



LUMEN TECHNOLOGIES (LUMN)

**7.2% UNSECURED NOTE DUE
12/01/25**

STRONG RECOVERY PLAN; IMPROVING CREDIT
HEALTH; OVERWEIGHT

LUMEN TECHNOLOGIES (LUMN) UNSECURED NOTE DUE 12/25

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THESIS

We are initiating an overweight rating on Lumen Technologies' unsecured note due 12/25 rated BB- following strong FY20 and Q4 results, and a revitalization of the firm's long term growth prospects. For the 5yr tenor, the bond, offering a YTM of 4.2%, has strong price appreciation opportunities as well. Beyond simply appreciation opportunities, from a downside protection perspective, the firm has strong coverage with an EBIT/interest expense of 2.2x, and healthy FCF generation at \$2.48 Bn clearing any concerns from the firm's large debt load.

KEY DRIVERS

Revitalization of moat and business strategy. Over the last few years, Lumen, formerly known as CenturyLink, faced heavy competition across its consumer facing segments – price undercutting by competitors drove down net income margins from 3.6% in 2017 to -23% in 2019. Over the past few quarters, the firm has pivoted its income streams to focus more heavily on their enterprise facing network and connectivity offerings. This, coupled with the expansion of their fiber optic cable lines to now cover ~500,000 miles globally (3rd most overall), has allowed them to benefit from the emergence of 5g, which needs fiber optic cables to connect network towers. This has provided it a robust growth strategy in the form of 5g expansion and improved fiscal health through its pivot to enterprise facing sales. This improvement in financial health has flowed through to FCF directly, with unlevered FCF growing from \$850 Mm in 2016 to \$3.7 Bn in 2019 (an increase of 335% over 3 fiscal years).

COVID-19 as a catalyst of growth. The telecommunications industry, through the short-term revenue weakness. However, as we move beyond the pandemic, the emphasis on digital infrastructure (and demand for remote working and learning, and home entertainment connectivity) will only increase. As reaffirmed by Fitch, consequently, "the telecom sector.. will be more resilient to a downturn than other sectors." Major risk factors stand to be first, broad declines in revenue due to increased price competition amongst large scale telecommunications companies, and second, an inability to meet infrastructure and Capex needs - connectivity demand spikes of ~35% post-lockdown, coupled with an increasing national shift towards 5G, are forcing companies to increase CapEx in the hopes of maintaining operational stability, which was inherently eating into each firm's Free Cash Flow.

As we exit this period of volatility and increased CapEx need, the firm is bound to have additional capital to bolster its financial health and focus on growth. Relative to its credit, this opens up significant opportunities for price appreciation as the firm's credit health improves.

OFFERING PRICE: \$99.78

OFFERING YIELD: 7.22%

SECURITY RATING: BB-

(As of 02/21/21)

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SUMMARY

Rating	Overweight
Current Yield	6.3%
Credit Rating	BB- (S&P)
Tenor	5 Yr
Annual Revenue	\$20 Bn (2020)
EBITDA	\$8.6 Bn (2020)
Market cap. (mil)	\$13 Bn
Net Debt/EBITDA	3.5x
Total Debt/Equity	288%
Total Debt/Capital	74.3%
EBIT/Interest Expense	2.2x
EBITDA/Interest Expense	5.4x
Levered Free Cash Flow	2.48 Bn
Quick ratio	0.6
Current ratio	0.7
Yield-to-Worst	4.17%
Benchmark Spread	92 Bps
Duration	4.03

Lumen Technologies, Inc. - NT-D
7.2%25 - Bond Price



Debt refinancing goal is already near being met. Over the past two fiscal years, Lumen has focused heavily on refinancing – moving from shorter term maturities to lower rate longer term maturities. Beyond simply attempting to capture historically low market rates on their financing, by reducing their shorter term debt load, the firm is also able to avoid liquidity concerns. This has allowed the firm to reduce interest expense to \$1.6 Bn in 2020 from a high of \$2.2 Bn in 2018 by locking in lower rates. There is a real risk that the firm may move to call our note too, however, the note maintains provisions that restrict it from being called in whole. This ensures that we will be able to maintain exposure to both the yield and price appreciation opportunities without facing a complete refinancing/call.

