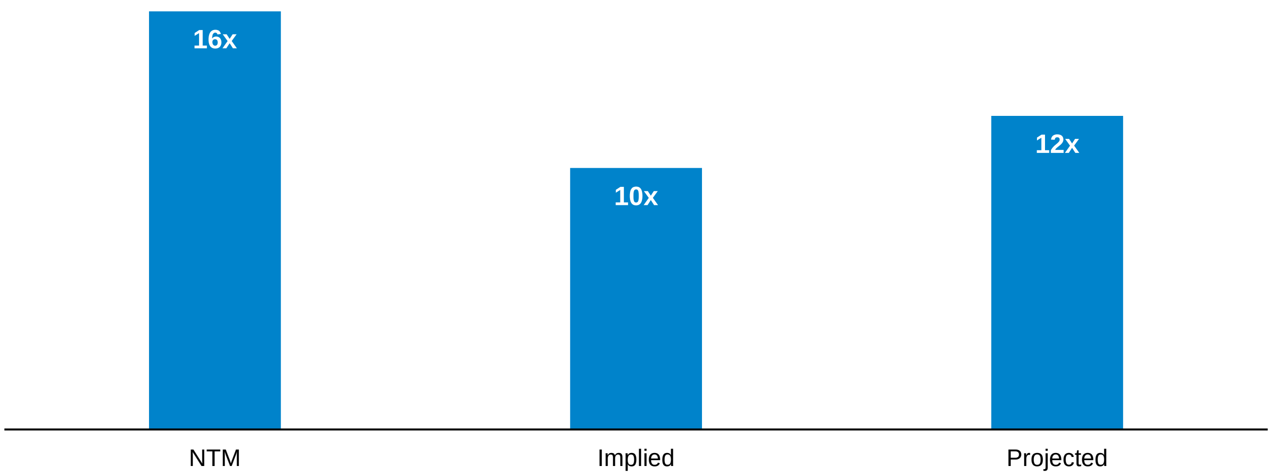
When EVs underperform, terminal value will appreciate and the share price of VVV will increase

A Chain Reaction

EV Underperformance → **Terminal Value Appreciation** → **Share Price Appreciation**

EV/EBITDA Exit Multiples



- Projection via DCF assumes a 25% decrease in exit multiple by 2030
- In contrast, implied multiple via Reverse DCF yields a 37.5% drop in EV/EBITDA
- We expect EV adoption, just not at the rate of the market

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II.

The possibility of EV under-penetration creates significant option value

BUY
Price Target: $45.52
Upside: 22.8%

Valvoline Mishawaka

Appendix

TAM (Consensus EV Adoption)

Street consensus for EV adoption is 35% of new car sales in 2030, and exponential growth thereafter

#'s in MM	2023A	2025E	2030E	2035E	2040E	2045E	2050E
Beginning of Year Cars	283	287	297	308	321	334	349
New Vehicle Sales	16	16	18	20	22	24	26
CAGR		*2.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*
EV Sales	1.1	1.8	6.3	16.7	18.4	20.4	22.5
% of Total Car Sales	*7%*	*11%*	*35%*	*85%*	*85%*	*85%*	*85%*
Decomissioned Cars	(14)	(14)	(16)	(17)	(19)	(21)	(23)
As % of New Vehicle Sales	*88%*	*88%*	*88%*	*88%*	*88%*	*88%*	*88%*
End of Year Cars	285	289	299	311	323	337	352
Average Number of Cars	**284**	**288**	**298**	**309**	**322**	**336**	**351**
Beginning of Year EVs	2.8	4.9	18.3	63.8	125.0	176.4	219.6
EV Sales	1.1	1.8	6.3	16.7	18.4	20.4	22.5
Decommissioned EVs	(0.1)	(0.2)	(1.0)	(3.6)	(7.5)	(11.1)	(14.6)
End of Year EVs	3.7	6.5	23.6	76.9	136.0	185.6	227.5
% of Total Vehicles	*1%*	*2%*	*8%*	*25%*	*42%*	*55%*	*65%*
Average Number of EV	**3**	**6**	**21**	**70**	**131**	**181**	**224**
Average Number of ICE	**281**	**282**	**277**	**239**	**191**	**155**	**127**
Miles Driven	3,231,719	3,296,677	3,464,840	3,641,582	3,827,339	4,022,572	4,227,763
CAGR		*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*
Miles per Car	11,367	11,444	11,618	11,767	11,891	11,988	12,056
Miles per Oil Change	7,500	7,500	7,500	7,500	7,500	7,500	7,500
Oil Changes per Car	1.52	1.53	1.55	1.57	1.59	1.60	1.61
Total Oil Changes	**426**	**431**	**430**	**375**	**303**	**247**	**204**
CAGR		*0.6%*	*(0.1%)*	*(2.7%)*	*(4.2%)*	*(4.0%)*	*(3.7%)*

