



Company Valuation- Stericycle

We Value Stericycle's stock at \$58.34 while it is currently trading At \$58.17 and recommend a hold

Key Takeaways

The recent Business Transformation project will yield significant cost-saving benefits over the projected period.

The much-needed business transformation which was announced in 2017 and is expected to finish in 2022, will reap significant cost benefits. We estimate the impact of the business transformation at a total \$770 million over the next four years. This is lower than management expectation of \$800 but still in line.

New Management team's track record.

Evaluating the newly appointed CEO's track record in financial turnarounds for under-performing business units suggests the business transformation will be successfully implemented.

Limited revenue growth due to cutbacks on acquisitions activity.

As the company evolves from its' traditional aggressive acquisition practices to pursue revenue growth, we believe revenue will grow at the organic growth rate, which traditionally has been low.

The deteriorating of Stericycle's core services is slowing down.

A lawsuit against the company in 2015 because of its' price gouging activities has impacted the company's reputation which has led to declining revenue from its' core service. Simultaneously a changing competitive landscape has drastically affected revenue over the last 3 years. However, we find the negative growth is beginning to cool down suggesting core services revenue has reached its lowest point.

RECOMMENDATION: HOLD

MARKET PRICE: \$58.17

AS OF (30/04/2019)

TARGET PRICE: \$58.34

Hazardous Waste Industry

Robert Barrow

Robert.barrow@ucdconnect.ie

Lee Doran

Lee.doran@ucdconnect.ie

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Company Overview

Stericycle is a multinational business to business services provider with a focus on regulated waste and compliance solutions. Headquartered in Illinois with operations for their full portfolio established in the US, Canada, Ireland, the Netherlands and Spain. They provide services throughout the Americas, Europe, Australia and Japan. Stericycle serves numerous industries including manufacturing and industrial customers through management of hazardous waste. Their competitive advantage and core service is the medical waste and compliance solutions in which they have been a market leader for many years.



Figure 1 Source: Company 10k

Stericycle operates across 3 segments:

Domestic and Canada Regulated Waste and Compliance Solutions (“Domestic and Canada RCS”)

International Regulated Waste and Compliance Solutions (“International RCS”)

Domestic Communications and Related Services (“Domestic CRS”)

Domestic and Canada RCS and International RCS is then made up of the following smaller segments:

- 1) Medical Waste & Compliance Solutions (55% Revenue 2018) – Collection, transportation, processing and disposal of medical and hazardous waste.
- 2) Secure Information Destruction Services (26% Revenue 2018) – Destruction and recycling of secure information. Operating under Shred-it brand.
- 3) Manufacturing & Industrial Services (10% Revenue 2018) – Hazardous waste management for manufacturing and industrial customers, reported as a separate segment due to historically volatile nature of revenues from these customers.

While Domestic CRS is made up of the following:

Communication and Related Services (9% Revenue 2018) – Live voice and automated communications services, regulated recall and returns management communications.