COMPANY OVERVIEW

American telecommunications company (formerly known as CenturyLink) offering network, communication, security, and cloud solutions, posting annual revenues of \$20 Bn, EBITDA of \$8.6 Bn, Free Cash Flows of ~\$3 Bn, and an Enterprise Value of ~\$45 Bn. Notably, the firm operates across the spectrum of Enterprise, Small and Medium Business, Wholesale, and Consumer segments.

MANAGEMENT OVERVIEW

Lumen Technologies is led by CEO & President Jeff Storey. Mr. Storey has set goals for Lumen to continue expanding the reach and capabilities of their network by investing at the edge of their 450,000 route miles' worth of fiber network and connecting approximately 170,000 fiber-based on-net enterprise buildings, connecting to public and private data centers and subsea networks. To stay ahead of the competition and enable a digital transformation for their customers, Lumen is committed to investing in new technologies and leveraging their extensive fiber network to provide customers with dynamic bandwidth and low-latency edge computing services.

Per Lumen's 10-Q filed 11/05/2020, the management's discussion and analysis section places a strong emphasis on continued expansion in many of their business segments. The International and Global Accounts Management (IGAM) segment is responsible for working with large multinational organizations in support of their business and IT transformation strategies. Lumen believes that they are well-positioned to serve customers in this segment given their extensive fiber network and ability to provide global networking solutions. This segment contains some of Lumen's largest customers which could result in revenue fluctuations driven by contract renegotiations or churn. Lumen remains focused on investing globally to expand reach, scale and technology to grow services. In the Enterprise segment, Management is focused on meeting customers' increasing and evolving needs for integrated data, broadband, and voice services with its extensive product portfolio.

With traditional voice services representing a significant portion of the Small & Medium Business segment's revenues, revenue growth is expected to continue to be a challenge. Management believes this risk will be mitigated by bringing products specific to meet the needs of this segment, adding fiber-fed on-net buildings and collaborating with indirect channel partners. Looking at the Wholesale segment, Lumen has plans to continue to partner with 5G wireless providers to support their growing needs for transmission capacity and place their network closer to customers. Due to competitive pressures, the relative contributions of the wholesale segment is expected to decline over the longer term. Lumen is aggressively investing in the Consumer segment specifically in fiber to drive higher

average revenue per broadband customer to offset legacy voice and video declines. Coupling this with continued investment into their own digital transformation to improve service delivery and reduce costs has yielded 4.7 million consumer broadband subscribers as of the start of 2020.

The company's direction is affected by the following:

- Customers' demand for automated products and services and competitive pressures will require Lumen to continue to invest in new technologies and automated processes to improve the customer experience and reduce operating expenses.
- The increasingly digital environment and the growth in online video require robust, scalable network services. Lumen continues to enhance their product capabilities and simplify their product portfolio based on demand and profitability to enable customers to have access to greater bandwidth.
- Businesses continue to adopt distributed, global operating models. Lumen is expanding and densifying their fiber network, connecting more buildings to the network to generate revenue opportunities and reduce costs associated with leasing networks from other carriers.
- Industry consolidation, coupled with changes in regulation, technology and customer preferences, are significantly reducing demand for traditional voice services and are pressuring some other revenue streams, while other advances, such as the need for lower latency provided by Edge computing or the implementation of 5G networks, are expected to create opportunities.
- The operating margins of several of Lumen's newer, more technologically advanced services, some of which may connect to customers through other carriers, are lower than the operating margins on traditional, on-net wireline services.

