Dell: Leveraged Buyout, Fair Value & Delaware Court Ruling

The following document is a case study of the Dell Inc. LBO, purposed for learning about an LBO model, the events leading up to the transaction that are considered in the model, and the law suit launched by former Dell Inc. shareholders, post transaction. An accompanying dynamic LBO model is provided and referenced throughout the text. It should be noted that for simplicity, many events have been omitted, especially those relating to the legal analysis used to arrive at the court's ruling. For a complete outline of events and analysis used in the court ruling, please reference: Memorandum Opinion, In the Court of Chancery of the State of Delaware RE: Appraisal of Dell Inc., May 31, 2016.

Executive Summary of Events

On February 5th, 2013, private equity firm Silver Lake and billionaire CEO Michael Dell announced their collective purchase of Dell Inc. through a leveraged buyout (LBO) at $13.75 per share. The transaction rationale stemmed from Michael Dell's optimistic view of the company's shift from hardware to enterprise solutions and services, and ultimately his opinion that the market just "didn't get" the company. At the time of the transaction, Dell traded at an unaffected share price $10.88[1].

Although the transaction closed successfully in October that year, the deal was taken to the Delaware court in March 2016 by unsatisfied shareholders to evaluate whether the $13.75 acquisition was in fact *fair value*. The court ruled that fair value was $17.62 per share, nearly $4 more than the purchase price, and ordered Silver Lake and Michael Dell to pay the difference to all shareholders involved in the lawsuit.

Background Info to Transaction

In January 2013 with a potential acquisition of Dell in talks, the Dell special committee hired Evercore to conduct a go-shop period, where other potential buyers were solicited to obtain the highest bid. Following the go-shop period, Silver Lake and Mr. Dell remained the highest bidder with total proceeds of $13.75 per share plus a 13-cent special dividend. Following several months of conflict, shareholders voted in favour of the deal and the transaction closed on October 28, 2013.

Soon after, some of the former Dell shareholders sued Mr. Dell and Silver Lake on the grounds that $13.65 was below fair value of the company. On May 31, 2016, the Delaware courts ruled that the fair value of Dell at the time of sale was $17.62 per share – nearly one third higher. The court ruling was based on what they deemed to be the fair value of the company.

While the transaction closed at $13.75, a fair value based on the LBO model, the value derived from the use of a DCF and comparable companies, was materially higher. The court effectively ruled that a DCF model is more reflective of fair value than an LBO and as such, utilized two DCF models: one from the Mr. Dell's defense ($16.43) and one from the shareholder's prosecution

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($18.81). The judge ruled fair value was an average of the two models, at $17.62 per share. Mr. Dell and Silverlake were ordered to pay the difference of $3.87 per share, plus the legal rate of interest compounded quarterly accrued on this amount, from the date of closing until the date of payment.

LBO Overview

An LBO is the acquisition of a company using a significant amount of debt. A financial sponsor (e.g. private equity fund) invests a small amount of equity, and uses leverage to fund the remaining consideration. The use of leverage allows financial buyers to generate a sizeable internal rate of return (IRR) on their equity, usually 15%+ annually, over their investment horizon (typically 3 to 7 years). In effect, buyers use LBO analysis to solve for the range of prices which achieves their required IRR or *hurdle rate*, based on attainable levels of leverage.

Delaware Court Ruling

While the Company argued that the highest bid following a competitive process is the best evidence of fair value, the Delaware court disagreed, indicating an LBO is not an appropriate measure of value for the following reasons:

