UNITED STATES SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

Form 10-K

☑ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2020

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from to

Commission file number 001-38335

Liberty Latin America Ltd.

(Exact name of Registrant as specified in its charter)

Bermuda	**98-1386359**
(State or Other Jurisdiction of Incorporation or Organization)	*(I.R.S. Employer Identification No.)*
2 Church Street, Hamilton	**HM 11**
(Address of Principal Executive Offices)	*(Zip Code)*

Registrant's telephone number, including area code: (441) 295-5950 or (303) 925-6000

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Trading Symbols	Name of Each Exchange on Which Registered
Class A Common Shares, par value $0.01 per share	LILA	The NASDAQ Stock Market LLC
Class C Common Shares, par value $0.01 per share	LILAK	The NASDAQ Stock Market LLC

Securities registered pursuant to Section 12(g) of the Act: none

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☑ No ☐

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☑

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☑ No ☐

Indicate by check mark whether the Registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the Registrant was required to submit such files). Yes ☑ No ☐

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act. Check one:

Large Accelerated Filer	☑	Accelerated Filer	☐	Non-Accelerated Filer	☐
Smaller Reporting Company	☐	Emerging Growth Company	☐		

If an emerging growth company, indicate by check mark if the Registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☑

Indicate by check mark whether the Registrant is a shell company as defined in Rule 12b-2 of the Exchange Act. Yes ☐ No ☑

State the aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold, or the average bid and asked price of such common equity, as of the last business day of the registrant's most recently completed second fiscal quarter: $1.5 billion.

The number of outstanding common shares of Liberty Latin America Ltd. as of January 31, 2021 was: 49,011,035 Class A; 1,932,386 Class B; and 181,128,981 Class C.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the definitive proxy statement for the Registrant's 2021 Annual General Meeting of Shareholders are incorporated by reference in Part III of this Form 10-K.

LIBERTY LATIN AMERICA LTD.

ANNUAL REPORT ON FORM 10-K

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PART I

Item 1. BUSINESS

(a) General Development of Business

Liberty Latin America Ltd. (**Liberty Latin America**) is a registered company in Bermuda that primarily includes:

(i) Cable & Wireless Communications Limited and its subsidiaries (collectively **C&W**), which includes Cable & Wireless Panama, S.A. (**CWP**);

(ii) Liberty Communications PR Holding LP and its subsidiaries (collectively **Liberty Puerto Rico**), which include Liberty Communications of Puerto Rico LLC (**LCPR**) and, as of October 31, 2020 and as further described in note 4, Liberty Mobile Inc. and its subsidiaries (**Liberty Mobile**);

(iii) VTR Finance N.V. and its subsidiaries (collectively **VTR**, which includes VTR.com SpA (**VTR.com**)); and

(iv) LBT CT Communications, S.A. and its subsidiary, Cabletica S.A. (**Cabletica**).

VTR, Liberty Communications PR Holding LP and LCPR were formerly known as VTR Finance B.V., Leo Cable LP and Liberty Cablevision of Puerto Rico LLC, respectively. C&W owns less than 100% of certain of its consolidated subsidiaries, including The Bahamas Telecommunications Company Limited (**C&W Bahamas**) (a 49%-owned entity that owns all of our operations in the Bahamas), Cable & Wireless Jamaica Limited (**C&W Jamaica**) (a 92%-owned entity that owns the majority of our operations in Jamaica), and CWP (a 49%-owned entity that owns most of our operations in Panama). Liberty Latin America owns 80% of LBT CT Communications S.A.

We are an international provider of fixed, mobile and subsea telecommunications services. We provide residential and business-to-business (**B2B**) services in (i) over 20 countries across Latin America and the Caribbean, through two of our reportable segments, "**C&W Caribbean and Networks**" and "**C&W Panama**", (ii) Chile and Costa Rica, through our reportable segment, "**VTR/Cabletica**", and (iii) Puerto Rico, through our reportable segment, Liberty Puerto Rico. Through our "**Networks & LatAm**" business, C&W Caribbean and Networks also provides (i) B2B services in certain other countries in Latin America and the Caribbean and (ii) wholesale communication services over its subsea and terrestrial fiber optic cable networks that connect over 40 markets in that region.

In the following text, the terms "**Liberty Latin America**," "**we**," "**our**," "**our company**" and "**us**" may refer, as the context requires, to Liberty Latin America or collectively to Liberty Latin America and its subsidiaries.

We were originally formed as a Bermuda company on July 11, 2017, as a wholly-owned subsidiary of Liberty Global plc (**Liberty Global**) under the name LatAm Splitco Ltd. and we changed our name to Liberty Latin America Ltd. on September 22, 2017. During October 2017, the Board of Directors of Liberty Global authorized a plan to distribute to the holders of its ordinary shares (the **LiLAC Shares**) common shares in our company (the **Split-Off**), which was completed on December 29, 2017. The LiLAC Shares were tracking shares, which were intended to reflect or "track" the economic performance of Liberty Global's "**LiLAC Group**" rather than the economic performance of Liberty Global as a whole. The LiLAC Group comprised the same entities as Liberty Latin America at the time of the Split-Off.

References in the following text to our assets, liabilities or businesses reflect the historical information of (i) certain former subsidiaries of Liberty Global for periods prior to the Split-Off and (ii) Liberty Latin America and its consolidated subsidiaries for the period following the Split-Off. Although Liberty Latin America was previously reported on a combined basis, the financial and operating information presented herein includes Liberty Latin America and its consolidated subsidiaries for all periods presented, unless stated otherwise.

Developments in the Business

We have expanded our footprint through fixed network new build and upgrade projects, mobile coverage expansion, and strategic acquisitions. Our new build projects consist of network programs pursuant to which we pass additional homes and businesses with our broadband communications network. We are also upgrading networks to increase broadband speeds and the services we can deliver for our customers. During the past three years, we passed or upgraded over 1.2 million additional homes and commercial premises. We have made strategic acquisitions to drive scale benefits across our business, enhancing our ability to innovate and deliver quality services, content and products to our customers. Within the last three years, we completed, or have entered into definitive agreements to complete, the following transactions:

- the acquisition on October 31, 2020, of AT&T's wireless and wireline operations in Puerto Rico and the U.S. Virgin Islands in an all-cash transaction (the **AT&T Acquisition)** based upon an enterprise value of $1.95 billion;
- on July 30, 2020, we entered into a definitive agreement to acquire Telefónica S.A.'s operations in Costa Rica in an all-cash transaction based upon an enterprise value of $500 million on a cash- and debt-free basis (the **Telefónica-Costa Rica Acquisition**). The transaction is subject to certain customary closing conditions, including regulatory approvals, and is expected to close in the first half of 2021;
- the disposition on November 5, 2019 of Cable & Wireless Seychelles based on an enterprise value of approximately $104 million to a consortium of local investors (the **Seychelles Disposition**);
- the acquisition on March 31, 2019 of an 87.5% stake from the government of Curacao in United Telecommunications Services N.V. (**UTS**, and the acquisition, the **UTS Acquisition**), which provides fixed and mobile services to the island nations of Curacao, St. Maarten, St. Martin, Bonaire, St. Eustatius and Saba, and on September 10, 2019 of the remaining 12.5% from the government of St. Maarten, each in an all cash transaction;
- the acquisition on October 17, 2018 of Searchlight Capital Partners L.P.'s 40% interest in both Leo Cable LP and Leo Cable L.L.C., which in turn gave us 100% ownership of Liberty Puerto Rico, in exchange for 9,500,000 unregistered Class C common shares; and
- the acquisition on October 1, 2018 of an 80% stake in Cabletica (the **Cabletica Acquisition**), which is a leading cable operator in Costa Rica that provides television, broadband internet and fixed-line telephony services to residential customers, from Televisora de Costa Rica S.A. in an all cash transaction.

For information regarding our material financing transactions, see note 10 to our consolidated financial statements included in Part II of this Annual Report on Form 10-K.

Forward-looking Statements

Certain statements in this Annual Report on Form 10-K constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. To the extent that statements in this Annual Report on Form 10-K are not recitations of historical fact, such statements constitute forward-looking statements, which, by definition, involve risks and uncertainties that could cause actual results to differ materially from those expressed or implied by such statements. In particular, statements under Item 1. *Business*, Item 1A. *Risk Factors*, Item 7. *Management's Discussion and Analysis of Financial Condition and Results of Operations* and Item 7A. *Quantitative and Qualitative Disclosures About Market Risk* may contain forward-looking statements, including statements regarding: our business, product, foreign currency and finance strategies; our property and equipment additions; grants or renewals of licenses; subscriber growth and retention rates; changes in competitive, regulatory and economic factors; the timing and impacts of proposed transactions, including the Telefónica-Costa Rica Acquisition; anticipated changes in our revenue, costs or growth rates; debt levels; our liquidity and our ability to access the liquidity of our subsidiaries; credit risks; the interest rate risks associated with the phasing out of LIBOR; internal control over financial reporting; foreign currency risks; compliance with debt, financial and other covenants; our future projected contractual commitments and cash flows; and other information and statements that are not historical fact. Where, in any forward-looking statement, we express an expectation or belief as to future results or events, such expectation or belief is expressed in good faith and believed to have a reasonable basis, but there can be no assurance that the expectation or belief will result or be achieved or accomplished. In evaluating these statements, you should consider the risks and uncertainties discussed under Item 1A. *Risk Factors* and Item 7A. *Quantitative and Qualitative Disclosures About Market Risk*, as well as the following list of some but not all of the factors that could cause actual results or events to differ materially from anticipated results or events:

- economic and business conditions and industry trends in the countries in which we operate;
- the competitive environment in the industries in the countries in which we operate, including competitor responses to our products and services;
- fluctuations in currency exchange rates, inflation rates and interest rates;
- our relationships with third-party programming providers and broadcasters and the ability to acquire programming;
- our relationships with suppliers and licensors and the ability to maintain equipment, software and certain services;
- instability in global financial markets, including sovereign debt issues and related fiscal reforms;