DIVERSE REVENUE GENERATION

A key criticism of Lumen Technologies (across both credit and equity offerings) through 2019 was its overexposure to consumer-facing business units, particularly in the broadband services space, which were inherently becoming increasingly more competitive across the United States. Due to a lack of pricing power in this oversaturated services space, the firm was noticing strong declines in revenue. The firm did, however, move to diversify revenue generation and transition to enterprise-facing units. This transition towards Enterprise contracts was also the underlying catalyst for the rapid expansion in the firm's long term debt load (from \$18 Bn in 2016 to \$37 Bn in 2017), which is only now being refinanced/paid down to avoid liquidity concerns. Nevertheless, strong Q4 results reaffirmed the firm's successful diversification of revenue streams in an increasingly more volatile macroeconomic environment – easing concerns across revenue and ensuring the stable generation of FCF needed to meet credit obligations.

MACROECONOMIC SUPPORT FOR FUTURE GROWTH

Beyond the declining revenue facing the firm, another element of risk that was inherently priced into both the firm's credit and equity was the supposed obsolete nature of the firm's fiber optic network in the face of 5G's rise globally. Put simply, the consensus was that the rise of 5G would reduce the market attractiveness of fiber-based internet subscriptions, and fiber optic cables as a means of transferring information all together. Nevertheless, this analysis, while right, was limited only to the case that the fiber optic network would relate to customer-facing units (see Figure 12). In light of Lumen's shift to enterprise-facing revenue channels, the script concerning its ~500,000-mile cable network has been flipped. Instead, the firm can now apply this infrastructure, which stands to be the 3rd largest US network, to connect the many 5G-enabled enterprises looking to transfer information. This opens up immense potential for the firm to capitalize on a boom in a market already worth \$42 Bn and growing at a CAGR of 43%.

Beyond the fanciful projections of potential growth, the firm has already seen expansion in this business unit. As of Q4, the firm has closed strategic partnerships with Zoom, VMware, and SAP, amongst others, which have directly contributed to keep earnings stable in light of any tailwinds seen during the pandemic as companies and individuals opted for the cheapest, not the best, options for cloud computing, high bandwidth data services, and more. From a credit perspective, this long-term growth potential in an increasingly more important business unit mitigates any concerns stemming from the firm's top line and bottom line contraction during FY19.

Figure 11: Revenue Mix

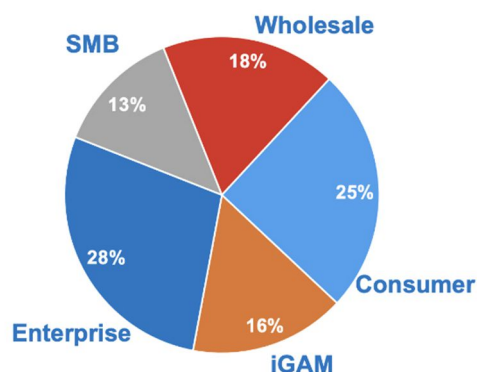
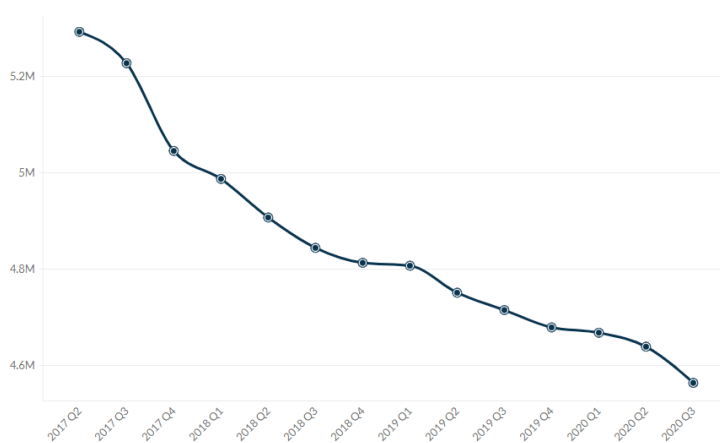


Figure 12: Declining Broadband Customers



ASSET COVERAGE AND RECENT DEBT PAY DOWNS

Lumen's credit ratios reveal a firm with a strong balance sheet capable of handling the large amounts of debt currently carried, despite their current issuer credit rating of B+. Although the Debt/Equity ratio is on the high side of what we consider comfortable, the EBIT/ Interest Expense ratio presents a clear image that Lumen can continue to perform (pay interest) on its debt issuances especially with their recent refinancing of near-term maturities at lower rates.

