



Capital
Markets

December 13, 2019

BlackBerry Limited

Discounted valuation suggests near-term challenges are priced in

Our view: BlackBerry's shares are likely to be volatile when the company reports Q3 results; however, given BlackBerry's discounted valuation, which implies no value for BlackBerry's ESS segment, we believe "less bad" results may be a short-term catalyst for the stock. Longer-term, BlackBerry faces challenges in its ESS segment, which need to be addressed to sustain a valuation re-rating upwards. Maintain Sector Perform.

Key points:

- **Expect mixed Q3.** BlackBerry is reporting Q3/FY20 results (quarter ended November) on December 20, before market open. We expect Q3 non-GAAP revenue to rise 21% Y/Y (-2% organic) to \$277MM, essentially in line with the Street at \$276MM. For adj. EPS, we expect \$0.01 Q3, slightly below the Street at \$0.02.
- **Sales execution challenges in ESS to weigh on organic growth.** Our outlook calls for -2% organic growth Q3, which is similar to Q2 (-2%). The contraction stems from ESS revenue, which we expect to decline 12% Y/Y to \$86MM. ESS is experiencing sales execution challenges, as a result of its sales force re-organization earlier in the year, along with competitive pressures from Microsoft and others. Additionally, BlackBerry announced that President and COO Bryan Palma left the company on November 4.
- **IP Licensing may continue to surprise.** We believe the bright spot of the quarter may be IP Licensing. In 8 of the last 9 quarters, BlackBerry has reported IP Licensing revenue above our expectations. We believe upside to our Q3 estimate for \$72MM IP Licensing revenue (+2% Q/Q) is possible, considering management's positive comments on IP Licensing momentum and given that guidance calls for 2H revenue above 1H revenue. Regarding BTS, we expect healthy results, with revenue up 17% Y/Y to \$62MM on the launches of more vehicles with digital instrument clusters and other next-generation features. For Cylance, we anticipate revenue up 5% Q/Q to \$54MM on the availability of new products (Guard, Optics 2.4).
- **Valuation implies nominal value for BlackBerry's ESS segment.** BlackBerry is currently trading at 2.4x FTM EV/S, below enterprise security software peers at 4.0x and at the low-end of BlackBerry's 3-year historical range of 2.4-6.4x. On a sum of the parts basis, current valuation implies ESS is valued at 0x FTM EV/S, assuming Cylance at 4.5x EV/S (\$1.1B, below \$1.4B purchase price), BTS at 4.0x EV/S, and IP Licensing at 2.0x EV/S.
- **Maintain Sector Perform, \$7.50 target.** Our Sector Perform thesis reflects our view that stronger organic growth is required to drive material upside for the shares. Our \$7.50 target equates to 3.0x CY20e EV/S on software revenue. In our sum of the parts, we value ESS at 2.0x CY20e EV/S, BTS at 4.0x, Licensing at 2.0x, and Cylance at 4.5x, plus \$554MM net cash.

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Sector: Telecom & Networking Equipment

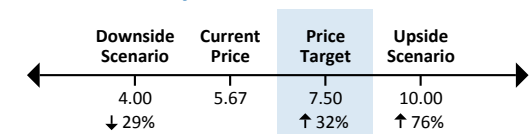
Sector Perform

NYSE: BB; USD 5.67; TSX: BB

Price Target USD 7.50

WHAT'S INSIDE	
<input type="checkbox"/> Rating/Risk Change	<input type="checkbox"/> Price Target Change
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Scenario Analysis*



*Implied Total Returns

Key Statistics

Shares O/S (MM):	552.3	Market Cap (MM):	3,132
Dividend:	0.00	Yield:	0.0%
		Avg. Daily Volume:	3,822,286