- our ability to obtain additional financing and generate sufficient cash to meet our debt obligations;
- the impact of restrictions contained in certain of our subsidiaries' debt instruments;
- consumer disposable income and spending levels, including the availability and amount of individual consumer debt;
- changes in consumer viewing preferences and habits, including on mobile devices that function on various operating systems and specifications, limited bandwidth, and different processing power and screen sizes;
- customer acceptance of our existing service offerings, including our video, broadband internet, fixed-line telephony, mobile and business service offerings, and of new technology, programming alternatives and other products and services that we may offer in the future;
- our ability to manage rapid technological changes;
- the impact of 5G and wireless technologies on broadband internet;
- our ability to maintain or increase the number of subscriptions to our video, broadband internet, fixed-line telephony and mobile service offerings and our average revenue per household and mobile subscriber;
- our ability to provide satisfactory customer service, including support for new and evolving products and services;
- our ability to maintain or increase rates to our subscribers or to pass through increased costs to our subscribers;
- the impact of our future financial performance, or market conditions generally, on the availability, terms and deployment of capital;
- changes in, or failure or inability to comply with, government regulations in the countries in which we operate and adverse outcomes from regulatory proceedings;
- government intervention that requires opening our broadband distribution networks to competitors;
- our ability to renew necessary regulatory licenses, concessions or other operating agreements and to otherwise acquire future spectrum or other licenses that we need to offer new mobile data or other technologies or services;
- our ability to obtain regulatory approval and satisfy other conditions necessary to close acquisitions and dispositions, and the impact of conditions imposed by competition and other regulatory authorities in connection with acquisitions, such as with respect to the Telefónica-Costa Rica Acquisition;
- our ability to successfully acquire new businesses and, if acquired, to integrate, realize anticipated efficiencies from and implement our business plan with respect to the businesses we have acquired or that we expect to acquire, such as with respect to the Telefónica-Costa Rica Acquisition;
- changes in laws or treaties relating to taxation, or the interpretation thereof, in the U.S. or in other countries in which we operate and the results of any tax audits or tax disputes;
- changes in laws and government regulations that may impact the availability and cost of capital and the derivative instruments that hedge certain of our financial risks;
- the ability of suppliers and vendors, including third-party channel providers and broadcasters (including our third-party wireless network provider under our mobile virtual network operator (**MVNO**) arrangement), to timely deliver quality products, equipment, software, services and access;
- the availability of attractive programming for our video services and the costs associated with such programming, including retransmission and copyright fees payable to public and private broadcasters;
- uncertainties inherent in the development and integration of new business lines and business strategies;
- our ability to adequately forecast and plan future network requirements, including the costs and benefits associated with our network extension and upgrade programs;
- the availability of capital for the acquisition and/or development of telecommunications networks and services, including property and equipment additions;
- problems we may discover post-closing with the operations, including the internal controls and financial reporting process, of businesses we acquire, such as with respect to the AT&T Acquisition and the Telefónica-Costa Rica Acquisition;
- the effect of any of the identified material weaknesses in our internal control over financial reporting;

- piracy, targeted vandalism against our networks, and cybersecurity threats or other security breaches, including the leakage of sensitive customer data, which could harm our business or reputation;
- the outcome of any pending or threatened litigation;
- the loss of key employees and the availability of qualified personnel;
- the effect of any strikes, work stoppages or other industrial actions that could affect our operations;
- changes in the nature of key strategic relationships with partners and joint venturers;
- our equity capital structure;
- our ability to realize the full value of our intangible assets;
- changes in and compliance with applicable data privacy laws, rules, and regulations;
- our ability to recoup insurance reimbursements and settlements from third-party providers;
- our ability to comply with economic and trade sanctions laws, such as the U.S. Treasury Department's Office of Foreign Assets Control (**OFAC**); and
- events that are outside of our control, such as political conditions and unrest in international markets, terrorist attacks, malicious human acts, hurricanes and other natural disasters, pandemics, including the COVID-19 pandemic, and other similar events.

The broadband distribution and mobile service industries are changing rapidly and, therefore, the forward-looking statements of expectations, plans and intent in this Annual Report on Form 10-K are subject to a significant degree of risk. These forward-looking statements and the above described risks, uncertainties and other factors speak only as of the date of this Annual Report on Form 10-K, and we expressly disclaim any obligation or undertaking to disseminate any updates or revisions to any forward-looking statement contained herein, to reflect any change in our expectations with regard thereto, or any other change in events, conditions or circumstances on which any such statement is based. Readers are cautioned not to place undue reliance on any forward-looking statement.

(b) Description of Business

Overview

We are a leading communications company with operations in Puerto Rico, Chile, Panama, Costa Rica, the Caribbean, including Jamaica, and other parts of Latin America. The communications and entertainment services that we deliver to our residential and business customers include video, broadband internet, telephony and mobile services. In most of our operating footprint, we offer a "triple-play" of bundled services of video, internet and telephony in one subscription. We are also focused on leveraging our full-service product suite to deliver fixed-mobile convergence offerings. Available fixed service offerings depend on the bandwidth capacity of a particular system and whether it has been upgraded for two-way communications.

Our business products and services also include enterprise-grade connectivity, data center, hosting and managed solutions, as well as IT solutions with customers ranging from small and medium enterprises to international companies and governmental agencies. We also operate an extensive subsea and terrestrial fiber optic cable network that connects over 40 markets in the region, providing connectivity solutions both within and outside our operating footprint.

We are the largest fixed-line provider of high-speed broadband and video services across a number of our markets, including Puerto Rico, Chile, Jamaica and Trinidad and Tobago. We also operate the largest telephony network in most of our C&W markets where we provide residential communications services. In addition, we offer mobile services throughout most of our operating footprint, including Puerto Rico and the U.S. Virgin Islands. Across C&W's markets, we are a mobile network operator in Panama and most of our Caribbean markets, including the Bahamas and Jamaica. As a network provider, we are able to offer a full range of voice and data services, including value-added, data-based and fixed-mobile converged services. In Chile, VTR provides mobile services as an MVNO and leases a third-party's radio access network. For a breakdown of revenue by major category, see note 21 to our consolidated financial statements in Part II of this Annual Report on Form 10-K.

Our operating brands include the following:

C&W	VTR.com	Liberty Puerto Rico	Cabletica

Trends in Market Demand

In December 2019, COVID-19 was reported in Wuhan, China. On March 11, 2020, the World Health Organization declared the outbreak a "pandemic," pointing to the sustained risk of further global spread. To date, confirmed cases of COVID-19 have been experienced in each of the markets in which we operate. During 2020, COVID-19 has negatively impacted our operations, primarily within our C&W Caribbean and Networks, C&W Panama and VTR/Cabletica segments, due to resulting lockdowns, moratoriums, cancellation of live sporting events, and mobility, travel and tourism restrictions across many of the markets in which we operate. The implications of these restrictions have been (i) the issuance of discounts to customers, (ii) the pause in certain managed service projects, particularly with government agencies, (iii) at VTR, customers experiencing network connection-related issues stemming from the significant increase, over a short period of time, in the capacity usage by our customers, and (iv) delayed or deferred customer payments and increased customer churn. In VTR, our most competitive consumer fixed market, we experienced increased revenue generating unit churn during the third quarter following network challenges related to the increased bandwidth demand earlier in the year. We have carried out a number of operational actions to improve the experience for our customers. Within our mobile operations, the lockdowns negatively impacted, primarily at C&W Caribbean and Networks and C&W Panama during the second quarter of 2020, our customers' ability to recharge their prepaid mobile devices. In addition, we experienced declines in inbound roaming activity as a result of travel restrictions and reduced tourism activities in the markets in which we operate. These factors collectively resulted in declines in revenue within our B2B and mobile operations and lower ARPU (as defined below) associated with our residential fixed subscription services. Given the impacts of COVID-19 continue to rapidly evolve, the extent to which COVID-19 may further impact our financial condition or results of operations continues to be uncertain and cannot be predicted at this time.

Operating Data

The following tables present certain operating data as of December 31, 2020. The tables reflect 100% of the data applicable to each of our reportable segments, and for the key markets within the segments of C&W Caribbean and Networks, C&W Panama and VTR/Cabletica, regardless of our ownership percentage. For additional information regarding terms used in the following tables, see the *Operating Data Glossary* below.

	Homes Passed	Two-way Homes Passed	Customer Relationships	Total RGUs	Video RGUs	Internet RGUs	Telephony RGUs	Total Mobile Subscribers (d)
C&W Caribbean and Networks:								
Jamaica	613,700	613,700	296,700	634,200	128,400	259,600	246,200	992,300
The Bahamas	120,900	120,900	35,300	68,200	7,400	26,400	34,400	181,100
Trinidad and Tobago	334,600	334,600	157,000	332,500	106,200	140,100	86,200	—
Barbados	140,400	140,400	82,400	174,200	33,700	69,400	71,100	118,600
Other	331,700	311,900	233,900	374,100	77,800	177,300	119,000	394,500
Total C&W Caribbean and Networks	1,541,300	1,521,500	805,300	1,583,200	353,500	672,800	556,900	1,686,500
C&W Panama (a) (b)	687,900	687,900	184,700	405,500	89,900	155,900	159,700	1,461,900
Total C&W	2,229,200	2,209,400	990,000	1,988,700	443,400	828,700	716,600	3,148,400
VTR/Cabletica:								
VTR	3,848,600	3,424,700	1,465,800	2,848,800	1,065,500	1,286,100	497,200	280,300
Cabletica	633,000	627,100	268,300	443,200	206,900	214,800	21,500	—
Total VTR/Cabletica (c)	4,481,600	4,051,800	1,734,100	3,292,000	1,272,400	1,500,900	518,700	280,300
Liberty Puerto Rico (d)	1,137,700	1,137,700	480,500	905,600	235,200	434,300	236,100	1,022,600
Total	7,848,500	7,398,900	3,204,600	6,186,300	1,951,000	2,763,900	1,471,400	4,451,300

(a) RGU balances do not include 58,600 RGUs that, due to the impact of COVID-19, have not been disconnected in accordance with our normal disconnect policy for non-payment and continue to receive services.

(b) During the fourth quarter of 2020, we announced that we would shut down our DTH operations in Panama, which went into effect in January 2021, and as such, the associated customer relationships and RGUs are no longer included in our subscriber count.