1. **An LBO uses a required rate of return to back calculate equity value** – this diverges from fair value given the financial sponsor's need to achieve benchmark IRRs to satisfy its own investors[2]. It isn't reflective of actual value the company generates from its cash flows.
2. **The amount of debt available restricts valuation** – LBOs are limited by the amount of leverage the company can support and the sponsor can use to finance the deal[3]. This is based on the company's free cash flow profile, and overall market willingness to provide the debt. A financial advisor involved in the sale process also indicated an LBO "would not have been possible for the company" at $19 per share or greater as it "would require leverage levels that you could not get in the marketplace"[4].
3. **The Dell sale process did not induce greater competition, due to the following reasons:**
    - All bidders were financial sponsors given lack of strategic buyer interest. Thus, each bidder faced the same leverage constraints as Silver Lake and Michael Dell.
    - The Winner's Curse – given this was also a Management Buyout (MBO), a financial sponsor would need to outbid Michael Dell, who as founder and CEO would have the greatest insight into the Company's value, raising concerns over information asymmetry. Therefore, should someone place a bid which isn't outmatched by Michael Dell, you've suddenly learned you think the Company is worth more than what management does.
    - Hostile bids – formal bids would be competing directly with Michael Dell and thus, likely interpreted as a hostile bid. Given private equity firms hope to work alongside management in a friendly relationship, they actively avoid anything

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which may be perceived as hostile. This suggests a superior bid is misaligned with their investment strategy.

Steps in an LBO

1. Project EBITDA and cash flow available for debt repayment over the investment horizon, based on various operating scenarios (see Dell Operating Scenarios)
2. Determine appropriate levels of leverage and debt structures which provide appropriate credit statistics based
3. Estimate the exit price as a multiple of EBITDA, typically around the same as the entry multiple
4. Calculate the IRR and sensitize steps one through three
5. Solve for the entry price using your required rate of return, based on the above parameters

As seen in Exhibit 1, the control panel in the model allows the user to toggle between various operating scenarios, financing scenario and exit multiple, all of which lead into the IRR calculation. In Exhibit 2, you can see how the various operating and financing scenarios actually impact the IRR. Lastly, Exhibit 3 demonstrates how the key credit statistics change throughout the projection period, based on our assumptions. It's also worth noting for Step 5 that given we already know the deal price, we aren't solving for the equity price but rather assessing the potential range of IRR's Mr. Dell and Silver Lake may generate based on varying operating scenarios.

Dell Operating Scenarios

The LBO model as described below, utilizes five operating scenarios to determine a range of value. These are derived from three Boston Consulting Group (BCG) projections, an adjusted BCG case, and a Bank case.

To assist with the sale process, BCG was hired to help forecast revenue, gross profit and EBITA to serve as an independent basis for valuation in the model (Exhibit 4). BCG returned with three operating cases: BCG Base, BCG 25% and BCG 75%.

BCG Base was more pessimistic than previous management reports, but in line with analyst reports. BCG's cases assumed Dell would realize 25% and 75% of the total $3.3B in cost savings management outlined as their goal.

After completing their analysis, BCG believed the 25% Case was the most reasonable set of projections. An additional "Bank Case" was built by Mr. Dell and Silver Lake for approaching banks regarding debt financing for the deal. To be conservative, the model highlights a fifth case that considered 95% of the BCG 25% Case (BCG 25% Adjusted).

Debt Funding

Exhibit 5 highlights the various types of debt used in the Dell transaction. The seniority of debt is as follows: revolving credit facility ("revolver"), bank debt (consisting of term loans), high-yield

debt (subordinated notes), and mezzanine debt. As such, debt with more seniority is cheaper given it's greater restrictions, often secured to assets, and requires amortization, making the debt much less risky for lenders.

The asset based loan (ABL) is a revolver with the bank. It has the cheapest rate of debt at LIBOR +275bps, at a maximum of $2B based on a 5 year term. This facility allows Dell to drawn-down the revolver when they need cash, and repay it when they have excess cash available.

Term Loan B, C and Euro Term Loans contributed about 23% of funding. While term loans are cheaper than other types of subordinated debt, they have more onerous maintenance covenants. These covenants are tested quarterly and require the Company to maintain specific performance metrics. In this deal, Term Loan C was cheaper than B, but required greater amortization of 2.5% of original principal quarterly. Additionally, the euro term loans are denominated in euros to fund appropriate expenses.

The transaction also established debt facilities with specifics purposes, including commercial receivables, consumer receivables and Canadian commercial receivables. These facilities were established to provide debt for specific working capital purposes. Given they are lower risk in nature, establishing separate facilities for these purposes provides Dell with a cheaper cost of debt.