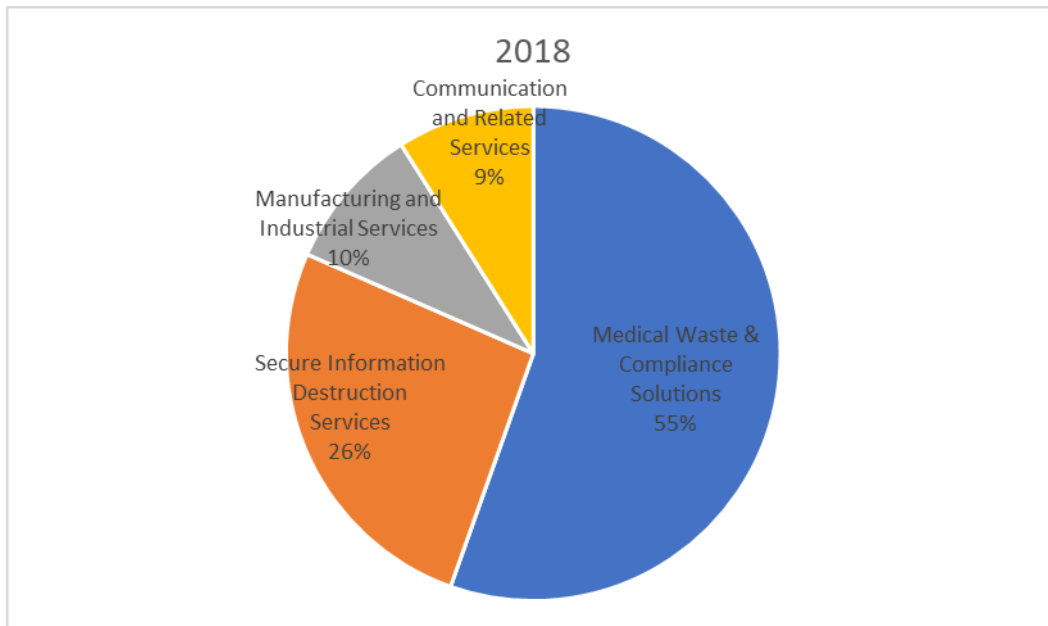


Figure 2 Source: Company 10k

Business Transformation

Stericycle started a multiyear business transformation initiative in the third quarter of 2017 due to poor recent performance. The business transformation is expected to continue until 2022.

The company became too bloated, due to completing over 500 acquisitions in their 30-year history, with 31 acquisitions in 2016. This led Stericycle to take on a lot of underperforming businesses and firms that did not make sense strategically.

The key initiatives of the business transformation are:

- Portfolio rationalisation – comprehensive review of the company’s global service lines to identify and pursue the divestiture of non-strategic assets.
- Operational optimization – standardizing route planning logistics, modernizing field operations and driving network efficiency across facilities.
- Organizational Excellence and Efficiency – Redesigning the Company’s organizational structure to optimize resources and align around a global shared business services model.
- Commercial Excellence – Aligning sales and service organizations around the customer, standardizing customer relationship management process, and expanding customer self-service options.
- Strategic Sourcing – Reducing spend through global procure-to-pay processes and leveraging organizational scale.

Board Changes

Along with the business transformation plan, Stericycle recently replaced their CEO and a significant fraction of its board of directors in 2018.

Stericycle hired Cindy Miller as a COO in October 2018 and quickly promoted her to CEO and President of the company in February. This corresponded with a stepdown of Stericycle’s CFO and many other board changes. We

believe Stericycle appointed Cindy Miller as CEO due to her track record in financial turnarounds of underperforming business units. Previously Miller was President of UPS Europe and President of Global Freight Forwarding. UPS does not publish figures for freight forwarding but in the first quarter of 2016 Supply Chain Solutions revenue grew by 10% to 2.4 billion which had been suffering from disappointing results prior and is attributed to the impact Cindy Miller had on the segment (aircargo news, 2017). This turnaround shows the impact that the new CEO can have with the ongoing business transformation of Stericycle.

Impact of Business Transformation

Based on the plans outlined for the business transformation we estimate this will impact the business through COGS and SG&A and we predict that a successful business transformation will converge these costs back to their low levels when they purchased Shred-It in 2015. We limited it to this period because the Shred-it business brought with it, a large amount of fixed cost which fundamentally change the cost structure of the company. Below is a table of the predicted forecasted ratios.

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
COGS	1461.2	1731.1	2075.4	2117.6	2109.9	2084.3	2135.9	2209.1	2217.4	2250.7
% of Total Revenue	0.56	0.58	0.58	0.59	0.60	0.59	0.59	0.58	0.58	0.58

Figure 3 Source: Company 10k, Team Estimates

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
SG&A	538.08	767.2	1053.1	1404.7	1178.4	1059.8	1086.0	1132.9	1146.9	1164.1
% of Total Revenue	0.21	0.26	0.30	0.39	0.34	0.30	0.30	0.30	0.30	0.30

Figure 4 Source: Company 10k, Team Estimates

Management has stated the expected financial impact of this business transformation will be a cumulative benefit of \$800 million over the next four years. To compare how our prediction falls in line with managements expectations we calculated the benefit of our predictions over the next 4 years. To find this value we calculated what COGS and SG&A would be over the next five years based on the most recent COGS and SG&A ratios i.e. .60 for revenue and .34 for SG&A. The table below shows the annual savings over the next 4 years. Our projected benefits from the business transformation are slightly lower than management but quite in line. Therefore, we believe the business transformation is attainable and a reasonable expectation.