(c) Our homes passed in Costa Rica include 40,000 homes on a third-party network that provides us long-term access.

(d) On October 31, 2020, we closed the AT&T Acquisition at which point Liberty Puerto Rico began to provide mobile services. Mobile subscriber information associated with the AT&T Acquisition is preliminary and subject to adjustment until we have completed our review of such information and determined that it is presented in accordance with our policies. RGU balances do not include 11,200 fixed RGUs representing customers that, due to the impact of COVID-19, have not been disconnected in accordance with our normal disconnect policy for non-payment and were moved to an "essential services plan", a basic service plan.

(d) Mobile subscribers comprise the following:

	Prepaid	Postpaid	Total
C&W Caribbean and Networks:			
Jamaica	970,000	22,300	992,300
The Bahamas	150,800	30,300	181,100
Barbados	88,400	30,200	118,600
Other	346,500	48,000	394,500
Total C&W Caribbean and Networks	1,555,700	130,800	1,686,500
C&W Panama (a)	1,338,900	123,000	1,461,900
Total C&W	2,894,600	253,800	3,148,400
VTR	11,300	269,000	280,300
Liberty Puerto Rico (b)	239,000	783,600	1,022,600
Total	3,144,900	1,306,400	4,451,300

(a) RGU balances do not include 12,400 mobile subscribers that, due to the impact of COVID-19, have not been disconnected in accordance with our normal disconnect policy for non-payment and continue to receive services.

(b) Postpaid mobile subscribers include 126,800 Corporate Responsible Users (**CRU**). A CRU represents an individual receiving mobile services through an organization that has entered into a contract for mobile services with us and the organization is responsible for the payment of the CRU's mobile services. Mobile subscriber information associated with the AT&T Acquisition is preliminary and subject to adjustment until we have completed our review of such information and determined that it is presented in accordance with our policies.

Operating Data Glossary

Customer Relationships – The number of customers who receive at least one of our video, internet or telephony services that we count as RGUs, without regard to which or to how many services they subscribe. To the extent that RGU counts include equivalent billing unit ("**EBU**") adjustments, we reflect corresponding adjustments to our customer relationship counts. For further information regarding our EBU calculation, see Additional General Notes below. Customer relationships generally are counted on a unique premises basis. Accordingly, if an individual receives our services in two premises (e.g., a primary home and a vacation home), that individual generally will count as two customer relationships. We exclude mobile-only customers from customer relationships.

Homes Passed – Homes, residential multiple dwelling units or commercial units that can be connected to our networks without materially extending the distribution plant. Certain of our homes passed counts are based on census data that can change based on either revisions to the data or from new census results.

Internet (Broadband) RGU – A home, residential multiple dwelling unit or commercial unit that receives internet services over our network.

Mobile Subscribers – Our mobile subscriber count represents the number of active subscriber identification module ("**SIM**") cards in service rather than services provided. For example, if a mobile subscriber has both a data and voice plan on a smartphone this would equate to one mobile subscriber. Alternatively, a subscriber who has a voice and data plan for a mobile handset and a data plan for a laptop (via a dongle) would be counted as two mobile subscribers. Customers who do not pay a recurring monthly fee are excluded from our mobile telephony subscriber counts after periods of inactivity ranging from 30 to 60 days, based on industry standards within the respective country. In a number of countries, our mobile subscribers receive mobile services pursuant to prepaid contracts.

Revenue Generating Unit (RGU) – RGU is separately a video RGU, internet RGU or telephony RGU. A home, residential multiple dwelling unit, or commercial unit may contain one or more RGUs. For example, if a residential customer in Chile subscribed to our video service, fixed-line telephony service and broadband internet service, the customer would constitute three RGUs. RGUs are generally counted on a unique premises basis such that a given premises does not count as more than one RGU for any given service. On the other hand, if an individual receives one of our services in two premises (e.g., a primary home and a vacation home), that individual will count as two RGUs for that service. Each bundled video, internet or telephony service is counted as a separate RGU regardless of the nature of any bundling discount or promotion. Non-paying subscribers are counted as RGUs during their free promotional service period. Some of these subscribers may choose to disconnect after their free service period. Services offered without charge on a long-term basis (e.g., VIP subscribers or free service to employees) generally are not counted as RGUs. We do not include subscriptions to mobile services in our externally reported RGU counts. In this regard, our RGU counts exclude our separately reported postpaid and prepaid mobile subscribers.

SOHO - Small office/ home office customers.

Telephony RGU – A home, residential multiple dwelling unit or commercial unit that receives voice services over our network. Telephony RGUs exclude mobile subscribers.

Two-way Homes Passed – Homes passed by those sections of our networks that are technologically capable of providing two-way services, including video, internet and telephony services.

Video RGU – A home, residential multiple dwelling unit or commercial unit that receives our video service over our network primarily via a digital video signal while subscribing to any recurring monthly service that requires the use of encryption-enabling technology. Video RGUs that are not counted on an EBU basis are generally counted on a unique premises basis. For example, a subscriber with one or more set-top boxes that receives our video service in one premises is generally counted as just one RGU.

Additional General Notes:

Most of our operations provide telephony, broadband internet, data, video or other B2B services. Certain of our B2B service revenue is derived from SOHO customers that pay a premium price to receive enhanced service levels along with video, internet or telephony services that are the same or similar to the mass marketed products offered to our residential subscribers. All mass marketed products provided to SOHO customers, whether or not accompanied by enhanced service levels and/or premium prices, are included in the respective RGU and customer counts of our operations, with only those services provided at premium prices considered to be "SOHO RGUs" or "SOHO customers." To the extent our existing customers upgrade from a residential product offering to a SOHO product offering, the number of SOHO RGUs and SOHO customers will increase, but there is no impact to our total RGU or customer counts. With the exception of our B2B SOHO customers, we generally do not count customers of B2B services as customers or RGUs for external reporting purposes.

Certain of our residential and commercial RGUs are counted on an EBU basis, including residential multiple dwelling units and commercial establishments, such as bars, hotels, and hospitals, in Chile and Puerto Rico. Our EBUs are generally calculated by dividing the bulk price charged to accounts in an area by the most prevalent price charged to non-bulk residential customers in that market for the comparable tier of service. As such, we may experience variances in our EBU counts solely as a result of changes in rates.

While we take appropriate steps to ensure that subscriber and homes passed statistics are presented on a consistent and accurate basis at any given balance sheet date, the variability from country to country in (i) the nature and pricing of products and services, (ii) the distribution platform, (iii) billing systems, (iv) bad debt collection experience and (v) other factors add complexity to the subscriber and homes passed counting process. We periodically review our subscriber and homes passed counting policies and underlying systems to improve the accuracy and consistency of the data reported on a prospective basis. Accordingly, we may from time to time make appropriate adjustments to our subscriber and homes passed statistics based on those reviews.

Fixed Network and Product Penetration Data (%)

	Panama	Jamaica	The Bahamas	Trinidad and Tobago	Barbados	Other C&W	Chile	Costa Rica	Puerto Rico
Network data:									
Two-way homes passed (1)	100 %	100 %	100 %	100 %	100 %	94 %	89 %	99 %	100 %
Homes passed:									
Cable (2)	59 %	45 %	31 %	100 %	— %	68 %	96 %	97 %	98 %
FTTx (2)	24 %	14 %	35 %	— %	100 %	12 %	4 %	3 %	2 %
VDSL (2)	16 %	41 %	34 %	— %	— %	20 %	— %	— %	— %
Product penetration:									
Television (3)	13 %	21 %	6 %	32 %	24 %	23 %	28 %	33 %	21 %
Broadband internet (4)	23 %	42 %	22 %	42 %	49 %	57 %	38 %	34 %	38 %
Fixed-line telephony (4)	23 %	40 %	28 %	26 %	51 %	38 %	15 %	3 %	21 %
Double-play (5)	42 %	38 %	52 %	9 %	32 %	32 %	36 %	51 %	11 %
Triple-play (5)	39 %	38 %	21 %	51 %	40 %	14 %	29 %	7 %	39 %

(1) Percentage of total homes passed that are two-way homes passed.

(2) Percentage of two-way homes passed served by a cable, fiber-to-the-home/-cabinet/-building/-node (**FTTx**) or digital subscriber line (**DSL**) network, as applicable. "**VDSL**" refers to both our DSL and very high-speed DSL technology networks.

(3) Percentage of total homes passed that subscribe to television services.

(4) Percentage of two-way homes passed that subscribe to broadband internet or fixed-line telephony services, as applicable.

(5) Percentage of total customers that subscribe to two services (double-play customers) or three services (triple-play customers) offered by our operations (video, broadband internet and fixed-line telephony), as applicable.

Video, Broadband Internet & Fixed-Line Telephony and Mobile Services

	Panama	Jamaica	The Bahamas	Trinidad and Tobago	Barbados	Other C&W	Chile	Costa Rica	Puerto Rico
Video services:									
Network System (1)	VDSL/HFC/FTTx	VDSL/HFC/FTTx	VDSL/FTTx	HFC	FTTx	VDSL/HFC/FTTx	HFC/FTTx	HFC/FTTx	HFC / FTTx
Broadband internet service:									
Maximum download speed offered (**Mbps**)	600	150	300	500	1,000	100 (2)	600	200	500
Mobile services:									
Network Technology (3)	LTE	LTE	LTE	—	LTE	LTE / HSPA+	LTE	—	5G

(1) These are the primary systems used for delivery of services in the countries indicated. "**HFC**" refers to hybrid fiber coaxial cable networks.

(2) Represents an average as speeds vary by market.

(3) Fastest available technology. "**LTE"** refers to the Long Term Evolution Standard. "**HSPA+**" refers to Evolved High Speed Packet Access.

Products and Services

We offer our customers a comprehensive set of converged mobile, broadband, video and fixed-line telephony services. In the table below, we identify the services we offer in each of the countries in the Caribbean and Latin America where we have operations.