- Total oil changes will start to significantly decrease in the mid-2030s if consensus EV adoption comes to fruition
- Market saturation is 85%, as EVs are not feasible for all buyers
- Exponential growth has been exhibited in places such as California and Norway, leading to the aggressive consensus estimates

TAM (EV Underperformance Case)

Based on our primary discovery, we believe EV adoption is likely to underperform street consensus

#'s in MM	2023A	2025E	2030E	2035E	2040E	2045E	2050E
Beginning of Year Cars	283	287	297	308	321	334	349
New Vehicle Sales	16	16	18	20	22	24	26
CAGR		*2.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*
EV Sales	1.1	1.5	3.2	7.0	10.9	12.0	13.2
% of Total Car Sales	7%	9%	18%	35%	50%	50%	*50%*
Decomissioned Cars	(14)	(14)	(16)	(17)	(19)	(21)	(23)
As % of New Vehicle Sales	88%	88%	88%	88%	88%	88%	*88%*
End of Year Cars	285	289	299	311	323	337	352
Average Number of Cars	**284**	**288**	**298**	**309**	**322**	**336**	**351**
Beginning of Year EVs	2.8	4.8	13.1	30.3	63.7	96.5	124.0
EV Sales	1.1	1.5	3.2	7.0	10.9	12.0	13.2
Decommissioned EVs	(0.1)	(0.2)	(0.7)	(1.7)	(3.8)	(6.1)	(8.3)
End of Year EVs	3.7	6.0	15.6	35.6	70.7	102.4	129.0
% of Total Vehicles	1%	2%	5%	11%	22%	30%	*37%*
Average Number of EV	**3**	**5**	**14**	**33**	**67**	**99**	**127**
Average Number of ICE	**281**	**283**	**284**	**277**	**255**	**236**	**224**
Miles Driven	3,231,719	3,296,677	3,464,840	3,641,582	3,827,339	4,022,572	4,227,763
CAGR		*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*
Miles per Car	11,367	11,444	11,618	11,767	11,891	11,988	12,056
Miles per Oil Change	7,500	7,500	7,500	7,500	7,500	7,500	7,500
Oil Changes per Car	1.52	1.53	1.55	1.57	1.59	1.60	1.61
Total Oil Changes	**426**	**431**	**440**	**434**	**404**	**377**	**360**
CAGR		*0.6%*	*0.4%*	*(0.3%)*	*(1.4%)*	*(1.3%)*	*(0.9%)*

- Our underperformance case pushes the critical 35% of sales threshold to 2035
- Market Saturation is 50% largely due to the high number of buyers for which EVs are not practical
- Our primary discovery suggested that we are seeing the early signs of this underperformance
- In this case, VVV should see limited harm, as the number of oil changes stagnates until ~2045, and growth can still occur due to industry fragmentation