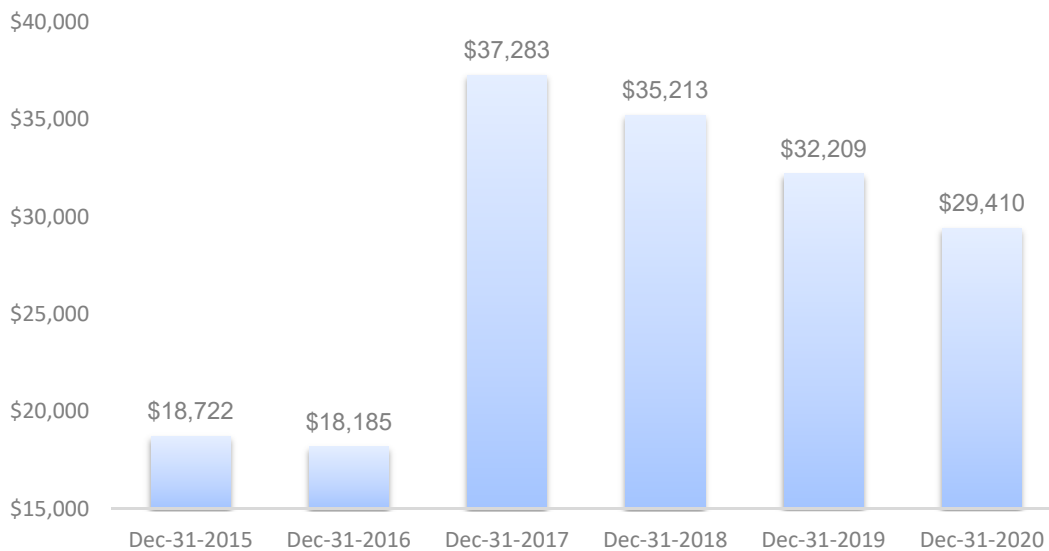
Per Q4 2020 earnings transcript, over the course of 2020, Lumen reduced net debt by approximately \$1.6 billion and refinanced approximately \$13 billion in long-term debt, further reducing interest expense, extending maturities, and strengthening their balance sheet. Management is striving for a Net Debt/EBITDA ratio goal of 2.75-3.25x with a 3.5x ratio expectation by the end of 2021--Lumen's ratio currently sits at 3.6x. As a whole, this ensures that the firm is in a comfortable position to maintain interest payments for the entirety of their debt load, barring black swans in the realm of network development and access.

In the case of excessive risk that limits their access to FCF, the firm may face liquidity concerns due to their limited cash pile (from \$1.7 Bn in FY19 to \$0.41 Bn in FY20). The burn to cash from their debt pay downs and aggressive CapEx spending has undeniably put some pressure on their liquidity, however, barring extreme circumstances, this is unlikely to evolve into a concern. Beyond their limited short-term asset holdings (quick ratio of 0.4x), due to the security in consideration being unsecured, there is a further need to evaluate interest coverage, relative value, and bondholder covenants set in place.

Due to the unsecured nature of this security, a key factor of analysis will undeniably be the firm's ability to maintain its 'performing' status. In FY20, Lumen Technologies paid a total of \$1.7 Bn in interest expense, allowing them to maintain an interest coverage ratio of 5.5x. Undeniably, this clearly represents the benefit of locking in lower rates via refinancing when compared to their \$2.6 Bn in interest expense during FY19. Considering their interest coverage alone highlights the firm's strong fiscal health, there is further emphasis added to the low risk of stress to the firm's credit. Nonetheless, at a total current debt/equity of 288%, the firm is still heavily levered and will remain so, as reaffirmed by management during the firm's Q4 call.