	Mobile	Broadband internet	Video	Fixed-line telephony
C&W:				
Anguilla	X	X	X	X
Antigua & Barbuda	X	X	X	—
Barbados	X	X	X	X
Bonaire	X	—	—	—
British Virgin Islands	X	X	X	X
Cayman Islands	X	X	X	X
Curaçao	X	X	X	X
Dominica	X	X	X	X
Grenada	X	X	X	X
Jamaica	X	X	X	X
Montserrat	X	X	—	X
Saba	X	—	—	—
St. Eustatius	X	—	—	—
St. Maarten	X	X	—	—
St. Martin	X	—	—	—
St. Kitts & Nevis	X	X	X	X
St. Lucia	X	X	X	X
St. Vincent & the Grenadines	X	X	X	X
The Bahamas	X	X	X	X
Trinidad and Tobago	—	X	X	X
Turks & Caicos	X	X	X	X
Panama	X	X	X	X
VTR/Cabletica:				
Chile	X	X	X	X
Costa Rica	—	X	X	X
Puerto Rico	X	X	X	X

We believe that our ability to offer our customers greater choice and selection in bundling their services enhances the attractiveness of our service offerings, improves customer retention, minimizes churn and increases overall customer lifetime value.

Residential Services

Mobile Services. We offer mobile services throughout most of our operating footprint. We are a mobile network provider, delivering high-speed services in Puerto Rico, Panama and all but one of our Caribbean markets, but excluding Costa Rica. In Chile, we provide mobile services as an MVNO, where VTR leases a third-party's radio access network. As a mobile network provider, we are able to offer a full range of voice and data services, including value-added services. Where available, we expect our mobile services will allow us to provide an extensive converged product offering with video, internet and fixed-line telephony, allowing our customers connectivity in and out-of-the-home. We hold spectrum licenses as a mobile network provider, with terms typically ranging from 10 to 15 years across our C&W markets. In Puerto Rico, spectrum licenses are typically held for perpetuity with the exception of CBRS spectrum which has a term of 10 years.

Subscribers to our mobile services pay varying monthly fees depending on whether the mobile service is bundled with one of our other services or includes mobile data services over their phones, tablets or laptops. Our mobile services are available on a postpaid or prepaid basis. We offer our customers the option to purchase mobile handsets with purchase terms typically related to whether the customer selects a prepaid or postpaid plan. Customers selecting a prepaid plan or service pay in advance for a pre-determined amount of airtime and/or data and generally do not enter into a minimum contract term. Customers subscribing to a postpaid plan generally enter into contracts ranging from 12 to 24 months. The long-term contracts are often taken with a subsidized mobile handset. Our mobile services include voice, SMS and internet access via data plans.

Broadband Internet Services. To support our customers' expectations for seamless connectivity, we are expanding our networks to make ultrafast broadband available to more people. This includes investment in the convergence of our fixed and mobile data systems and making wireless systems available in the home. During 2020, our Network Extension programs (as defined and described below) passed approximately 387,000 homes across Liberty Latin America. We provide next generation WiFi and telephony gateway products to our subscribers. These products enable us to maximize the impact of our ultrafast broadband networks by providing reliable wireless connectivity anywhere in the home. These gateway products can be self-installed and have an automatic WiFi optimization function, which selects the best possible wireless frequency.

The internet speeds we offer are one of our differentiators, as customers spend more time streaming video and other bandwidth-heavy services on multiple devices. As a result, we are continuing to invest in additional bandwidth and technologies to increase internet speeds throughout our Latin America and Caribbean footprint. We plan to continue the upgrade and expansion of our fixed networks so that we can deploy high-speed internet service to additional customers in the coming years.

Our residential subscribers access the internet via DSL over our fixed-line telephony networks, FTTx or hybrid fiber coaxial cable networks and with cable modems connected to their internet capable devices, including personal computers, or wirelessly via next generation WiFi and telephony gateway products. In each of our markets, we offer multiple tiers of internet service. The speed of service depends on location and the tier of service selected by our subscribers.

Our value-added services include security measures and online storage. Mobile broadband internet services are also available through our mobile services described above. Subscribers to our internet service pay a monthly fee based on the tier of service selected. In addition to the monthly fee, customers pay an activation service fee upon subscribing to an internet service. This one-time fee may be waived for promotional reasons. We determine pricing for each different tier of internet service through an analysis of speed, market conditions and other factors.

Video Services. We offer video services in Puerto Rico, Chile, Costa Rica, and in most of C&W's residential markets. To meet the demands of our customers, we have enhanced our video services with next generation, market-leading digital television platforms that enable our customers to control when and where they watch their programming. These advanced services are delivered over our FTTx, VDSL and hybrid fiber coaxial cable networks and include a digital video recorder (**DVR**), a video-on-demand (**VoD**) offering and an advanced electronic programming guide. In most of our markets, customers can pause their programming while a live broadcast is in progress as well as access a selection of channels and VoD content through a mobile application. We have also launched "Replay TV" in many of our markets. Replay TV allows a viewer to watch a TV program from the beginning after it has started or has concluded.

In Chile, our TV Everywhere app (branded "VTR Play") extends the advanced video viewing experience to connected devices beyond the set-top box, including mobile phones and tablets. In our Caribbean video markets and Panama, we offer a comprehensive internet streaming video service (branded "**Flow ToGo**" and "**+TV Go**") that allows our video customers to stream an increasing number of channels with a broadband connection in and out of the home and on multiple devices. In Puerto Rico, our video customers can watch their favorite channels on the TiVO serviced Liberty Go app as well as access over 65 applications from content providers to watch streamed linear and VoD programming by authenticating as a Liberty Puerto Rico customer.

Our operations with video services offer multiple tiers of digital video programming starting with a basic video service. In addition, subscribers have the option to select extended and/or premium subscription tiers. Fixed digital video services require a set-top box provided by us that also enables access to enhanced features such as VoD. Subscribers to our basic digital video services pay a fixed monthly fee and generally can elect to receive, in most of our markets, a skinny entry tier or a basic tier, including a number of high definition (**HD**) channels. We also offer a variety of premium packages combining linear channels and VoD. In the few markets where our analog service is still available, including Costa Rica, subscribers to that service typically receive fewer channels than subscribers to our digital services, with the number of channels dependent on their location. Subscribers to our digital services in each case receive the channels available through our analog service. In all of our video operations, we continue to upgrade our systems to expand our digital services and encourage our remaining analog subscribers to convert to a digital or premium digital service. Discounts to our monthly service fees are generally available to a subscriber who selects a bundled service of at least two of the following services: video, internet and fixed-line telephony.

We tailor our video services in each country of operation based on local preferences, culture, demographics and local regulatory requirements. Our channel offerings include the most relevant content to our subscribers, combining general entertainment, sports, movies, documentaries, lifestyle, news, adult, children and foreign channels, as well as local, regional and international broadcast networks. We also operate several channels in the Caribbean, including a leading Caribbean sports network, Flow Sports, and through a consolidated joint venture, RUSH, the channel operating the rights to broadcast the Premier League across the Caribbean (excluding Puerto Rico).

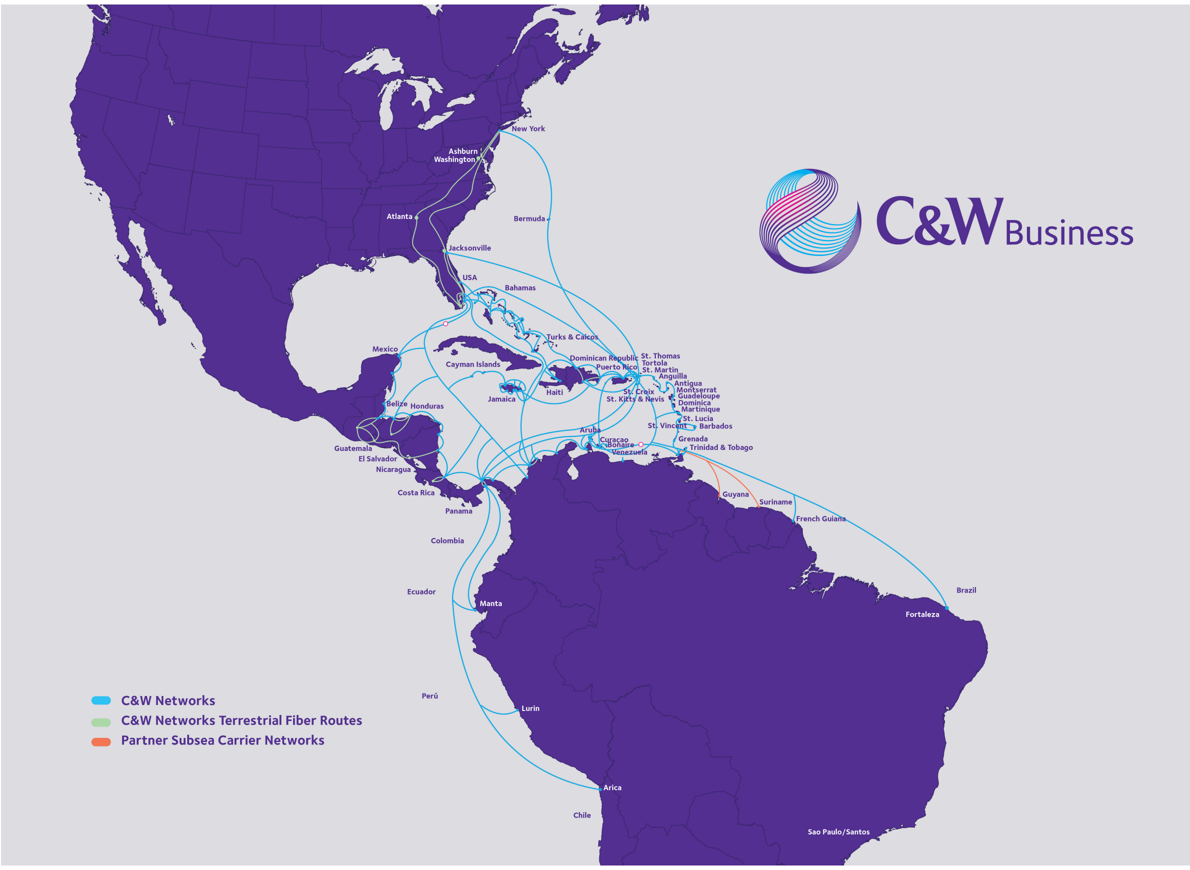
Telephony Services. C&W is the incumbent fixed-line telephony service provider in most of its residential markets. VTR is the second largest residential fixed-line telephony operator, and a leading provider within its footprint. LCPR and Cabletica also offer telephony services over their respective cable networks.