The first lien notes of $1.5B are based on a fixed rate of 5.625%, meaning they aren't subject to movements in LIBOR, and have a bullet repayment due in 2020. They rank equal in right of payment with all existing and future senior indebtedness and senior in right of payment to all existing and future subordinated indebtedness.

The Microsoft subordinated note of $2B charges a fixed rate of 7.25% interest, and has a bullet repayment due in 2023. Dell also has the option to pay 3.5% per annum in kind (PIK). Staggering the maturity dates of this note and first lien notes, and having a PIK option provides a buffer for Dell to generate cash flow in intermediate years.

Rollover Equity

Any pre-existing equity held by management which is held, or "rolled over", to the proforma capitalization is called rollover equity. This is important to note in the case of the Dell LBO, given Michael Dell's rollover equity position contributed 11.8% of total funding sources (Exhibit 6). He also contributed additionally equity, 2.3% of sources, to fund the transaction. Private equity funds often incorporate rollover equity into the transactions to ensure their incentives are aligned with management, in addition to benefitting from management expertise.

Debt Repayment

In an LBO, a large portion of the financial sponsor's return is generated through leverage to fund the purchase, and paying off debt over the investment horizon. The model utilizes what's known as a "cash sweep", whereby all excess cash is used to repay debt. As seen in Exhibit 7, excess cash (cash available for optional debt repayment) is calculated by taking cash flow from operations,

less cash flow from investing (capital expenditures and acquisitions of intangible assets), less mandatory debt repayments while maintain an appropriate minimum cash balance to sustain operations.

In the case of Dell, capital expenditures and acquisitions of intangible assets are core the business. They allow the Company to maintain their assets, and continuously develop their product offerings. As such, we'd expect them to continue with these expenditures throughout the investment horizon and have forecasted them as seen in Exhibit 8. Additionally, a minimum cash balance is assumed in order for the company to sustain operations the following years. As seen in Exhibit 9, this cash is used for working capital, restricted cash and tax purposes. Generally speaking, an assumed minimum cash balance is derived from their historical operations and cash balances.

Return Analysis

As Exhibit 11 demonstrates, all excess cash flows to equity holders are accounted for in the IRR calculation. Another key metric when analyzing LBO transactions is the multiple on invested capital (MOIC), which is also reflected in this section.

Exhibit 1 – Control Panel

Assumptions	
LTM Date	2-Aug-13
Close Date	29-Oct-13
Exit Multiple	5.0x
Hold Period	7 years
Stub	50%
Marginal Tax Rate	21.0%
BCG 25% Adjustment	95.0%

Scenarios		
	Select	
Operating Scenario	5	Bank
Financing Scenario	1	1
Data Table	1	On
Average Interest	1	On

Exhibit 2 – IRR Sensitivity

Silver Lake's IRR at $13.75					
		Financing Scenario			
		1	2	3	4
Operating Scenario	1	9.82%	10.05%	11.54%	6.61%
	2	18.72%	22.25%	22.73%	14.38%
	3	31.32%	35.00%	35.70%	24.19%
	4	15.98%	19.58%	20.65%	12.41%
	5	23.12%	26.00%	26.76%	18.39%

Exhibit 3 – Credit Statistics throughout Investment Horizon

	Projection Period						
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
SUMMARY CREDIT STATISTICS							
% Debt to Total Capitalization	72.4%	67.2%	61.8%	56.0%	48.0%	40%	23%
EBITDA / Cash Interest Expense	3.9x	4.6x	5.2x	5.8x	6.7x	7.6x	10.3x
(EBITDA - Capex) / Cash Interest Expense	3.3x	3.9x	4.4x	5.0x	5.8x	6.5x	9.0x
EBITDA / Total Interest Expense	3.8x	4.5x	5.0x	5.6x	6.5x	7.3x	10.0x
(EBITDA - Capex) / Total Interest Expense	3.2x	3.8x	4.3x	4.8x	5.6x	6.4x	8.7x
Senior Debt / EBITDA	4.1x	3.5x	3.1x	2.7x	2.2x	1.8x	0.7x
Total Debt / EBITDA	4.6x	4.0x	3.5x	3.1x	2.6x	2.2x	1.1x
Net Debt / EBITDA	3.3x	2.8x	2.4x	2.1x	1.6x	1.2x	0.2x