RBC Estimates

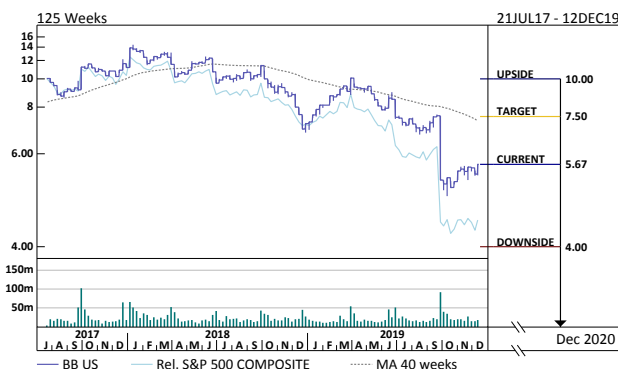
FY Feb	2019A	2020E	2021E	2022E
Revenue	916.3	1,123.5	1,216.2	1,325.0
EPS, Ops Diluted	0.23	0.05	0.16	0.22
P/E	24.7x	NM	35.4x	25.8x
Revenue	Q1	Q2	Q3	Q4
2019	217.0A	214.0A	228.3A	257.0A
2020	267.0A	261.0A	277.2E	318.3E
2021	286.2E	283.7E	302.8E	343.5E
EPS, Ops Diluted				
2019	0.03A	0.04A	0.05A	0.11A
2020	0.01A	0.00A	0.01E	0.02E
2021	0.03E	0.03E	0.04E	0.06E

All values in USD unless otherwise noted.



Target/Upside/Downside Scenarios

Exhibit 1: BlackBerry Limited



Source: Bloomberg and RBC Capital Markets estimates for Upside/Downside/Target

Price target/base case

Our \$7.50 price target equates to 3.0x CY20e EV/S on software revenue. In our sum of the parts, we value ESS at 2.0x CY20e EV/S, BTS (QNX/Radar) at 4.0x, Licensing at 2.0x, and Cylance at 4.5x CY20e EV/S, plus \$554MM net cash.

Upside scenario

For our upside scenario of \$10.00, we assume faster organic growth of BlackBerry's software business (including enterprise, QNX, IoT, and Licensing). In this more optimistic scenario, we assume 9% software & services revenue (excluding Cylance) growth FY20e. Our \$10.00 scenario values BlackBerry's software business at 4.0x on \$1.24B CY20e software revenue.

Downside scenario

For our downside scenario of \$4.00, we assume a slower rate of growth of Enterprise Software. In this more pessimistic scenario, we assume 3% software & services revenue (excluding Cylance) growth FY20e. Our \$4.00 scenario values BlackBerry's software business at 2.0x on \$1.16B CY20e software revenue.

Investment summary

BlackBerry has successfully transitioned its business away from handsets to enterprise software. Our Sector Perform thesis reflects our view that stronger growth is required to drive material upside for the shares.

- **BlackBerry remains a "show me" story.** The investor debate on BlackBerry stems from the company's future opportunity compared to its current momentum. Licensing and BTS appears the healthiest, given design win momentum which may drive stronger growth. For other opportunities like ESS and Radar, limited near-term growth reduces long-term visibility. Cylance is early, and Cylance's lower growth vs. some competitors creates uncertainty.
- **Discounted valuation, catalysts needed.** BlackBerry is trading at a discounted valuation (2.4x FTM EV/S), which is near the rule-of-thumb 2x trough valuation for software stocks. BlackBerry's valuation is below enterprise security peers at 4.0x and at the low end of its 3-year historical range (2.4-6.4x). While valuation is discounted, catalysts are needed to drive an upwards valuation re-rating. Stabilization of ESS revenue, stronger organic growth at Cylance and BTS, and new high-profile customer wins, if realized, are possible catalysts for higher valuation multiples.
- **Cylance expected to amplify short-term volatility.** The \$1.4B Cylance acquisition reduces BlackBerry's net cash from \$3.37/share in Q3/FY19 to \$0.67/share Q2/FY20, or 40% of BlackBerry's share price to 11%. The reduction in BlackBerry's net cash is likely to amplify share price volatility around quarterly results and changes in investor sentiment regarding future growth.
- **Visibility to future growth in emerging segments is not clear.** BlackBerry has secured a number of design wins in the automotive segment. While positive, we believe the future revenue from these design wins is difficult to predict considering that penetration is unknown and pricing pressure has reduced ASPs in the automotive segment. BlackBerry Radar appears compelling but early-stage, particularly relative to competitors that have established distribution channels and sales to end customers.

Discounted valuation suggests near-term challenges are priced in

BlackBerry's shares are likely to be volatile when the company reports Q3 results; however, given BlackBerry's discounted valuation, which implies no value for BlackBerry's ESS segment, we believe "less bad" results may be a short-term catalyst for the stock. Longer-term, BlackBerry faces challenges in its ESS segment, which need to be addressed to sustain a valuation re-rating upwards. Maintain Sector Perform.