We offer multi-feature telephony service over our various fixed networks, including cable, FTTx and copper networks. Depending on location, these services are provided via either circuit-switched telephony or voice-over-internet-protocol (**VoIP**) technology. As we continue to develop and invest in new technologies that will enhance our customers' experiences, we are replacing obsolete switches with VoIP technology and older copper networks with modern fiber optics. These digital telephony services cover international and domestic services.

Business Services

C&W is one of the largest business service providers in its markets, and business services represent a significant portion of C&W's revenue. We offer cloud-based integrated communication services, connectivity and wholesale solutions to carriers and businesses throughout the Caribbean and in parts of Latin America via our subsea and terrestrial fiber optic cable networks. Our systems include long-haul terrestrial backbone and metro fiber networks that provide access to major commercial zones, wireless carrier cell sites and customers in key markets within our operating footprint. Our networks deliver critical infrastructure for the transit of growing traffic from businesses, governments and other telecommunications operators across the region, particularly to the high-traffic destination of the United States.

Below is a map of our subsea fiber network.



With over 50,000 km of fiber optic cable, and a capacity of over 3 terabits per second (**Tbps**), C&W is able to carry large volumes of voice and data traffic on behalf of our customers, businesses and carriers. C&W's networks also allow us to provide point-to-point, clear channel wholesale broadband capacity services and IP transit, superior switching and routing capabilities and local network services to telecommunications carriers, internet service providers (**ISPs**) and large corporations. In the case of outages on portions of the cable systems, our network provides inbuilt resiliency through our traffic re-routing capability. C&W has received recognition for its wholesale services. In 2020, C&W was recognized by Frost & Sullivan with the Latin American and Caribbean Hosted IP Telephony and UCaaS Growth Excellence Frost Radar Award. Our C&W Caribbean and Networks business was named the Best Marketing Team and Best Social Media Campaign at the 2020 Global Carrier Awards. We hold several notable certifications, including the International ISO 27001 Certification, which reinforces the commitment to customer data safety, as well as CISCO Cloud and Managed Services Partner Master Certification, along with several others such as SOC 1 Type 2 and SOC 2 Type 2 attestations and PCI-DSS for select services.

We also provide services to business customers across various segments, from small and medium businesses to larger corporate and enterprise organizations including multi-national companies and governments. We work with our business customers to customize the information and communication services they require. We target specific industry segments, such as financial institutions, the hospitality sector, education institutions and government ministries and agencies. We have agreements to provide our services over fully managed and monitored network bandwidth, dedicated fiber lines and third-party fiber networks. We offer tailored solutions that combine our standard services with value-added features, such as dedicated customer care and enhanced service performance monitoring, to meet specific customer requirements. Our business products and services include voice, broadband, enterprise-grade connectivity, network security, unified communications and a range of cloud based IT solutions, such as Infrastructure as a Service (**IaaS**), disaster recovery and other service offerings. We also offer a range of data, voice and internet services to carriers, ISPs and mobile operators. Our extensive fiber optic cable networks allow us to typically deliver redundant, end-to-end connectivity. Our networks also allow us to provide business customers our services over fiber lines and local networks; thereby, seamlessly connecting businesses anywhere in the region. We continuously enhance our capabilities and offerings to be the preferred provider for the business market.

Our business services fall into five broad categories:

- VoIP and circuit-switch telephony, on-premise and hosted private branch exchange solutions and conferencing options, hosted contact center solutions;
- Data services for internet access, virtual private networks, high capacity point-to-point, point-to-multi-point and multi-point-to-multi-point services, managed networking services such as wide area networks and WiFi networks;
- Wireless services for mobile voice and data;
- Interactive TV service with specialized channel lineups for targeted industries; and
- Value added services, including cloud IT services such as disaster recovery as a service, backup services, and IaaS; managed network security services; and specialized services such as digital signage, retail analytics and location based marketing.

The extensive reach of our network and assets, as well as our comprehensive set of capabilities positions us to meet the needs of carriers, businesses and government customers that are searching for a capable, progressive provider to manage their ever more complex communications, connectivity and information technology needs.

Technology

In many of our markets, we transmit our broadband internet, video and fixed-line telephony services over a hybrid fiber coaxial (**HFC**) cable network, and increasingly through FTTx networks. An HFC network consists primarily of fiber networks that we connect to the home over the last few hundred meters by coaxial cable and an FTTx network uses fiber-to-the-home/-cabinet/-building/-node. In several of our Caribbean markets, we transmit our services over a fixed network consisting of FTTx, VDSL or DSL copper lines. Approximately 95% of our networks allow for two-way communications and are flexible enough to support our current services as well as new services.

We closely monitor our network capacity and customer usage. We continue to take actions and explore improvements to our technologies that will increase our capacity and enhance our customers' connected entertainment experience. These actions include:

- recapturing bandwidth and optimizing our networks by:
  - increasing the number of nodes in our markets;
  - increasing the bandwidth of our hybrid fiber coaxial cable networks;
  - converting analog channels to digital;
  - bonding additional data over cable service interface specification (**DOCSIS**) 3.0 channels;
  - deploying VDSL over our fixed telephony network;
  - replacing copper lines with modern optic fibers; and
  - using digital compression technologies.
- freeing spectrum for high-speed internet, VoD and other services by encouraging customers to move from analog to digital services;
- increasing the efficiency of our networks by moving headend functions (encoding, transcoding and multiplexing) to cloud storage systems;
- enhancing our network to accommodate further business services;
- using our wireless technologies to extend services outside of the home;
- offering remote access to our video services through laptops, smart phones and tablets;
- expanding the availability of next generation decoder and set-top boxes and related products, as well as developing and introducing online media sharing and streaming or cloud-based video; and
- testing new technologies.

We are engaged in network extension and upgrade programs across Liberty Latin America. We collectively refer to these network extension and upgrade programs as the "Network Extensions." Through the Network Extensions, we continue to expand our fixed networks pursuant to which we pass or upgrade homes and businesses with our broadband communications network. In addition, we look for mobile service opportunities where we have established cable networks and have expanded our fixed-line networks where we have a strong mobile offering. This will allow us to offer converged fixed-line and mobile services to our customers.

We deliver high-speed data and fixed-line telephony over our various fixed networks, including cable, FTTx and copper networks. These networks are further connected via our subsea and terrestrial fiber optic cable networks that provide connectivity within and outside the region. Our subsea network cables terminating in the United States carry over 3 Tbps, which represent less than 10% of their potential capacity based on current deployed technology, presenting us with significant growth opportunities. In Puerto Rico, our network includes a fiber ring around the island that provides enhanced interconnectivity points to the island's other local and international telecommunications companies.

As noted above, we operate one of the largest subsea fiber networks in the region and our systems include long-haul terrestrial backbone and metro fiber networks that provide access to major commercial zones, wireless carrier cell sites and customers in key markets within our operating footprint. For more information about our subsea network, see —*Business Services* above.

Mobile

We operate mobile networks in all of our consumer markets except Chile (where we operate as an MVNO), Costa Rica and Trinidad & Tobago. Our networks deliver high-speed services across our markets, with approximately 95% LTE population coverage. Our primary wireless networks use GSM/EDGE, 3G and 4G LTE technologies, which we offer in most of the countries where we operate. We aim to increase the speed of transmission of our data services and have been expanding our 3G and 4G LTE coverage. We transmit wireless calls and data through radio frequencies that we use under spectrum licenses. We have a diversified portfolio of frequencies which support 3G, 4G and 5G (Puerto Rico & USVI only) technologies. While spectrum is a limited resource, and, as a result, we may face spectrum and capacity constraints on our wireless network in certain countries. We believe our current spectrum portfolio will allow us to meet subscribers' needs in the coming years and minimal further investment, although we will continue to evaluate our need to acquire additional frequencies to supplement our existing spectrum portfolio. For example, in 2020, we acquired CBRS (3.5 GHz) spectrum in Puerto Rico and the USVI in the auction for that frequency. In Puerto Rico and USVI the 700 MHz FirstNet (Band 14) is usable by us (when not occupied by first responders' traffic) but owned by AT&T and the First Responders Public Private Partnership.

We continue to invest significant capital in expanding our network capacity and reach and to address spectrum and capacity constraints on a market-by-market basis. Our prime 5G deployed market is Puerto Rico and USVI where over 90% of the population is served by our 5G capable network. We continually look for opportunities to expand our 5G footprint to other countries where a positive business case exists. Similarly, we are investing to build a new mobile core in Puerto Rico, which when built, will be virtualized, redundant and "pooled" across all our countries/islands in the Caribbean region (inside and outside hurricane regions) to provide redundancy and resilience. These pooled and redundant network elements will be connected by our owned and operated diverse submarine cable routes with automatic alternate routing. Across all our mobile operations we continually strive to improve our network performance by commissioning annual competitive performance benchmarking studies and undertaking customer experience improvement programs. In Puerto Rico and the USVI, we are a part of the national US Firstnet (Emergency/First Responders) network, which necessitates above-average network resilience and other customer performance requirements, subject to governmental penalties for non-compliance.

Supply Sources

Content

With telecommunication companies increasingly offering similar services, content is one of the drivers for customers in selecting a provider of video, broadband and/or wireless services. Therefore, in addition to providing products that allow our customers to consume content whenever and wherever they want, we continue to invest into content that matters the most to our customers. Our programming strategy is based on:

- product (enabling access through home and mobile screens at anytime, including live, restart, catch-up, personal recording, on-demand and third party apps);
- proposition (exceeding our customers' expectations on content and entertainment by offering access to the wider range of channels and third party app services);
- acquisition (investment in the most relevant channels, sports and on-demand); and
- partnering (alliances with content partners and leading distributors to aggregate the best linear, non linear and third party apps content).