Store Count Build

Valvoline

We used a store count build to project revenue

	2018A	2019A	2020A	2021A	2022A	2023A	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Company Owned Store Count													
Beginning of Period Store Count	384	462	519	584	719	790	876	966	1056	1148	1248	1340	1428
Opened Stores	17	28	36	30	34		37	37	38	42	38	36	34
Aquired Stores	3	24	12	57	33		37	37	38	42	38	36	34
Conversion between Franchised and Company Operate	58	5	17	50	4		16	16	16	16	16	16	16
Closed Stores	--	--	--	(2)	--		--	--	--	--	--	--	--
2023 Total New Owned Stores						86							
End of Period Stores	**462**	**519**	**584**	**719**	**790**	**876**	**966**	**1056**	**1148**	**1248**	**1340**	**1428**	**1512**
Period New Stores		57	65	135	71	86	90	90	92	100	92	88	84
Franchised Store Count													
Beginning of Period Store Count	743	780	866	878	875	925	976	1036	1130	1244	1394	1508	1622
Opened Stores	28	65	36	39	60		38	55	65	83	65	65	65
Acquired Stores	73	31	--	12	--		38	55	65	83	65	65	65
Conversion between Franchised and Company Operate	(58)	(5)	(17)	(50)	(4)		(16)	(16)	(16)	(16)	(16)	(16)	(16)
Closed Stores	(6)	(5)	(7)	(4)	(6)		--	--	--	--	--	--	--
2023 Total New Franchised Stores						51							
End of Period Stores	**780**	**866**	**878**	**875**	**925**	**976**	**1036**	**1130**	**1244**	**1394**	**1508**	**1622**	**1736**
Period New Stores		86	12	(3)	50	51	60	94	114	150	114	114	114
Total Beginning of Period Stores	1127	1242	1385	1462	1594	1715	1852	2002	2186	2392	2642	2848	3050
Total End of Period Stores	1242	1385	1462	1594	1715	1852	2002	2186	2392	2642	2848	3050	3248
Net New Stores	115	143	77	132	121	137	150	184	206	250	206	202	198
Growth %	*10%*	*12%*	*6%*	*9%*	*8%*	*8%*	*8%*	*9%*	*9%*	*10%*	*8%*	*7%*	*6%*

1. VVV has a well-developed toolkit for store growth Enables balanced growth with a diversified portfolio of store across markets

2. Management plans to increase development of company owned stores using divestiture capital

3. '30 and '31 Senior Notes will command management attention and slow capital expenditure towards the end of the decade

Sources: *Company Filings, Primary Discovery*

Sensitivity Analysis

Key variable sensitivity tables for implied share price

WACC

Exit Multiple	6.886%	7.886%	8.886%	9.886%	10.886%
8x	$77	$57	$45	$38	$32
10x	$83	$62	$50	$42	$36
12x	$88	$67	$55	$47	$41
14x	$93	$72	$59	$51	$45
16x	$98	$77	$64	$55	$49

Perpetuity Growth Rate

Exit Multiple	3.0%	3.5%	4.0%	4.5%	5.0%
8x	$38	$40	$42	$45	$49
10x	$43	$45	$47	$50	$54
12x	$48	$49	$52	$55	$58
14x	$52	$54	$56	$59	$63
16x	$57	$59	$61	$64	$68

WACC

Perpetuity Growth Rate	6.886%	7.886%	8.886%	9.886%	10.886%
3.0%	$71	$60	$52	$46	$42
3.5%	$76	$63	$54	$48	$43
4.0%	$83	$67	$56	$49	$44
4.5%	$93	$72	$59	$51	$45
5.0%	$108	$78	$63	$53	$46

PGR vs. Exit Multiple

- Implied share price is relatively more sensitivity to exit multiple than PGR
- Even extremely conservative values imply some upside

WACC vs. Exit Multiple

- WACC has a relatively larger impact on implied share price as compared to exit multiple
- Aggressive exit multiples reveal a pathway to extreme upside

WACC vs. PGR

- WACC has a relatively larger impact on implied share price as compared to exit multiple
- Almost all cases imply some upside

WACC

WACC Calculation (CAPM)

Capital Structure

	Rate	Maturity	Amount	Px	YTM	Market Value
RCF	7.433%	Apr-24	--	100.00	7.286%	--
Term Loan	7.069%	Apr-24	$463	100.00	6.936%	$463
2031 Notes	3.625%	Jun-31	$535	85.43	6.100%	$457
2030 Notes	4.250%	Feb-30	$600	99.29	4.384%	$596

Cost of Debt

Pre Tax Cost of Debt	5.698%
Tax Rate	20%
After Tax Cost of Debt	**4.558%**

Cost of Equity

Risk Free Rate	4.120%
Beta	1.38
Market Risk Premium	5.000%
Cost of Equity	**11.020%**