Q3 preview

BlackBerry reporting Q3/FY20 results on December 20. BlackBerry is reporting Q3/FY20 (quarter ended November 2019) on Friday, December 20, before market open. A conference call is scheduled for 8:00 a.m. ET. Dial-in: 877-682-6267. Replay: 800-585-8367; ID#9608207.

Expect mixed Q3. We expect Q3 non-GAAP revenue to rise 21% Y/Y (-2% organic) to \$277MM, essentially in line with the Street at \$276MM. We anticipate GAAP revenue (which reflects the non-cash deferred revenue write-down from purchase price accounting related to the acquisition of Cylance) at \$261MM, up 19% Y/Y. For adj. EPS, we expect \$0.01 Q3, slightly below the Street at \$0.02. GAAP EPS is expected at \$0.01.

Exhibit 2: Expect Q3 revenue in line with the Street, adj. EPS below the Street

\$MM, except per share items	Q3/FY20e		Q3/FY19	Y/Y %	Q2/FY20	Q/Q %
	RBC	Consensus				
Revenue:						
IoT	\$149		\$151	-2%	\$134	11%
Licensing	\$72		\$68	6%	\$71	2%
BlackBerry Cylance	\$54		n/a	n/a	\$51	5%
Other	\$3		\$9	-67%	\$5	-35%
Total Revenue	\$277	\$276	\$228	21%	\$261	6%
Gross Profit	\$207	\$205	\$173	19%	\$195	6%
Gross Margin	74.6%	74.4%	75.9%		74.7%	
Adj. EBITDA	\$24	\$29	\$44	-45%	\$20	24%
Adj. EBITDA Margin	8.8%	10.4%	19.4%		7.5%	
Adj. EPS	\$0.01	\$0.02	\$0.05	-74%	\$0.00	1271%

Source: RBC Capital Markets; Thomson Reuters; Company Reports

Sales execution challenges in ESS to weigh on organic growth. Excluding Cylance, our outlook calls for -2% organic growth Q3, which is similar to Q2 (-2%). The contraction stems from ESS revenue, which we expect to decline 12% Y/Y to \$86MM (included in BlackBerry's IoT segment). ESS is experiencing sales execution challenges, as a result of its sales force re-organization earlier in the year, along with competitive pressures from Microsoft and others. Additionally, BlackBerry announced that President and COO Bryan Palma left the company on November 4. Despite these headwinds, our outlook calls for ESS revenue to rise 11% Q/Q, as management anticipates improved ESS revenue 2H/FY20, given visibility to its sales pipeline, along with the possible close of slipped Q2 deals.

IP Licensing may continue to surprise. We believe the bright spot of the quarter may be IP Licensing. In 8 of the last 9 quarters, BlackBerry has reported IP Licensing revenue above our expectations. We believe upside to our Q3 estimate for \$72MM IP Licensing revenue (+2% Q/Q) is possible, considering management's positive comments on IP Licensing momentum and given that guidance calls for 2H revenue above 1H revenue.

On December 6, German newspaper [Süddeutsche Zeitung](#) published an article indicating that the district court of Munich has ruled that Whatsapp, Instagram, Facebook, and Facebook

Messenger infringe several of BlackBerry's patents. A spokesperson for Facebook said the company may appeal the ruling and has software updates/workarounds to replace certain features of their apps that are claimed to infringe BlackBerry's patents. Facebook indicated that it is also challenging the validity of several of BlackBerry's patents.

New vehicle launches expected to fuel growth in BTS. Regarding BTS (included in BlackBerry's IoT segment), we expect healthy results, with revenue up 17% Y/Y to \$62MM on the launches of more vehicles with digital instrument clusters and other next-generation features. For example, BlackBerry announced that the 2020 Subaru Legacy and Outback would ship with a digital cockpit solution featuring the BlackBerry QNX hypervisor. Additionally, the 2020 Land Rover Defender, which is expected to be launched in the spring of 2020, would utilize BlackBerry QNX software. The 2021 Ford F-150 coming late 2020 is expected to feature 4 BlackBerry QNX modules. Additionally, BlackBerry Radar may drive higher BTS revenue, given possible contribution from its deal with Canadian Pacific to deploy Radar on 2,000 intermodal chassis (possibly \$0.6MM hardware revenue at \$300 ASP).