Exhibit 4 – Operational Scenarios from BCG Projections

BCG Base Case					
(in billions)	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Revenue	$ 56.85	$ 56.49	$ 55.51	$ 55.05	$ 54.34
Gross Profit	$ 12.77	$ 12.89	$ 12.64	$ 12.53	$ 12.30
EBITA	$ 3.85	$ 3.36	$ 3.28	$ 3.17	$ 2.98

BCG 25% Case				
(in billions)	FY 2014	FY 2015	FY 2016	FY 2017
Revenue	$ 56.45	$ 55.51	$ 55.05	$ 54.34
Gross Profit	$ 12.92	$ 12.78	$ 12.81	$ 12.58
EBITA	$ 3.44	$ 3.70	$ 4.01	$ 3.82

BCG 75% Case				
(in billions)	FY 2014	FY 2015	FY 2016	FY 2017
Revenue	$ 56.45	$ 55.51	$ 55.05	$ 54.34
Gross Profit	$ 12.98	$ 13.06	$ 13.36	$ 13.13
EBITA	$ 3.61	$ 4.54	$ 5.69	$ 5.50

Bank Case					
(in billions)	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Revenue	$ 57.20	$ 58.71	$ 60.24	$ 62.03	$ 63.15
Gross Profit	$ 11.64	$ 12.42	$ 12.98	$ 13.56	$ 13.93
EBITA	$ 2.76	$ 3.15	$ 3.53	$ 3.90	$ 4.14

Exhibit 5 – Debt Funding

Sources				
Source	Pricing	Multiple of EBITDA	Amount	% of Total
New Debt				
Term Loan B	L + 350	1.5x	4,660	14.6%
Term Loan C	L + 300	0.5x	1,500	4.7%
Euro Term Loans	L + 300	0.4x	1,239	3.9%
ABL Facility	L + 275	0.2x	750	2.3%
First Lien Notes	5.625%	0.5x	1,500	4.7%
Term/Commercial Receivables Facility	L + 225	0.5x	1,600	5.0%
Revolving/Consumer Receivables Facility	L + 225	0.2x	757	2.4%
Canadian Revolving/Commercial Receivables Facility	L + 258	0.1x	165	0.5%
Microsoft Subordinated Note	7.250%	0.7x	2,000	6.3%
Existing Debt				
Commercial Paper	L + 225	0.0x	0	0.0%
Long-term Debt	5.000%	1.9x	5,900	18.4%
Equity				
New Michael Dell Equity		0.2x	750	2.3%
Michael Dell Rollover Equity		1.2x	3,769	11.8%
New Silver Lake Equity		0.6x	1,875	5.9%
Cash				
Cash from Balance Sheet		1.8x	5,520	17.3%
Total		**10.5x**	**31,985**	**100.0%**

Exhibit 6 – Sources of Funding

Sources			
Source	Multiple of EBITDA	Amount	% of Total
New Debt			
Term Loan B	1.5x	4,660	14.6%
Term Loan C	0.5x	1,500	4.7%
Euro Term Loans	0.4x	1,239	3.9%
ABL Facility	0.2x	750	2.3%
First Lien Notes	0.5x	1,500	4.7%
Term/Commercial Receivables Facility	0.5x	1,600	5.0%
Revolving/Consumer Receivables Facility	0.2x	757	2.4%
Canadian Revolving/Commercial Receivables	0.1x	165	0.5%
Microsoft Subordinated Note	0.7x	2,000	6.3%
Existing Debt			
Commercial Paper	0.0x	0	0.0%
Long-term Debt	1.9x	5,900	18.4%
Equity			
New Michael Dell Equity	0.2x	750	2.3%
Michael Dell Rollover Equity	1.2x	3,769	11.8%
New Silver Lake Equity	0.6x	1,875	5.9%
Cash			
Cash from Balance Sheet	1.8x	5,520	17.3%
Total	**10.5x**	**31,985**	**100.0%**