WACC

Debt to Total Capitalization	33.03%
Equity to Total Capitalization	66.97%
WACC	**8.886%**

DCF Output (Base)

Valvoline

Our base case uses conservative assumptions largely in-line with management guidance

	FYE Sept. 30		FYE Sept. 30					
	2022A	2023A	2024E	2025E	2026E	2027E	2028E	2029E
Revenue	$1,236	$1,444	$1,704	$1,984	$2,300	$2,660	$3,028	$3,408
Growth %		*17%*	*18%*	*16%*	*16%*	*16%*	*14%*	*13%*
Expenses								
COGS	$760	$899	$1,056	$1,230	$1,426	$1,649	$1,877	$2,113
Gross Profit	$476	$545	$647	$754	$874	$1,011	$1,150	$1,295
Gross Margin %	*39%*	*38%*	*38%*	*38%*	*38%*	*38%*	*38%*	*38%*
SG&A	252	237	290	337	391	452	515	579
Other Operating Expense (Income)	11	33	9	10	11	13	15	17
Operating Income (EBIT)	**$213**	**$275**	**$349**	**$407**	**$471**	**$545**	**$621**	**$699**
EBIT Margin %	*17.3%*	*19.0%*	*20.5%*	*20.5%*	*20.5%*	*20.5%*	*20.5%*	*20.5%*
Income Tax Expense	35	37	51	60	69	80	91	102
NOPAT	**$179**	**$238**	**$298**	**$347**	**$402**	**$466**	**$530**	**$596**
Cash Flow								
Plus: D&A	$71	$89	$102	$119	$138	$160	$182	$204
Discretionary Cash Flow	**$250**	**$327**	**$400**	**$466**	**$540**	**$625**	**$711**	**$801**
Less: ΔNWC	--	70	(91)	10	12	13	14	14
Less: CAPEX	(132)	(181)	(221)	(258)	(322)	(399)	(424)	(443)
Free Cash Flow	**$118**	**$216**	**$88**	**$219**	**$230**	**$240**	**$301**	**$372**
				149%	5%	4%	26%	23%
WACC	8.886%							
Discount Period			0.75	1.75	2.75	3.75	4.75	5.75
Disount Factor			0.938	0.862	0.791	0.727	0.667	0.613
Present Value of Free Cash Flow			**$82**	**$188**	**$182**	**$174**	**$201**	**$228**

Perpetuity Growth Method	
Cumulative Value of Present FCF	**$1,056**
Terminal Value	
Long Term Growth Rate	4.0%
Final Year FCF	$459
Terminal Value	$9,402
Present Value of Terminal Value	**$5,763**
% of Enterprise Value	85%
Enterprise Value	**$6,819**

PGR Implied Equity and Share Value	
Enterprise Value	$6,819
Less: Total Debt	(2,074)
Plus: Cash & Cash Equivalents	764
Implied Equity Value	**$5,509**
Shares Outstanding	130.7
Implied Share Price	**$42**

Exit Multiple Method	
Cumulative Value of Present FCF	**$1,056**
Terminal Value	
Terminal Year EBITDA	$903
Exit Multiple	12x
Terminal Value	$10,838
Present Value of Terminal Value	**$6,643**
% of Enterprise Value	*86%*
Enterprise Value	**$7,699**

Exit Multiple Implied Equity and Share Value	
Enterprise Value	$7,699
Less: Total Debt	(2,074)
Plus: Cash & Cash Equivalents	764
Implied Equity Value	**$6,390**
Shares Outstanding	130.7
Implied Share Price	**$49**

DCF Output (Downside)

Valvoline

Our downside case assumes failure to realize growth plans, slowing sales growth, and terminal value depression