Except for Flow Sports and Flow 1 services in the Caribbean, and the RUSH sports channel operated by a consolidated joint venture with the Digicel Group, we license almost all of our programming and on-demand content through distribution agreements with third-party content providers, including broadcasters and leading cable networks. For such licenses, we generally pay a monthly fee on a per subscriber basis, through long-term programming licenses. In our distribution agreements, we seek to include the rights to offer the licensed channels and programming to our authenticated customers through multiple delivery platforms including through our apps for IP-connected mobile and fixed devices, and our websites. We also acquire rights to make available, in selected markets, our and third party video services to mobile and/or broadband subscribers that are not subscribers to fixed TV services.

With respect to rights for the sports and entertainment services we operate directly or in a joint-venture in the Caribbean, we seek to license the most locally relevant sports content, such as the English Premier League, UEFA Champions League and Bundesliga soccer, Indian Premier League cricket, and WWE Wrestling. Our latest video device that is distributed to a growing number of markets, including Puerto Rico, Chile and Panama, also enables our customers to access, through its App Store, leading subscription video on demand (**SVOD**) services such as Netflix, HBOMax and Amazon Prime Video.

Mobile Handsets and Customer Premises Equipment

We use a variety of suppliers for mobile handsets to offer our customers mobile services. For other customer premises equipment, we purchase from a number of different suppliers and regularly assess production lead times to ensure supply continuity and implement dual sourcing strategies to mitigate further risks when applicable. Customer premises equipment includes set-top boxes, modems, WiFi routers, extenders and similar devices. For each type of equipment, we retain specialists to provide customer support. For our broadband services, we use a variety of suppliers for our network equipment and the various services we offer.

Software Licenses

We license software products, including email and security software as well as content, such as news feeds, from several suppliers for our internet services and internal IT platforms. The agreements for these products require us to pay a per subscriber fee or a one-off software license fee and a share of advertising revenue for content licenses. For our mobile network operations and our fixed-line telephony services, we license software products, such as voicemail, text messaging and caller ID, from a variety of suppliers. For these licenses we seek to enter into long-term contracts, which generally require us to pay based on usage of the services.

Access Arrangements

For our mobile services provided through MVNO arrangements at VTR, we are dependent on third-party wireless network providers, with whom we contract to carry the mobile communications traffic of our customers. We seek to enter into medium to long-term arrangements for this service. Any termination of these arrangements could significantly impact our mobile services provided through VTR.

Regulatory Matters

Video distribution, broadband internet, fixed-line telephony and mobile businesses are regulated in each of the markets in which we operate, and the scope of regulation varies from market to market. Adverse regulatory developments could subject our businesses to a number of risks. Regulation, including conditions imposed on us by competition or other authorities as a requirement to close acquisitions or dispositions, could limit growth, revenue and the number and type of services offered and could lead to increased operating costs and property and equipment additions. In addition, regulation may restrict our operations and subject them to further competitive pressure, including pricing rules and restrictions, interconnect and other access obligations, and restrictions or controls on content, including content provided by third parties. Failure to comply with current or future regulation could expose our businesses to various penalties.

C&W Caribbean and Networks

The video, broadband, telephony and mobile services provided by C&W Caribbean and Networks are subject to regulation and enforcement by various governmental and regulatory entities in each of the jurisdictions where such services are provided. The scope and reach of these regulations are distinct in each market. Generally, C&W Caribbean and Networks provides services in accordance with licenses and concessions granted by national authorities pursuant to national telecommunication legislation and associated regulations. Certain of these regulatory requirements are summarized below.

As the incumbent telecommunications provider in many of its jurisdictions, C&W Caribbean and Networks is subject to significant regulatory oversight with respect to the provision of fixed-line and mobile telephony services. Generally, in these markets, C&W Caribbean and Networks operates under a government issued license or concession that enables it to own and operate its telecommunication networks, including the establishment of wireless networks and the use of spectrum. These licenses and concessions are typically non-exclusive and have renewable multi-year terms that include competitive, qualitative and rate regulation. Licenses and concessions are scheduled to expire over the next two years in the Cayman Islands and Turks and Caicos Islands. We believe we have complied with all local requirements to have existing licenses renewed and have provided all necessary information to enable local authorities to process applications for renewal in a timely manner. In addition, in some of the ECTEL (as defined below) states we are operating under expired licenses and have applied for renewal of such licenses. We expect that such licenses will be granted or renewed, as applicable, on the same or substantially similar terms and conditions in a timely manner. Pending issuance of new or renewed licenses or concessions, we continue to operate on the same terms and conditions as prior to the licenses expiring.

With respect to licenses for mobile spectrum, the initial grant of the spectrum is sometimes subject to an auction process, but in a number of other cases, the license may be granted on the basis of an administrative process at a set level of fees for a fixed period of time, typically to coincide with carrier licenses, subject to the payment of annual fees and compliance with applicable license requirements. In very rare cases, spectrum previously assigned to C&W Caribbean and Networks may be re-allocated by regulatory authorities to other operators in the market. Alternatively, spectrum sought by C&W Caribbean and Networks may not be available for grant, due to prior historical grants or due to the need to avoid interference with neighboring markets particularly in the Caribbean. By and large, spectrum assignments, once granted, remain unchanged for the duration of a license and beyond.

Rate regulation of C&W Caribbean and Networks' telephony services typically includes price caps that set the maximum rates it may charge to customers, or legislation that requires consent from a regulator prior to any price increases. In addition, all regulators determine and set the rates that may be charged by all telephony operators, including C&W Caribbean and Networks, for interconnect charges, access charges between operators for calls originating on one network that are completed through connections with one or more networks of other providers, and charges for network unbundling services. In addition, in certain markets, regulators set, or are seeking to set, mobile roaming rates. Interconnection rates (and primarily mobile termination and roaming rates) in the telecommunications industry worldwide are decreasing, and we are experiencing this trend towards lower interconnection rates in our markets.

In recent years, a number of markets in which C&W Caribbean and Networks operates have demonstrated an increased interest in regulating various aspects of broadband internet services due to the increasing importance of high speed broadband. National regulators have also demonstrated an increased focus on the issues of network resilience, broadband affordability and penetration, quality of services and consumer rights.

Certain regulators are also seeking to mandate third-party access to C&W Caribbean and Networks' network infrastructure, including dark fiber and landing stations, as well as to regulate wholesale services and prices. Any such decision and application to grant access to our network infrastructure may strengthen our competitors by granting them the ability to access our network to offer competing products and services without making the corresponding capital intensive infrastructure investment. In addition, any resale access granted to competitors on favorable economic terms that are not set by the free market could adversely impact our ability to maintain or increase our revenue and cash flows. The extent of any such adverse impacts ultimately will be dependent on the extent that competitors take advantage of the resale access ultimately afforded to our network, the pricing mandated by regulatory authorities and other competitive factors or market developments.

As an example of infrastructure sharing, the Office of Utilities Regulation (**OUR**) in Jamaica has completed a consultation process on telecom facilities sharing rules that would require all licensees to share infrastructure (including dark fiber, ducts, subsea cable landing stations and mobile network towers) with third parties, including competitors, without any requirement of making a corresponding capital intensive infrastructure investment. Once the rules are finalized by the Chief Parliamentary Counsel in Jamaica, they will be formally published and thereafter become law. Our operations in Jamaica intend to appeal to the telecommunications tribunal and finally to the courts for changes to be made to the adverse provisions of the new rules or to revoke them entirely. The process of such a challenge is likely to be long and we cannot at this time determine the possibility of a successful outcome.

In addition, the Eastern Caribbean Telecommunications Authority (**ECTEL**), the regulatory body for telecommunications in five Eastern Caribbean States (Commonwealth of Dominica, Grenada, St. Kitts & Nevis, St. Lucia and St. Vincent and the Grenadines), has adopted an Electronic Communications Bill that may have a material adverse impact on C&W Caribbean, and Networks' operations in the ECTEL member states. The proposed Electronic Communications Bill includes provisions relating to:

- net neutrality principles mandating equal access to all content and applications regardless of the source and without favoring, degrading, interrupting, intercepting, blocking access or throttling speeds;
- subscription television rate regulation;
- regulations implementing market dominance rules;
- network unbundling at regulated rates; and
- mandated unbundled access to all landing station network elements at cost-based rates.

We currently cannot determine the impact these provisions will have on our operations because national regulators are required to conduct extensive market reviews before adopting specific measures and these measures might be reconsidered in accordance with the market reviews. It is currently unclear as to when the new legislation will be enacted. We expect that consensus on the final version of the bill will take some time. As such, the timing and ultimate effect of the bill is unclear.

In addition to rate regulation, several markets in which C&W operates have imposed, or are considering imposing, regulations designed to further encourage competition, including introducing requirements related to unbundling, network access to third parties, and local number portability (**LNP**) for fixed and mobile services. Jurisdictions such as the Bahamas, the Cayman Islands and Jamaica have implemented fixed and mobile LNP and ECTEL has implemented mobile LNP. Other jurisdictions, including Barbados, have considered or begun to implement LNP. Trinidad and Tobago has yet to implement fixed LNP, although mobile LNP rules are already in place.

The pay television service provided in certain C&W markets is subject to, among other things, subscriber privacy regulations, data protection laws and regulations, and the must-carry rule (as defined below) and retransmission consent rights of broadcast stations.

C&W is also subject to universal service obligations in a number of markets. These obligations vary in specificity and extent, but they are generally related to ensuring widespread geographic coverage of networks and that the populations of C&W's individual markets have access to basic telecommunication services at minimum quality standards. In a number of cases, C&W is required to support universal access/service goals through contributions to universal service funds or participate in universal service-related projects. In Panama, there is a proposal to modify the universal service law to expand its scope to include television services and provide conditions that would diminish the value of the contribution to the fund vis-a-vis projects covered by the law. An additional process regarding coverage of maintenance cost of universal service law phones is ongoing.

In addition to the industry-specific regimes discussed above, C&W's operating companies must comply with both specific and general legislation concerning, among other matters, data retention, consumer protection and electronic commerce. These operating companies are also subject to national level regulations on competition and on consumer protection.