New product launches may lift Cylance revenue. For Cylance, we anticipate revenue up 5% Q/Q to \$54MM on the availability of new products (Guard, Optics 2.4). In July, BlackBerry announced Cylance Guard, which is a managed detection and response (MDR) solution. Additionally, Cylance Optics 2.4 became available during Q3 and on October 23, BlackBerry announced Cylance Protect for Mobile, which uses Cylance's AI/ML technologies for mobile threat defense on mobile devices.

Expect adj. EBITDA margins to improve sequentially. We expect adj. EBITDA margins to improve 130bps Q/Q to 8.8% Q3 on operating leverage. On higher revenue, our forecast calls for adj. EBITDA to increase 24% Q/Q to \$24MM Q3. Our estimates call for opex to increase 37% Y/Y to \$201MM Q3 from \$193MM Q2 on inclusion of Cylance and new investments to re-organize the UEM/ESS sales force.

Exhibit 3: Expect adj. EBITDA margins to improve sequentially

US\$ mm except EPS	Q3/FY20e	Q3/FY19	Y/Y %	Q2/FY20	Q/Q %
Gross Profit	\$207	\$173	19%	\$195	6%
<i>Gross Margin</i>	74.6%	75.9%		74.7%	
Operating Expenses:					
R&D Expense	\$61	\$52	17%	\$59	3%
<i>% of Revenue</i>	22%	23%		23%	
SM&A Expense	\$128	\$81	57%	\$122	5%
<i>% of Revenue</i>	46%	35%		47%	
Depreciation & Amortization Expense	\$12	\$13	-8%	\$12	0%
<i>% of Revenue</i>	5%	6%		6%	
Total Operating Expense	\$201	\$146	37%	\$193	4%
<i>% of Revenue</i>	73%	64%		75%	
Operating Income	\$6	\$27	-77%	\$2	306%
<i>Operating margin</i>	2.3%	12.0%		0.6%	
Adj. EBITDA	\$24	\$44	-45%	\$20	24%
<i>Adj. EBITDA margin</i>	8.8%	19.4%		7.5%	

Source: RBC Capital Markets Estimates; Company Reports

FCF to improve sequentially on higher profitability. We expect Q3 operating cashflow to increase from \$17MM Q2 to \$70MM Q3 on higher GAAP profitability. After \$3MM capex, our estimates call for \$67MM free cashflow Q3, an improvement from \$13MM Q2 and up



19% Y/Y. As a result, we expect net cash to increase to \$427MM (\$0.77/share) Q3 from \$368MM Q2.

Exhibit 4: FCF expected to improve sequentially on higher profitability

US\$ mm except EPS	Q3/FY20e	Q3/FY19	Y/Y %	Q2/FY20	Q/Q %
Cashflow:					
Net Income	\$8	\$59	-87%	(\$44)	n/a
Depreciation & Amortization	\$53	\$37	43%	\$54	-2%
Other Items	\$14	(\$51)	n/a	(\$21)	n/a
Changes in Working Capital	(\$5)	\$15	16%	\$28	-118%
Operating Cashflow	\$70	\$60	n/a	\$17	309%
Less: Capex	(\$3)	(\$4)	n/a	(\$4)	n/a
Free Cashflow	\$67	\$56	19%	\$13	412%
Capital Deployed on Acquisitions	-	-	n/a	\$1	-100%
Cash / Debt Positions:					
Cash & Equivalents	\$1,032	\$2,427	-57%	\$973	6%
Borrowings	\$1,458	\$4,247	-66%	\$1,341	9%
Net Cash (Debt)	\$427	\$1,820	-77%	\$368	16%
Net Cash / Share	\$0.77	\$3.37	-77%	\$0.67	16%

Source: RBC Capital Markets Estimates; Company Reports

Maintain Sector Perform, \$7.50 target

BlackBerry remains a “show me” story. The investor debate on BlackBerry stems from the company’s future opportunity compared to its current momentum. Licensing and BTS appears the healthiest, given design win momentum which may drive stronger growth. For other opportunities like ESS and Radar, limited near-term growth reduces long-term visibility. Cylance is early, and Cylance’s lower growth vs. some competitors creates uncertainty.