	FYE Sept. 30		FYE Sept. 30					
	2022A	**2023A**	**2024E**	**2025E**	**2026E**	**2027E**	**2028E**	**2029E**
Revenue	$1,236	$1,444	$1,590	$1,732	$1,900	$2,071	$2,215	$2,366
Growth %		*17%*	*10%*	*9%*	*10%*	*9%*	*7%*	*7%*
Expenses								
COGS	$760	$899	$986	$1,074	$1,178	$1,284	$1,373	$1,467
Gross Profit	$476	$545	$604	$658	$722	$787	$842	$899
Gross Margin %	*39%*	*38%*	*38%*	*38%*	*38%*	*38%*	*38%*	*38%*
SG&A	252	237	270	294	323	352	376	402
Other Operating Expense (Income)	11	33	8	9	10	10	11	12
Operating Income (EBIT)	**$213**	**$275**	**$326**	**$355**	**$390**	**$425**	**$454**	**$485**
EBIT Margin %	*17.3%*	*19.0%*	*20.5%*	*20.5%*	*20.5%*	*20.5%*	*20.5%*	*20.5%*
Income Tax Expense	35	37	64	69	76	83	89	95
NOPAT	**$179**	**$238**	**$262**	**$286**	**$314**	**$342**	**$365**	**$390**
Cash Flow								
Plus: D&A	$71	$89	$95	$104	$114	$124	$133	$142
Discretionary Cash Flow	**$250**	**$327**	**$358**	**$390**	**$428**	**$466**	**$498**	**$532**
Less: ΔNWC	--	70	(95)	5	6	6	5	6
Less: CAPEX	(132)	(181)	(191)	(208)	(228)	(249)	(221)	(237)
Free Cash Flow	**$118**	**$216**	**$72**	**$187**	**$206**	**$224**	**$282**	**$301**
				161%	10%	9%	26%	7%
WACC	8.886%							
Discount Period			0.75	1.75	2.75	3.75	4.75	5.75
Disount Factor			0.938	0.862	0.791	0.727	0.667	0.613
Present Value of Free Cash Flow			**$67**	**$161**	**$163**	**$163**	**$188**	**$185**

Exit Multiple Method	
Cumulative Value of Present FCF	**$927**
Terminal Value	
Terminal Year EBITDA	$627
Exit Multiple	10x
Terminal Value	$6,269
Present Value of Terminal Value	**$3,842**
% of Enterprise Value	*81%*
Enterprise Value	**$4,769**

Exit Multiple Implied Equity and Share Value	
Enterprise Value	$4,769
Less: Total Debt	(2,074)
Plus: Cash & Cash Equivalents	764
Implied Equity Value	**$3,460**
Shares Outstanding	130.7
Implied Share Price	**$26**

Perpetuity Growth Method	
Cumulative Value of Present FCF	**$927**
Terminal Value	
Long Term Growth Rate	3.0%
Final Year FCF	$322
Terminal Value	$5,467
Present Value of Terminal Value	**$3,351**
% of Enterprise Value	*78%*
Enterprise Value	**$4,278**

PGR Implied Equity and Share Value	
Enterprise Value	$4,278
Less: Total Debt	(2,074)
Plus: Cash & Cash Equivalents	764
Implied Equity Value	**$2,968**
Shares Outstanding	130.7
Implied Share Price	**$23**

DCF Output (Upside)

Our upside case assumes successful growth and terminal value recovery from EV underperformance