In Trinidad and Tobago, C&W was required by the Telecommunications Authority of Trinidad and Tobago (**TATT**), in connection with TATT's approval of C&W's acquisition of Columbus International Inc. in March 2015, to dispose of its 49% shareholding in the Telecommunications Services of Trinidad and Tobago Limited (**TSTT**). The disposal of C&W's stake in TSTT is not complete. We cannot predict when, or if, we will be able to dispose of this investment at an acceptable price. As such, no assurance can be given that we will be able to recover the carrying value of our investment in TSTT.

With respect to C&W's B2B and networks business in Latin America, we are subject to significantly less regulation in the markets in which we operate compared to our residential businesses described above. We do have the licenses in Latin America and the U.S. necessary to operate wholesale and enterprise services in all countries in which we operate. Although the legal framework in Latin America changes from country to country, we do own international/local carrier and Internet or data services licenses in every jurisdiction in which we operate. Most licenses are granted for a 10 to 15 year term.

The networks business operates over 50,000 km of submarine fiber optic cable systems in the U.S., the Caribbean and Latin America. These sub-systems have cable landing stations and facilities in the U.S. and its territories. These facilities are regulated by the Federal Communications Commission (**FCC**), the Department of Homeland Security and other U.S. governmental agencies that impose additional reporting and licensing obligations on C&W Caribbean and Networks.

C&W Panama

C&W Panama is subject to regulatory entities, principally the National Authority of Public Services (**ASEP**), created in 1996 and modified in 2006 through Decree Law No. 10. ASEP regulates and controls the public services for the supply of drinking water, sanitary sewerage, telecommunications and electricity. Also, C&W Panama is subject to the Authority for Consumer Protection and Defense of Competition (**ACODECO**), guarantor of consumer protection and antitrust, which operates under the direction of the Ministry of Commerce and Industries.

By virtue of the Telecommunications Law 1996, public services in Panama are classified as "Type A services" and "Type B services," with Mobile Telephony (STMC) and Personal Communication (PCS) services being classified as Type A services. Spectrum. C&W Panama has a total of 65MHz allocated (20 MHz in the 700 MHz band, 20 MHz in the 1900 MHz band and 25 MHz in the 850 MHz band). Due to COVID-19, ASEP granted temporary use from April 2020 and until June 30th, 2021, free of charge, of 30 MHz to each of the 4 operators, between 1710 – 1780 MHz and 2110 – 2180 MHz (AWS Band).

Concessions. C&W Panama holds thirteen concessions renewed for the following twenty years, available until the year 2037, except a pay TV license that was renewed in 2008 for 25 years. C&W Panama decided not to renew the concessions corresponding to discontinued or not provided services (facsimile retransmission service and conventional trunk systems service for public or private use), and the Concession #104 (Pay Phone Services), was renewed under special conditions imposed by the regulator. C&W Panama was obliged to obtain regulator approval to remove public pay phones in places where the service is no longer exclusive and are not profitable; the service can be provided by any other concessionaires in the territory of Panama. C&W Panama filed a legal action within the Supreme Court of the Republic of Panama, opposing the aforementioned condition imposed by the regulator, however in 2019, the Supreme Court confirmed the obligation to obtain regulator approval and the necessity to define a procedure to formalize each disconnection.

Public Telephone Service. By means of Resolution AN No. 11208-Telco of May 3rd, 2017, renewed for the following twenty years the concession for the Public and Semi-Public Terminal Service (identified with No. 104). C&W Panama is the only operator that provides Public Telephone Service in Panama.

Fixed Services (Fixed-Line Telephony, Public and Semipublic Telephone). C&W Panama has a license to provide Basic Local, National and International Telecommunications Services, as well as Public and Semipublic Terminals and Rental of Dedicated Voice Circuits, within the entire territory of Panama until the year 2037. C&W Panama is a Type B concessionaire, with or without use of radio spectrum, subject to compliance with Law No. 31 of February 8th, 1996, Executive Decree No. 73 of 1997 and the Resolutions issued by the regulator regarding the fulfillment of quality goals for the provision of these services, such as the attention to recommendations issued by the International Telecommunications Union (ITU).

Mobile Services. Through Contract DAF-034-2013, dated November 22nd, 2013, C&W Panama is authorized to install, maintain, manage, operate and commercially exploit the Mobile Telephone Service, in the assigned radio spectrum segments, which currently C&W Panama has 65 MHz (32.5MHz uplink + 32.5MHz downlink), under the prepaid and post-paid contract modalities, public and semi-public telephones, including supplementary services and other Mobile Telephony services, throughout Panama, which is valid until 2037.

Pay Television Service. Initially, the concession for the provision of the pay television service was granted to the International Contact Center Company in 2008, and then the rights were transferred in favor of C&W Panama, whose provision is governed by Law No. 24/99, and its regulations in Executive Decree No. 189/99 and No. 111/00. The license was granted to retransmit audio and video signals through coaxial cable and fiber optics in the province of Panama, with a validity of 25 years, which was later extended to other provinces in the coverage area for the provision of paid TV service.

VTR / Cabletica

VTR

VTR is subject to regulation and enforcement by various governmental entities in Chile including the Chilean Antitrust Authority, the Ministry of Transportation and Telecommunications (the **Ministry**) through the Chilean Undersecretary of Telecommunications (**SubTel**), the National Television Council (**CNTV**) and the National Consumer Service (**SERNAC**).

In addition to the specific regulations described below, VTR.com is subject to certain regulatory conditions which were imposed by the Chilean Antitrust Authority in connection with VTR.com's combination with Metrópolis Intercom SA in April 2005. These conditions are indefinite and include, among others, (i) prohibiting VTR.com and its control group from participating, directly or indirectly through a related person, in Chilean satellite or microwave television businesses, (ii) prohibiting VTR.com from using its market power over programmers without justification, (iii) prohibiting VTR.com from obtaining exclusive broadcast rights, except for specific events, (iv) requiring VTR.com to offer its broadband capacity for resale of internet services on a wholesale basis, and (v) requiring VTR to maintain a uniform single price policy for all of the national territory. In September 2019, VTR submitted a petition to the Chilean Competition Court (**TDLC**) to lift all the above-mentioned conditions. VTR asserts that such conditions should only have been adopted for a transitional period and that they have been in place for an excessively long period during which the market structure and levels of competition have materially changed. Objections were filed by other operators and by the Free Competition Prosecutor and SubTel. In December 2019, the TDLC joined this procedure with an adversarial procedure initiated by AMC Networks Latin America LLC (**AMC**) against VTR. In 2019, AMC alleged that VTR had violated condition (ii) noted above by not agreeing to a content distribution agreement with AMC (see below for more information regarding this matter). We can't estimate at this time when this matter will be resolved.

Video. The provision of pay television services requires a permit issued by the Ministry. Cable pay television permits are granted for an indefinite term and are non-exclusive. As these permits do not involve radio electric spectrum, they are granted without ongoing duties or royalties. VTR.com has permits to provide cable pay television services in most of the medium- and large-sized markets in Chile.

Cable television service providers in Chile are free to define the channels and content included in their services and are not required to carry any specific programming, except as described below. However, CNTV may impose sanctions on providers who are found to have run programming containing excessive violence, adult content or other objectionable programming or advertising of certain categories of products within certain time slots throughout the day. Pay television operators are directly responsible for violation of such prohibitions. Additionally, the Chilean Television Act (the **Television Act**) requires pay television operators to offer a certain quota of cultural content and to distribute public interest campaigns.

The Television Act establishes a retransmission consent regime between broadcast television concession holders and pay television operators. This regime provides that once a broadcast operator achieves digital coverage of 85% of the population within its concession areas, the broadcast operator may require that pay television operators enter into an agreement for the retransmission of its digital signal. In addition, the Television Act requires that the technical or commercial conditions imposed by broadcast operators not discriminate among pay television operators. Also, the Television Act establishes a must carry regime requiring pay television operators to distribute up to four local broadcast television channels in each operating area. The channels that must be carried by any particular pay television operator are to be selected by CNTV. The full implementation of the retransmission and must carry regimes are still pending.

VTR.com's ability to change its channel lineup is restricted by an agreement reached with SERNAC in July 2012 and the general regulation established by SubTel in February 2014 (by the Telecommunication Services General Rulemaking). This framework allows VTR.com to change one or more channels from its lineup after a 60-day notice period to its subscribers. In such cases, VTR.com shall offer a channel of similar content and quality or proportional compensation. Despite this, TVI, a mid-sized programmer in Chile, sued VTR in July 2016, after VTR's decision to remove TVI's channels from its channel lineup. TVI argued that VTR was violating the condition set out in the 2005 VTR/Metrópolis merger conditions (as summarized above), which prohibits VTR from using its market power to unjustifiably refuse to contract with programmers. The TDLC dismissed the lawsuit, but the Supreme Court, in May 2019, reversed that decision questioning the termination procedure applied by VTR. The Supreme Court required VTR to open a new negotiation period and if no agreement was reached, to return TVI's channels until the original contractual term is fulfilled. As a result, the TVI channels have been reinstated on VTR's channel lineup. Using the precedent from the TVI case, in August 2019, AMC sued VTR claiming a breach of the condition related to contracting with programmers. This process is still pending and was joined with VTR's petition to lift the 2005 merger conditions as described above. Additionally, a consumer association filed a class action against VTR requesting that VTR compensate clients with a permanent discount on the monthly rent for each change of channels or, in the alternative, the nullification of the power enshrined in VTR's subscriber contract that authorizes the company to change its channel lineup. This collective process is still pending.

Internet. A law passed in November 2017 requires all ISPs to apply for a public service concession for data transmission within three months of the passage of such law. Because VTR.com operates via networks that were previously approved by SubTel, VTR.com timely applied and an approval is pending.

A law on internet neutrality prohibits "arbitrary blockings" of legal content, applications or services and the provision of differentiated service conditions according to the origin or ownership of the content or service provided through the internet. Additionally, the law authorizes ISPs to take measures to ensure the privacy of their users and provide virus protection and safety processes over their network, as long as these measures do not infringe antitrust laws. Additional measures have been implemented, including obligations related to consumer information, traffic management policies, internet quality of service requirements and notices required by law concerning the effective maximum and minimum traffic speeds offered under internet access plans.