Valuation implies nominal value for BlackBerry’s ESS segment. BlackBerry is currently trading at 2.4x FTM EV/S, below enterprise security software peers at 4.0x and at the low-end of BlackBerry’s 3-year historical range of 2.4-6.4x. On a sum of the parts basis, current valuation implies ESS is valued at 0x FTM EV/S, assuming Cylance at 4.5x EV/S (\$1.1B, below \$1.4B purchase price), BTS at 4.0x EV/S (\$1.1B), and IP licensing at 2.0x EV/S (\$0.6B).



Exhibit 5: Current valuation implies ESS is valued at 0.0x EV/S

BlackBerry Limited		
Sum of the Parts Valuation (FTM)		
\$MM, except per share figures		
Software Revenue (FTM):		
Enterprise Software & Services		\$350
BTS (QNX/Radar)		\$262
Cylance		\$235
IP, Licensing, and Other		\$311
Software Revenue		\$1,158
Enterprise Value:		
	FTM EV/S Multiple	EV
Enterprise Software & Services (ESS)	0.0x	\$0
BTS (QNX/Radar)	4.0x	\$1,059
Cylance	4.5x	\$1,068
IP, Licensing, and Other	2.0x	\$636
Enterprise Value	2.4x	\$2,764
Equity Value:		
Enterprise Value		\$2,764
Plus: Total Cash (current)		\$973
Less: Convertible Debentures		\$605
Equity Value		\$3,132
Shares (current)		552
Current share price		\$5.67

Source: RBC Capital Markets Estimates; Company Reports

Maintain \$7.50 target. Our \$7.50 price target equates to 3.0x CY20e EV/S on software revenue. In our sum of the parts, we value ESS at 2.0x CY20e EV/S, BTS (QNX/ Radar) at 4.0x, Licensing at 2.0x, and Cylance at 4.5x CY20e EV/S, plus \$554MM net cash. For ESS, our target multiple is justified below peers (at 4.0x), given low visibility to long-term growth. For Cylance, we believe our target valuation multiple is justified below cybersecurity peers (at 6.1x) due to limited visibility to sustainable growth. For BTS, we assume a higher target valuation multiple than telematics peers (at 1.8x), given higher growth and mix of software.



Exhibit 6: BlackBerry is trading below enterprise security software peers on an EV/S basis