Due to the secured and covenant heavy nature of the rest of Lumen's debt stack, the firm may see extreme volatility across its capital structure in the case of declining financials or market conditions, which is undeniably an additional risk to the firm's long term credit health.

Figure 1.3: Debt Accumulation and Pay down (\$ Millions)



RELATIVE VALUE

A key component of analyzing the relative attractiveness of Lumen's credit also then falls to whether they offer attractive relative value. Comparing Lumen Technologies with key competitors in similar geographies and fiscal situations globally allow us to note the contextual attractiveness of the firm's YTM.

Figure 1.4 also highlights the additional protections in place that only re-confirm the appeal of the security, even when evaluated in the context of a benchmark security.

Nonetheless, the evaluation does highlight potential concerns that the credit has already begun pricing in price appreciation, as seen through the market price of \$115.

Nevertheless, due to the premium that BCE and EQIX credit is trading at as well, there is some comparable comfort provided in terms of valuation.

Figure 1.4: Relative Value

Description	Term Loans			
	LUMN	CCOI	BCE	EQIX
Company Name	Lumen Technologies	Cogent Communications	Bell Canada Enterprises	Equinix Inc
EBITDA	\$8.6 Bn	\$0.24 Bn	\$7.6 Bn	\$2.5 Bn
FCF	\$2.48 Bn	\$0.08 Bn	\$2.51 Bn	\$2.4 Bn
Credit Rating	B+	B+	BBB+	BBB-
Overall Credit Health				
EBITDA/Interest Exp	5.4x	3.4x	8.6x	6.7x
Debt/EBITDA	3.6x	5.6x	2.8x	5.1x
Net Debt/EBITDA	3.5x	3.7x	2.7x	4.5x
Debt/Equity	2.9x	NM	1.23x	1.3x
Security Analysis				
Coupon	L+650 bp	L+360 bp	L+280 bp	L+215 bp
Benchmark Spread	92bp	-	-	120bp
Maturity	12/1/2025	6/30/2024	3/2/2026	11/18/2026
Call Protection	Can't Call In Whole	None	None	Can't Call In Whole
Credit Rating	BB-	B+	BBB+	BBB-
Duration	4.02	3.71	4.65	5.125
Covenants	Negative Pledge, Sale of Assets	None	None	Negative Pledge, Cross Default, Cross Accelerati
Trading levels				
Market Price	\$112	\$102	\$109	\$108
YTM	4.20%	3.24%	1.51%	1.36%

COVENANTS

Of significance in the evaluation of this note, of which \$100 Mm (100%) is still outstanding, is the callable feature, which may cause concern in the instance that Lumen expands its horizons for debt pay-downs and refinancing. Indeed, the note does have provisions against a call in whole, which may allow for an increased chance of maturation, however, if the firm does move to call the bond it could do so to some degree. In terms of bondholder protection, the negative pledge covenant prevents the bond issuer from taking on future debt that could compromise its ability to meet obligations to existing subordinated unsecured bondholders. Most often, a negative pledge clause also prevents the issuer from using the same assets to secure another debt obligation, however, as this note is unsecured, there are no assets being pledged.

CONCLUSION

In considering the risks and opportunities of the note, we find that it undeniably provides an adjusted return that is favorable relative to both, comparables and market conditions. The firm's long term growth prospects, coupled with its current FCF generation under high capex spend, also reduces default risk considerably, accounting for any previous fears of a ballooning debt pile. Moreover, in considering the relative value analysis in figure 1.4 we find that the credit is also offering attractive YTM and pricing relative to other credit at comparable firms. All in all, this affords us exposure to high returns at acceptable risk levels under a strong management that is driven to restore Lumen to its previous position of market dominance.