Ratios with no change	2019	2020	2021	2022
COGS	2138.26	2191.16	2285.66	2314.01
SG&A	1194.24	1223.79	1276.56	1292.40
Total COGS and SG&A	3332.50	3414.95	3562.22	3606.40
Ratios with change				
COGS	2119.66	2135.89	2228.01	2236.52
SG&A	1059.83	1086.05	1132.89	1146.93
Total COGS and SG&A	3179.49	3221.94	3360.89	3383.46
Annual Savings	153.02	193.01	201.33	222.94
Total 4 years saving	770.30			

Figure 5 Source: Team Estimates

Limited Growth Opportunities for Revenue

We believe the business transformation will have a positive impact on Stericycle's bottom-line, however we are pessimistic about Stericycle potential future top-line growth rate. We are pessimistic about Stericycle's future revenue growth due to its' historic organic growth and deteriorating core service.

Organic Revenue Growth

Historically Stericycle has pursued growth through Acquisitions. Acquisitions were a key strategy to rapidly building their company base and route density in United States (2017 10K). Stericycle has completed over 500 acquisitions.

In 2016 Stericycle acquired Shred-it, a global shredding company. Not only did this acquisition not fit into their traditional business model, Stericycle over-levered to facilitate this purchase which limited their future acquisitions possibilities. We believe Stericycle's limited growth opportunities through acquisitions is what led Stericycle to announce a business transformation in 2017 Q4. The affects of the business transformation can already be seen on the revenues deriving from acquisitions in 2017 and 2018.

Year	2010	2011	2012	2013	2014	2015	2016	2017	2018
Revenue from Acquisitions	355.8	158.2	140.2	137.6	301.6	352.5	563.9	27.3	29.7

Figure 6 Source: Company 10k

Due to Stericycle's business transformation and revaluation of its' growth through acquisitions practices we believe the only opportunity for growth in the near future is through organic growth. We estimate the organic growth by adjusting for the impact acquisitions had on revenues. We find an average growth of 1.5% without acquisitions for its' Domestic & Canada RCS segment. The company structure was quite different prior to 2014 with different revenue segments, therefore were limited to the revenue ranging back to 2014 in our estimations.

Year	2014	2015	2016	2017	2018
Domestic & Canada RCS	1670	1999.196	2508.8	2551.9	2574.1
Revenue from acquisitions		265.8	476.1	20.9	27
Revenue without acquisitions		1733.396	2032.7	2531	2547.1
Growth Rate		3.8%	1.7%	0.9%	-0.2%
Organic Growth					1.5%

Figure 7 Source: Company 10k

To estimate the organic growth for Stericycle's International RCS we adjust revenue for several line items.

- 1) Subtract the revenue from acquisitions.
- 2) Add back the revenue from divesture.
- 3) Add back the impact of foreign exchange. We did this to estimate the organic growth in this industry as loss on foreign exchange was outside the control of the company and distorted the growth in this segment.

Following this approach, we found that average organic growth to be 3%. In comparison with Domestic & Canada RCS, International RCS has higher opportunities for growth and has already bounced back from its slump in 2017. We used the growth rate to forecast the International RCS for the projected period

Year	2014	2015	2016	2017	2018
International RCS	663.9	716.771	751.7	706.6	655.1
Revenue from acquisitions		86.7	87.8	6.4	2.7
Revenue loss from divesture				21.6	41.7
Impact of Foreign Exchange		93.7	85.7	15.5	26.8
Organic Revenue		723.771	749.6	737.3	720.9
Organic Growth		9%	5%	-2%	2%
Average Growth					3%

Figure 8 Source: Company 10k, Team Estimates

Deteriorating Core Services

Stericycle's business transformation has occurred simultaneously with their core service deteriorating. Stericycle's core service is its' regulatory waste and compliance services which in 2018 contribute 55% of total revenue. Two factors have led to the deteriorating of this core service.

1) Pricing Lawsuit:

In 2015 Stericycle was hit with a lawsuit due to its pricing practices. It was found that Stericycle were automatically inflating customers' bills up to 18% biannually over the contracted amount. The businesses affected by these were identified as "small quantity" customers, which make up 97% of customers worldwide. This affected Stericycle's revenue stream as they lost customers or offered their services at a discount to retain customers.

2) Changing competitive landscape:

Stericycle has seen a drastic shift in their core market. Stericycle has stated the increasing trend of hospitals buying and consolidating smaller doctor practices has negatively impacted their revenue. (Terry, (2019)) shows that the number of hospital-owned physician practices increased from 35,700 in 2012 to more than 80,000 in 2018.