Company	Ticker	Price	Market	EV	Price/Earnings		EV/EBITDA		EV/Sales		Growth (FTM)		
		12-Dec-19	Cap. (MM)	(MM)	FTM	CY20e	FTM	CY20e	FTM	CY20e	EPS	EBITDA	Rev.
BlackBerry Ltd	BB	\$5.67	\$3,132	\$2,764	60.8x	42.8x	23.4x	19.8x	2.4x	2.3x	-46%	-27%	15%
Enterprise Security Software:													
Cisco Systems Inc	CSCO.O	\$45.67	\$195,148	\$185,610	14.1x	14.0x	10.0x	9.9x	3.6x	3.6x	19%	14%	-2%
Qualcomm Inc	QCOM.O	\$89.05	\$107,572	\$111,245	21.2x	17.9x	15.0x	13.4x	5.0x	4.6x	17%	46%	13%
VMware Inc	VMW	\$156.14	\$64,650	\$67,532	22.8x	22.5x	17.0x	17.0x	6.2x	6.0x	73%	49%	13%
Citrix Systems Inc	CTXS.O	\$110.30	\$14,632	\$14,825	20.2x	20.4x	14.0x	13.8x	4.8x	4.8x	22%	24%	2%
MobileIron Inc	MOBL.O	\$4.56	\$505	\$409	N/A	N/A	96.2x	52.4x	1.9x	1.9x	N/A	-110%	4%
Absolute Software Corp	ABT.TO	C\$8.51	\$355	\$316	38.0x	40.4x	12.1x	12.1x	2.3x	2.2x	-29%	-25%	6%
Enterprise Security Software Average					23.3x	23.0x	27.4x	19.8x	4.0x	3.9x	20%	-1%	6%
Telematics:													
Trimble Inc	TRMB.O	\$40.46	\$10,200	\$11,767	19.8x	19.3x	16.2x	15.9x	3.6x	3.5x	53%	15%	2%
ORBCOMM Inc	ORBC.O	\$4.10	\$327	\$525	N/A	N/A	7.7x	7.3x	1.8x	1.8x	N/A	25%	6%
CalAmp Corp	CAMP.O	\$11.18	\$375	\$474	14.1x	12.5x	8.9x	8.3x	1.2x	1.2x	N/A	76%	9%
Powerfleet Inc	PWFL.O	\$6.03	\$108	\$103	16.0x	12.6x	5.5x	4.6x	0.7x	0.7x	N/A	-786%	143%
Telematics Average					16.6x	14.8x	9.6x	9.0x	1.8x	1.8x	53%	-168%	40%
Cyber Security Software:													
Palo Alto Networks Inc	PANW.K	\$226.89	\$21,918	\$20,502	43.4x	41.5x	25.0x	24.0x	5.7x	5.5x	N/A	N/A	20%
NortonLifeLock Inc	NLOK.O	\$26.18	\$16,860	\$19,493	50.0x	35.6x	33.1x	28.4x	7.9x	7.9x	221%	-51%	-33%
Check Point Software Technologies Ltd	CHKP.O	\$113.77	\$17,152	\$15,467	17.4x	17.6x	14.8x	14.7x	7.6x	7.5x	28%	14%	4%
Fortinet Inc	FTNT.O	\$104.40	\$18,249	\$16,309	39.8x	38.1x	24.8x	23.5x	6.8x	6.6x	8%	77%	17%
FireEye Inc	FEYE.O	\$16.34	\$3,467	\$3,469	N/A	N/A	41.2x	39.4x	3.8x	3.7x	N/A	-175%	6%
Rapid7 Inc	RPD.O	\$52.45	\$2,571	\$2,507	N/A	N/A	158.8x	109.5x	6.6x	6.3x	N/A	-156%	24%
Sophos Group PLC	SOPH.L	\$5.58	\$2,721	\$2,826	38.7x	37.7x	29.0x	29.0x	4.5x	4.5x	1029%	35%	13%
Cyber Security Software Average					37.9x	34.1x	46.7x	38.4x	6.1x	6.0x	321%	-43%	7%
Note: Estimates for BlackBerry are RBC CM estimates; all other estimates are consensus.													
Source: RBC Capital Markets; Thomson Reuters; Company Reports													