Exhibit 7 – Breakdown of Cash Available for Optional Debt Repayment

	Year 1 2014E	Year 2 2015E	Year 3 2016E	Year 4 2017E	Year 5 2018E	Year 6 2019E	Year 7 2020E
Forward LIBOR Curve	0.58%	0.75%	1.32%	2.04%	2.68%	3.21%	3.63%
Cash Flow from Operations	1,449	2,887	3,277	3,647	3,764	3,771	4,086
Cash Flow from Investing	-858	-1,761	-1,807	-1,861	-1,895	-1,929	-1,964
Cash Available for Debt Repayment	591	1,125	1,469	1,786	1,870	1,843	2,123
Total Mandatory Payments	-501	-501	-501	-501	-1,251	-351	-7,081
Planned Dividends	-372	0	0	0	0	0	0
Cash from Balance Sheet	815	0	0	0	0	0	0
Cash Available for Optional Debt Repayment	532	624	968	1,285	619	1,491	-4,959

Exhibit 8 – Cash flow from Investing

	Projection Period						
	Year 1 2014E	Year 2 2015E	Year 3 2016E	Year 4 2017E	Year 5 2018E	Year 6 2019E	Year 7 2020E
Cash Flow from Investing:							
Net Purchase/(Sale) of Investments	0	0	0	0	0	0	0
Capital Expenditures	-286	-587	-602	-620	-632	-643	-655
Proceeds from Sale of Facilities, Land, and Other Asset	0	0	0	0	0	0	0
Purchase of Financing Receivables	0	0	0	0	0	0	0
Collections on Purchased Financing Receivables	0	0	0	0	0	0	0
Acquisitions, Net of Cash Received	-572	-1,174	-1,205	-1,241	-1,263	-1,286	-1,309
Cash Flow from Investing	-858	-1,761	-1,807	-1,861	-1,895	-1,929	-1,964

Exhibit 9 - Capital Expenditures and Acquisitions of Intangible Assets

Capital Expenditures									
	Historical Average %	Stub 50%	Year 1 2014E	Year 2 2015E	Year 3 2016E	Year 4 2017E	Year 5 2018E	Year 6 2019E	Year 7 2020E
Capital Expenditures		286	572	587	602	620	632	643	655
% of Sales	*0.9%*		*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*

Acquisition of Intangible Assets									
	Historical Average %	Stub 50%	Year 1 2014E	Year 2 2015E	Year 3 2016E	Year 4 2017E	Year 5 2018E	Year 6 2019E	Year 7 2020E
Acquisition of Intangible Assets		572	1,144	1,174	1,205	1,241	1,263	1,286	1,309
% of Sales	*1.9%*		*2.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*

Exhibit 10 – Minimum Cash Balance

Excess Cash	
Total Cash and Equivalents	11,828
Cash as Working Capital	3,000
Restricted Cash	1,200
Liability from Unrecognized Tax Benefits	650
Minimum Cash	4,850

Exhibit 11 – Returns Analysis

Ownership Percentage	
SLP	32.2%
Michael Dell	67.8%

Equity Value	
2020E EBITDA	4,981
Exit Multiple	5.0x
Implied Enterprise Value	24,903
Less: 2020E Net Debt	1,697
Implied Equity Value	23,206

Returns	
IRR	23.1%
MOIC	3.5x

Equity Flows	Year 1 2014E	Year 2 2015E	Year 3 2016E	Year 4 2017E	Year 5 2018E	Year 6 2019E	Year 7 2020E
SLP Equity	-2,145						
Michael Dell Equity	-4,519						
Equity Value on Sale	0	0	0	0	0	0	23,206
Net Equity Flows	-6,664	0	0	0	0	0	23,206