This shift in market conditions increased the buying power of Stericycle's typical customer target as they are now putting their medical waste contracts out for bid. Typically, we have seen higher barriers to entry in the hazardous waste industry and this is still the case for Stericycle's large quantity customers who need a portion of their waste to be incinerated. However, in the SQ business the barriers to entry are extremely small as all that is needed a permit for trucks to transfer medical waste to a third party which can then treat that waste. Stericycle is facing increasing competition from small regional competitors who are drastically undercutting prices. Stericycle has been forced to decrease prices and offer discounts to retain customers.

The table below shows the deterioration of their regulated waste and compliance services waste.

Year	2015	2016	2017	2018
Revenue	2064.9	2063	2023.6	1932.6
Growth		-0.09%	-1.91%	-4.50%

Figure 9 Source: Company 10k,

Stericycle has stated that the growth rates of their domestic revenue has begun to soften. To investigate this, we evaluated past two years of quarterly data. We find the negative growth rate is decreasing. This indicates that Stericycle may actually be approaching the floor in terms of pricing and its impact on revenues. Due to this we forecast that domestic revenue will be flat in the near future and begin to approach the organic growth rate in the long-term

Year	2017 Q1	2017 Q2	2017 Q3	2017 Q4	2018 Q1	2018 Q2	2018 Q3	2018 Q4
US	633.7	649.1	633.7	635.4	638.5	644.5	638.5	652.6
Revenue from Acquisitions	7	5.6	4.2	4.1	5	7	7.7	7.3
Revenue without Acquisitions	626.7	643.5	629.5	631.3	633.5	637.5	630.8	645.3
Growth	-7.1%	1.5%	-3.0%	-0.4%	-0.3%	-0.2%	-2.1%	1.1%
Average Growth				-2.2%				-0.4%

Figure 10 Source: Company 10Q

Domestic CRS

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Domestic CRS	269.9	269.9	301.8	321.2	256.7	283.9	286.7	290.1	287.7	281.0

Figure 11 Source Company 10K

Due to the volatile nature and uncertainty of the Domestic CRS revenue we took the average over the last four to forecast the projected period.

Total Revenue Forecast

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total Revenue	2603.8	2986.2	3562.6	3579.7	3485.8	3532.8	3620.2	3776.4	3823.2	3880.6
Growth		15%	19%	0%	-3%	1%	2%	4%	1%	2%
Domestic & Canada CRS	1670.0	1999.2	2508.8	2551.9	2574.1	2574.1	2638.4	2770.4	2798.1	2840.0
Growth		20%	25%	2%	1%	0%	.025%	.05%	1%	15%
International CRS	663.90	716.77	751.70	706.60	655.10	674.75	695.00	715.85	737.32	759.44
Growth		8%	5%	-6%	-7%	3%	3%	3%	3%	3%
Domestic CRS	269.90	269.94	301.80	321.20	256.70	283.91	286.71	290.06	287.72	281.02
Growth %		0%	12%	6%	-20%	11%	1%	1%	-1%	-2%