Exhibit 7: BlackBerry – Financial Estimates

BlackBerry Limited Financial Estimates Yr End Feb 28, \$MM except per share figures	2020e				2021e				2022e				Years Ended Feb 28				2019 - 2022e CAGR
	Q1 May-19	Q2 Aug-19	Q3e Nov-19	Q4e Feb-20	Q1e May-20	Q2e Aug-20	Q3e Nov-20	Q4e Feb-21	Q1e May-21	Q2e Aug-21	Q3e Nov-21	Q4e Feb-22	2019	2020e	2021e	2022e	
Revenue:																	
Enterprise Software & Services (ESS)	83	78	86	99	83	82	91	102	86	85	94	106	367	346	357	372	0.4%
BlackBerry Technology Solutions (BTS)	54	56	62	65	67	67	74	77	78	79	85	90	204	238	285	332	17.5%
IoT	137	134	149	164	150	149	164	179	165	164	180	195	571	584	642	703	7.2%
Licensing	72	71	72	96	72	71	72	96	72	71	72	96	286	311	311	311	2.8%
BlackBerry Cylance	51	51	54	56	63	62	65	69	75	75	78	82	0	212	259	311	N/A
Other	7	5	3	2	2	1	1	0	0	0	0	0	59	16	4	0	-100.0%
Total Revenue	267	261	277	318	286	284	303	344	312	309	330	374	916	1,123	1,216	1,325	13.1%
Y/Y%	23.2%	21.8%	21.4%	23.9%	7.0%	8.9%	9.2%	7.9%	9.0%	9.1%	9.0%	8.8%	-5.2%	22.6%	8.3%	8.9%	
Q/Q%	4.0%	-2.6%	6.4%	14.8%	-10.1%	-0.9%	6.7%	13.4%	-9.2%	-0.8%	6.6%	13.2%					
Cost of Revenue	68	66	70	81	73	71	74	82	75	74	79	90	200	285	300	318	
Gross Profit	199	195	207	237	213	213	229	261	237	235	251	284	716	838	916	1,007	
Gross margin	74.6%	74.7%	74.6%	74.6%	74.6%	75.0%	75.5%	76.0%	76.0%	76.0%	76.0%	76.0%	78.2%	74.6%	75.3%	76.0%	
Total operating expenses	194	193	201	225	199	199	207	230	213	213	222	246	602	813	836	893	14.1%
Adj. EBITDA	23	20	24	30	32	32	39	49	42	40	47	56	182	97	152	186	0.7%
Adj. EBITDA margin	8.8%	7.5%	8.8%	9.5%	11.2%	11.1%	13.0%	14.2%	13.4%	12.9%	14.3%	15.1%	19.8%	8.7%	12.5%	14.0%	
Depreciation & amortization	35	36	35	35	35	35	35	35	35	35	35	35	77	141	140	140	
Adj. EBIT	5	2	6	12	14	14	21	31	24	22	29	38	115	25	80	114	-0.3%
Adj. EBIT margin	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Interest income (expense)	3	0	1	1	1	2	2	2	2	2	2	2	17	6	6	8	
Other expenses	41	45	0	0	0	0	0	0	0	0	0	0	63	86	0	0	
Income (loss) before taxes	-33	-43	8	14	16	15	23	33	26	24	31	41	77	-55	86	122	
Taxes	2	1	0	0	0	0	0	0	0	0	0	0	-16	3	0	0	
Adj. tax rate	-6.1%	-2.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-20.7%	-5.5%	0.0%	0.0%	
GAAP Net Income	-35	-44	8	14	16	15	23	33	26	24	31	41	93	-58	86	122	N/A
Net margin %	-12.9%	-17.1%	2.7%	4.3%	5.4%	5.3%	7.6%	9.5%	8.2%	7.7%	9.5%	10.9%	10.2%	-5.2%	7.1%	9.2%	
Adj. Net Income	5	1	8	14	16	15	23	33	26	24	31	41	127	28	86	122	-1.4%
Adj. net margin %	2.0%	0.2%	2.7%	4.3%	5.4%	5.3%	7.6%	9.5%	8.2%	7.7%	9.5%	10.9%	13.8%	2.5%	7.1%	9.2%	
GAAP EPS	(\$0.06)	(\$0.08)	\$0.01	\$0.02	\$0.03	\$0.03	\$0.04	\$0.06	\$0.05	\$0.04	\$0.06	\$0.07	\$0.17	(\$0.10)	\$0.16	\$0.22	
Adj. EPS	\$0.01	\$0.00	\$0.01	\$0.02	\$0.03	\$0.03	\$0.04	\$0.06	\$0.05	\$0.04	\$0.06	\$0.07	\$0.23	\$0.05	\$0.16	\$0.22	-2.3%
Diluted shares outstanding	551.8	552.3	552.9	553.4	554.0	554.6	555.1	555.7	556.2	556.8	557.3	557.9	540.6	552.6	554.8	557.1	
Debt & Cashflow:																	
Net cash	361	368	427	554	578	640	739	876	896	971	1,083	1,236	428	554	854	1,214	
Net cash per share	1	1	1	1	1	1	1	2	2	2	2	2	1	1	2	2	
Operating cash flow	-64	17	70	139	37	75	112	150	33	88	125	165	100	161	374	411	N/A
Free cash flow	-66	13	67	136	33	71	108	146	29	84	121	161	84	149	358	395	N/A
Free cash flow / share	(\$0.12)	\$0.02	\$0.12	\$0.25	\$0.06	\$0.13	\$0.19	\$0.26	\$0.05	\$0.15	\$0.22	\$0.29	\$0.16	\$0.27	\$0.65	\$0.71	N/A

Source: Company Reports, RBC Capital Markets estimates

Valuation

Our \$7.50 price target equates to 3.0x CY20e EV/S on software revenue. In our sum of the parts, we value ESS at 2.0x CY20e EV/S, BTS (QNX/Radar) at 4.0x, Licensing at 2.0x, and Cylance at 4.5x CY20e EV/S, plus \$554MM net cash. For ESS, our target multiple is justified below peers (at 4.0x), given low visibility to long-term growth. For Cylance, we believe our target valuation multiple is justified below cybersecurity peers (at 6.1x) due to limited visibility to sustainable growth. For BTS, we assume a higher target valuation multiple than telematics peers (at 1.8x), given higher growth and mix of software. Our price target supports our Sector Perform rating.