	FYE Sept. 30		FYE Sept. 30					
	2022A	2023A	2024E	2025E	2026E	2027E	2028E	2029E
Revenue	$1,236	$1,444	$1,717	$2,027	$2,383	$2,804	$3,260	$3,764
Growth %		*17%*	*19%*	*18%*	*18%*	*18%*	*16%*	*15%*
Expenses								
COGS	$760	$899	$1,065	$1,257	$1,477	$1,739	$2,021	$2,333
Gross Profit	$476	$545	$653	$770	$905	$1,066	$1,239	$1,430
Gross Margin %	*39%*	*38%*	*38%*	*38%*	*38%*	*38%*	*38%*	*38%*
SG&A	252	237	292	345	405	477	554	640
Other Operating Expense (Income)	11	33	9	10	12	14	16	19
Operating Income (EBIT)	**$213**	**$275**	**$352**	**$416**	**$488**	**$575**	**$668**	**$772**
EBIT Margin %	*17.3%*	*19.0%*	*20.5%*	*20.5%*	*20.5%*	*20.5%*	*20.5%*	*20.5%*
Income Tax Expense	35	37	52	61	71	84	98	113
NOPAT	**$179**	**$238**	**$301**	**$355**	**$417**	**$491**	**$570**	**$659**
Cash Flow								
Plus: D&A	$71	$89	$103	$122	$143	$168	$196	$226
Discretionary Cash Flow	**$250**	**$327**	**$404**	**$476**	**$560**	**$659**	**$766**	**$884**
Less: ΔNWC	--	70	(91)	12	13	16	17	19
Less: CAPEX	(132)	(181)	(223)	(264)	(334)	(421)	(456)	(489)
Free Cash Flow	**$118**	**$216**	**$90**	**$224**	**$240**	**$254**	**$327**	**$414**
				150%	7%	6%	29%	27%
WACC	8.886%							
Discount Period			0.75	1.75	2.75	3.75	4.75	5.75
Disount Factor			0.938	0.862	0.791	0.727	0.667	0.613
Present Value of Free Cash Flow			**$84**	**$193**	**$190**	**$185**	**$218**	**$254**

Perpetuity Growth Method	
Cumulative Value of Present FCF	**$1,123**
Terminal Value	
Long Term Growth Rate	4.5%
Final Year FCF	$525
Terminal Value	$11,960
Present Value of Terminal Value	**$7,331**
% of Enterprise Value	*87%*
Enterprise Value	**$8,454**

PGR Implied Equity and Share Value	
Enterprise Value	$8,454
Less: Total Debt	(2,074)
Plus: Cash & Cash Equivalents	764
Implied Equity Value	**$7,145**
Shares Outstanding	130.7
Implied Share Price	**$55**

Exit Multiple Method	
Cumulative Value of Present FCF	**$1,123**
Terminal Value	
Terminal Year EBITDA	$997
Exit Multiple	14x
Terminal Value	$13,963
Present Value of Terminal Value	**$8,558**
% of Enterprise Value	*88%*
Enterprise Value	**$9,682**

Exit Multiple Implied Equity and Share Value	
Enterprise Value	$9,682
Less: Total Debt	(2,074)
Plus: Cash & Cash Equivalents	764
Implied Equity Value	**$8,372**
Shares Outstanding	130.7
Implied Share Price	**$64**

SSS Growth Behemoth

VVV has grown SSS for 17 consecutive years, demonstrating the power of scale and differentiated customer experience

Jake Lestan, Senior Director for Marketing and Consumer Engagement

- "We are targeting anybody with a heartbeat and a car" – Broad range, narrowed focus
- "Value proposition of quick, easy, trusted" – Excel in key areas consumers care about

SSS Growth Drivers

- **Customer Retention & Satisfaction – Ranked 3rd on J.D. Power for Oil Change, Strong Value Proposition**
- **Differentiated Service – Enables Pricing Power**
- **Car Park is Always Increasing – Miles Driven, Number of Vehicles, Age of Fleet**

Sources: *Company Filings, J.D. Power, FRED*

Franchises Compliment Owned Store Growth

Valvoline

Valvoline's franchises come in a variety of different forms and offer both the company and the franchisees key benefits

VVV Franchise Offerings

Third Party Financing → **Pre-opening Training** → **Marketing and PR**

Jake Lestan, VVV Senior Director

"We've got some single owners who own just **one store**, and then we've got others who **own hundreds**"

- Wide variety of different franchisees
- Unique goals and abilities

"It is similar to what you would think of as a **traditional franchise model**"

- Initial capital outlay, royalties, etc.

"Several of our franchisees operate in **adjacent businesses**"

- Restaurants, car washes, etc.
- Understand model

Jonathan Webb, Auto Industry Professional

"You don't necessarily **own the real estate**"

- Some franchisees in industry do not own the real estate, while others have varying degree of ownership

"Not an incredible amount of **upfront capital needed**"

- Initial capital outlay is not substantial
- Able to attract greater number of potential franchisees

"In return for that they (VVV) get the **lion's** share of the profits"

- Low initial capital outlay gives VVV more leverage and stake in franchises