Figure 12 Source: Company 10k, Team Estimates

Ratio Analysis

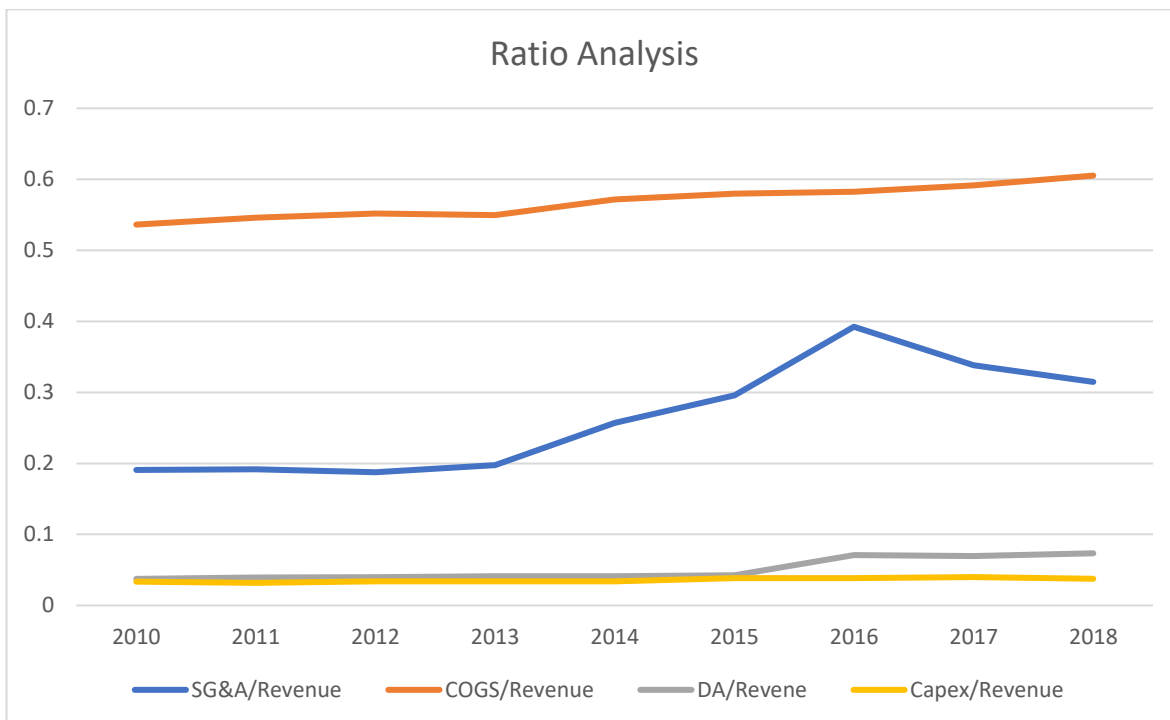


Figure 13 Source: Company 10k,

Costs of Goods Sold

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
COGS	1461.2	1731.1	2075.4	2117.6	2109.9	2119.7	2135.9	2228	2236.5	2250.7
% of Total Revenue	0.56	0.58	0.58	0.59	0.61	0.60	0.59	0.59	0.58	0.58

Figure 14 Source: Company 10k, Team Estimates

COGS is forecasted to revert back to the historical average ratio of .58 due to the impact of the business transformation.

SG&A

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
SG&A	538.1	767.2	1053.1	1404.7	1178.4	1059.8	1086.1	1132.9	1146.9	1164.1
% of Total Revenue	0.21	0.26	0.30	0.39	0.34	0.30	0.30	0.30	0.30	0.30

Figure 15 Source: Company 10k, Team Estimates

SG&A is forecasted to revert back to the historical average ratio of .3 due to the impact of the business transformation.

Depreciation and Amortization

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
D&A	104.62	127.40	252.50	249.50	255.90	251.99	258.77	272.17	273.84	278.34
% of Total Revenue	0.04	0.04	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07

Figure 16 Source: Company 10k, Team Estimates

Depreciation and Amortization to revenue has been consistent since the acquisition of Shred-it in 2015, which increased D&A levels, therefore we used this forecasting forward.

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Capex	86.50	114.80	136.20	143.00	130.80	132.83	138.83	144.75	146.62	147.58
% of Total Revenue	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04

Figure 17 Source: Company 10k, Team Estimates

Capex to revenue has been consistent since 2015 and we forecasting this to remain the same for our projected period.

Bringing it all together

Tax Rate

We assumed a tax rate of 26.5%, consistent with guidance from Q4 2018 earnings call.