Risks to rating and price target

Risks to our price target and rating include: a general pullback in technology valuations; market acceptance of its new products; slower-than-expected uptake of new automotive technologies; intensifying competition in the EMM and MDM markets; higher-than-expected legal expenses; opex spending may be higher than expected; new product launches may be later than expected; and BlackBerry may not monetize new services and software.

Company description

BlackBerry is a Waterloo, Ontario-based, developer of enterprise mobility management (EMM) software, embedded operating systems for automotive and other vertical markets, next-generation end-point protection software, telematics and other software for the Enterprise of Things. Founded in 1984, BlackBerry introduced its smartphone brand in 1999, which was the focus of the company until it exited the segment in 2016. BlackBerry acquired Good Technology for \$425MM in November 2015 and Cylance for \$1.4B in February 2019.

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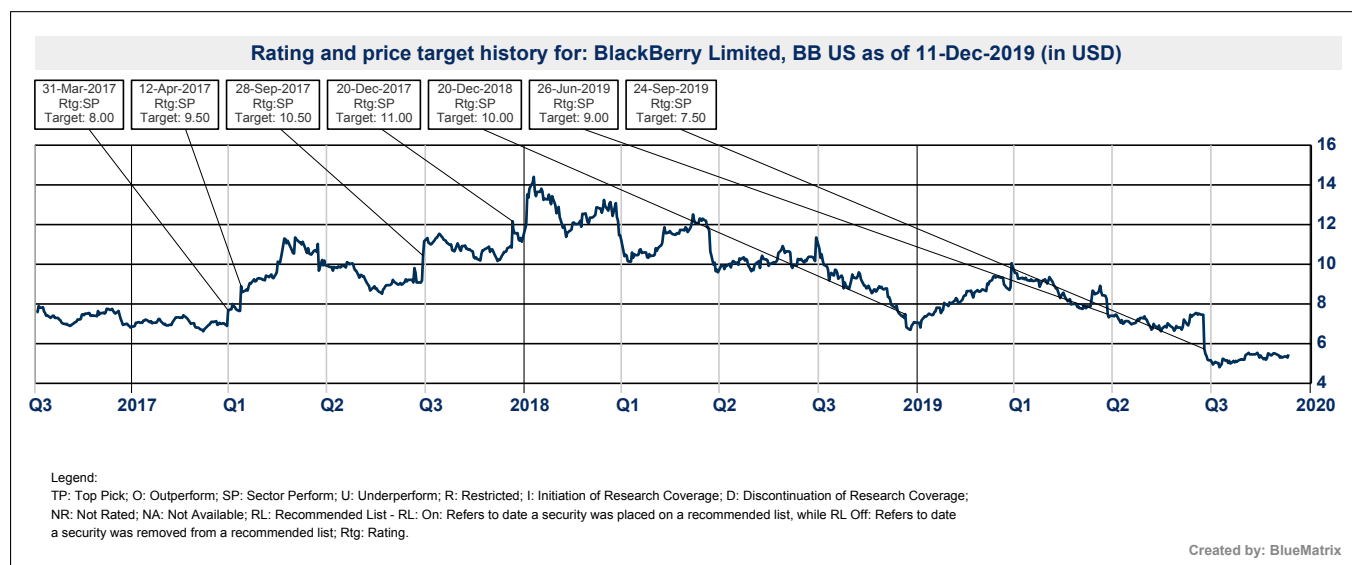
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BlackBerry Limited

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is justified below peers (at 4.0x), given low visibility to long-term growth. For Cylance, we believe our target valuation multiple is justified below cybersecurity peers (at 6.1x) due to limited visibility to sustainable growth. For BTS, we assume a higher target valuation multiple than telematics peers (at 1.8x), given higher growth and mix of software. Our price target supports our Sector Perform rating.

Risks to rating and price target

Risks to our price target and rating include: a general pullback in technology valuations; market acceptance of its new products; slower-than-expected uptake of new automotive technologies; intensifying competition in the EMM and MDM markets; higher-than-expected legal expenses; opex spending may be higher than expected; new product launches may be later than expected; and BlackBerry may not monetize new services and software.

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