Beta Analysis

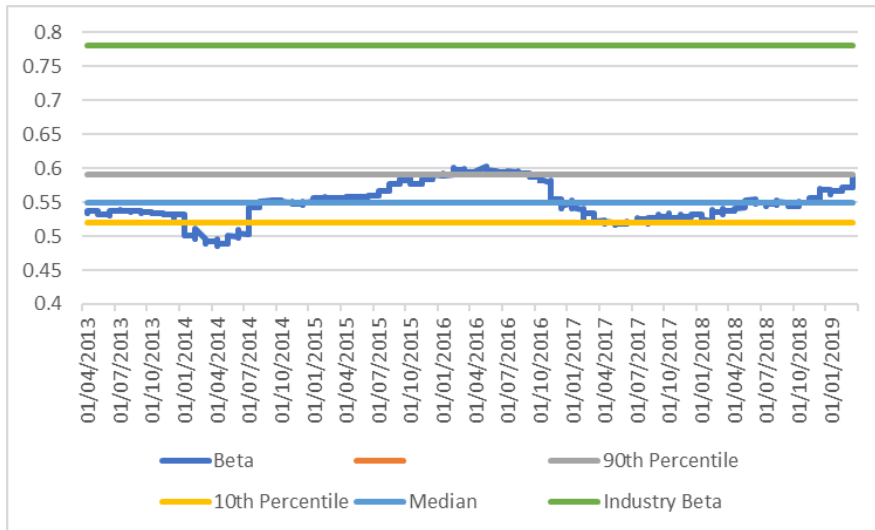


Figure 18 Source Yahoo Finance

We analysed Stericycle’s beta using Russel 2000 as a proxy for the market return. We found that Stericycle have consistently had a beta of around 0.55 (median 0.5487) historically. We used the most recent value of 0.58 in our valuation.

Market Premium

Market Premium was taken from the NYU Stern data base of market risk premiums. The risk premium for the United States was 5.75%

Risk Free Rate

We used the 1-month treasury bill as our risk-free rate. Currently this is a rate of 2.43%.

Cost of Debt

We used the most recent yield of 3.8% on Stericylce bonds from Bloomberg

WACC

Since the company has a consistent Debt to Equity ratio we used WACC.

Cost of Equity		Cost of Debt	
Beta	.58	Tax-rate	.27
Market Risk Premium	.0575	Debt/Value	.344
Risk-Free rate	.0243	Cost of Debt	.038
Cost of equity	.05764		
Equity Value	.655		
WACC			.0474

Figure 19

Recommendation: Hold

Forecasted DCF

	Historical Period						Projected Period			
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total Revenue	2555.6	2985.91	3562.3	3579.7	3485.9	3532.76	3620.16	3776.28	3823.12	3880.51
Growth%		17%	19%	0%	-3%	1%	2%	4%	1%	2%
Domestic & Canada RCS	1670	1999.2	2508.8	2551.9	2574.1	2574.1	2638.45	2770.38	2798.08	2840.05
International RCS	663.9	716.771	751.7	706.6	655.1	674.753	694.996	715.845	737.321	759.44
Other	269.9	269.941	301.8	321.2	256.7	283.908	286.71	290.064	287.716	281.02
Total COGS	1461.19	1731.1	2075.4	2117.61	2109.9	2119.66	2135.89	2228.01	2236.52	2250.7
% of Revenue	0.57176	0.57976	0.5826	0.59156	0.60527	0.6	0.59	0.59	0.585	0.58
Total SG&A	538.075	767.202	1053.1	1404.71	1178.4	1059.83	1086.05	1132.89	1146.93	1164.15
% of Revenue	0.21055	0.25694	0.29562	0.39241	0.33805	0.3	0.3	0.3	0.3	0.3
GoodWill Impairment	0	0	0	65	358.7	20	0	0	0	0
Operating Income	556.336	488.19	425.9	-14.216	-169.4	373.276	398.217	415.391	439.658	465.661
Interest Expense	68.768	77.274	97.8	94	106	105.983	108.605	113.289	114.693	116.415
% of Revenue	0.02691	0.02588	0.02745	0.02626	0.03041	0.03	0.03	0.03	0.03	0.03
Tax Expense	159.422	142.894	120.2	-150.9	-29.8	70.8327	76.7473	80.0572	86.1157	92.5502
Net Income	328.146	268.022	207.9	42.684	-245.6	196.461	212.865	222.046	238.849	256.696
Plus: Depreciation	104.616	127.4	252.5	249.5	255.9	251.992	258.767	272.169	273.84	278.336
Less: Capex	86.496	114.8	136.2	143	130.8	132.83	138.833	144.747	146.617	147.578
Less: Change in NWC	-33.094	83.492	56.221	-386.7	170.1	70.6552	72.4032	75.5257	76.4623	77.6102
Unlevered Free Cash Flow	379.36	197.13	267.979	535.884	-290.6	244.967	260.396	273.941	289.611	309.844
PV of Free Cash Flow						233.881	237.359	238.405	240.635	245.795

PV of FCF from 19 to 23	1196.08
Terminal Growth Rate	0.01
PV of Terminal Value	6883.02
Enterprise Value	8079.1
Less: Net Debt	2748.7
Plus: Cash & Cash Equivalents	34.3
Equity Value	5296.1
Shares Outstanding	90.772
Share Price	58.3451
Current Share Price	58.17
Downside	0%

Based on our assumptions we calculate the share price as 58.3451. This is perfectly reflected by the market's share price.

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