In order to protect the constitutional rights of privacy and safety of communications, ISPs are prohibited from undertaking surveillance measures over data content on their networks. Also, special summary proceedings have been created in order to safeguard intellectual property rights against violations committed through networks or digital systems. These proceedings include measures designed to withdraw, disqualify or block infringing content in the ISP's network or systems. The law also provides for the right of intellectual property owners to judicially request from ISPs the delivery of necessary information to identify the provider of infringing content.

A law passed in November 2017 requires all fixed and mobile ISPs to meet levels of quality of service, guarantee a minimum broadband throughput based on the offered speed, and provide their subscribers with a certified measurement tool allowing subscribers to verify this minimum service level, imposing fines or penalties to ISPs if the service level is not fulfilled. During 2020, the Ministry issued the Regulation on the Organization, Operation, and Public Tender Mechanism of the

Independent Technical Body (**OTI**) which, according to this legal framework, will be responsible for performing the quality-of-service measurements. Also, SubTel issued a technical rule on the service levels that ISPs need to comply with in the provision of their internet service. Finally, as required by the above regulation, major ISPs organized a Representative Committee and filed before SubTel a proposal of the terms and conditions of the public tender to designate the OTI (which is not approved by Subtel yet).

Fixed-Line Telephony and Mobile Services. The provision of fixed-line telephony and mobile services requires a public telecommunications service concession. VTR has concessions to provide fixed-line telephony in most major and medium-sized markets in Chile. Telephony concessions are non-exclusive and have renewable 30-year terms. The original term of VTR's fixed-line telephony concessions expires in November 2025. Long distance telephony services are considered intermediate telecommunications services and, as such, are also regulated by the Ministry. VTR has concessions to provide this service, which is non-exclusive, for a 30-year renewable term expiring in September 2025.

VTR.com holds concessions to provide fixed wireless local telephony service on the 3.5 GHz band in several regions of the country. These concessions have renewable 30-year terms, expiring in 2036. During 2018, SubTel partially froze 20MHz of the 50 MHz concession granted to VTR.com in order to evaluate future 5G concession auctions. VTR.com is contesting SubTel's legal ability to take such a measure. In November 2018, Movistar asked the TDLC to rule on whether the decision to keep part of the spectrum at 3.5 GHz available for immediate deployment (with potential use for mobile services), was consistent with previous decisions requiring this band to be allocated to fixed services. Although the TDLC rejected Movistar's request, it considered that in order to allow the use of this already assigned spectrum for mobile services, SubTel should open public tenders to assign the concessions for mobile services. This decision has been challenged before the Supreme Court by all interested parties, including VTR, and a final decision on the case is pending.

In January 2020, SubTel opened for public comments its plan for a 5G tender, which ended with a contest for four bands of spectrum: 20MHz in the 700 MHz band, 30 MHz in the AWS Band, 150 MHz in the 3.5 MHz band (not including the spectrum previously assigned to fixed wireless local telephony), and 400 MHz in the 26 GHz band. Technical proposals were submitted in October 2020, and given that several competitors tied there was an auction to define the winners. In February 2021, Entel, Movistar, WOM and Claro were awarded with several spectrum bands to provide mobile services using 5G technologies. Additionally, the concessions granted in this tender allow SubTel to modify the licenses in case of non-use or inefficient use of the spectrum.

With respect to mobile services, in 2009, SubTel awarded VTR.com a 30MHz license in the 1700/2100 MHz band. The license has a 30-year renewable term, expiring in 2040. Currently, antitrust bodies and the Supreme Court have declared a new cap structure for spectrum allocation, which is variable depending on the macro band were spectrum is being assigned and the amount of spectrum available. Therein for the low macro-band from 0 to 1.000 MHz the cap is 32% of the band, from 1.001 MHz to 3000MHz the cap is 30% of the band, for 3001MHz band to 6000MHz band the cap is 30% and for higher than 6001MHz the cap is 25%.

VTR.com has concessions to provide fixed-line telephony in most major and medium-sized markets in Chile. Telephony concessions are non-exclusive and have renewable 30-year terms. The original term of VTR.com's fixed-line telephony concessions expires in November 2025. Long distance telephony services are considered intermediate telecommunications services and, as such, are also regulated by the **Ministry**. VTR.com has concessions to provide this service, which is non-exclusive, for a 30-year renewable term expiring in September 2025.

There are no universal service obligations in Chile. However, local service concession holders are obligated to provide telephony service to all customers that are within their service area or are willing to pay for an extension to receive service. All local service providers, including VTR.com, must give long distance telephony service providers equal access to their network connections at regulated prices and must interconnect with all other public service concession holders whose systems are technically compatible.

As a general rule, fixed-line telephony service providers are free to establish the rates directly charged to their customers, unless the Chilean Antitrust Authority concludes that due to a lack of sufficient competition in the market, rates should be fixed by SubTel. However, SubTel sets the maximum rates that may be charged by each operator for interconnect charges, access charges between operators for calls originating on one network that are completed through connections with one or more networks of other providers. Rate regulation on interconnection charges is applicable to all fixed-line and mobile telephony companies, including VTR.com. The determination of the maximum rates that may be charged by operators for their fixed-line or mobile services are made on a case-by-case basis by SubTel and are effective for five years.

Other Chilean Regulation

Price Increase. The Consumer Rights Protection Law has been interpreted to require that any raise in rates exceeding inflation must be previously accepted and agreed to by subscribers. Although VTR.com disagrees with this interpretation, in July 2012, VTR.com reached an agreement with SERNAC that permits VTR.com to make adjustments to its published prices twice per year to adjust for inflation, except those services that are subject to rate regulation. VTR.com is generally prohibited from increasing the rates over the inflation adjustment. VTR.com may, however, cancel a subscriber's contract after 12 months and propose a new contract with new rate provisions. Once a year VTR.com may propose to its existing subscribers additional changes to their rates, which must be accepted by the subscriber for the rates to go into effect.

Bundling. In 2012, the Chilean Antitrust Authority issued its regulation governing the on-net/off-net pricing practice in the mobile industry and the offering of bundled telecommunication services. Pursuant to the terms of this regulation, as revised by the Chilean Supreme Court, mobile services may be sold jointly with fixed-line services. However, promotional discounts are not permitted for these double-play offers. As for traditional bundling over the same platform (e.g., bundled fixed-line services such as our double-play and triple-play packages, or bundled mobile services), this regulation provides that such services may be bundled, subject to certain price limitations. These limitations require that the total price for a bundle must be greater than the standalone price for the most expensive service included in the bundle. Also, when three or more services are bundled, the price for the bundle must be greater than the sum of the standalone prices for each service in the bundle, excluding the lowest priced service.

Consumer's Rights Protection Law. In 2018, a bill was enacted introducing significant new powers to SERNAC including a material increase in its ability to levy fines and compensations.

Cabletica

Cabletica is subject to regulation and enforcement by various governmental entities in Costa Rica, including the Ministry of Science and Technology, the Costa Rican Telecommunications Superintendence (**Sutel**), and the Consumer Support Office of the Ministry of Economy, Industry and Commerce (**MEIC**). Cabletica holds a telecommunications services concession, expiring in 2028, issued by Sutel that authorizes the deployment and operation of its wireline HFC network throughout the country. At the service layer, the concession permits: (i) paid television; (ii) the provision of fixed telephony service; (iii) internet access; and (iv) data links.

Video. Cable television service providers in Costa Rica are free to define the channels and content included in their services and are not required to carry any specific programming, except as described below. However, the Commission of Control and Qualification of Public Spectacles of the Ministry of Justice and Peace may impose sanctions on providers that have run programming containing excessive violence, adult content, or other objectionable content. Pay television operators are directly responsible for violating such prohibitions.

The Costa Rican General Telecommunications Law (art.138) establishes a retransmission consent regime between broadcast television concessionaires and pay television operators. This regime provides that (i) the concessionaires must include within their programming the Costa Rican television channels that have coverage in at least sixty percent of the national territory, excluding Isla del Coco, which complies with at least fourteen minimum hours of daily transmission, and (ii) the reception of the signal complies with the minimum signal requirements established in this regulation, which have acceptable ratings and have the corresponding transmission rights.

Internet. The Regulation of Provision and Quality of Services of Sutel establishes minimum quality thresholds, such as minimum speeds, oversubscription, and delay.

Fixed-Line Telephony Services. The current regulations separate VoIP fixed telephony from traditional fixed telephony (e.g., copper lines) and there is no fixed number portability.

Other Costa Rican Regulation

The powers of the Agency for the Protection of Data of Inhabitants (Prohab) are stipulated in the Law on the Protection of the Person against the Processing of Personal Data (Law No. 8968). Its functions are focused on compliance with data protection regulations. The Commission to Promote Competition (Coprocom) is a maximum deconcentration body attached to MEIC. Its fundamental purpose is to comply with the provisions of the Law on Promotion of Competition and Effective Defense of the Consumer (Law No. 7472) through the protection and promotion of (i) the process of competition and free competition, (ii) investigating and sanctioning monopolistic practices, and (iii) other restrictions related to the efficient functioning of the market.

Liberty Puerto Rico

Liberty Puerto Rico is subject to regulation in Puerto Rico by various governmental entities at the Puerto Rico and the U.S. federal level, including the FCC and the Puerto Rico Telecommunications Regulatory Bureau (**TRB**). TRB has primary regulatory jurisdiction in Puerto Rico at the local level and is responsible for awarding franchises to cable operators for the provision of cable service in Puerto Rico and regulating cable television and telecommunications services.

Our business in Puerto Rico is subject to comprehensive regulation under the United States Communications Act of 1934, as amended (the **Communications Act**), which regulates communication, telecommunication and cable television services. The Communications Act also provides the general legal framework for, among other things, the provision of telephone services, services related to interconnection between telephone carriers, and television, radio, cable television and direct broadcast satellite services.

The FCC and/or the TRB have the authority to impose sanctions, including warnings, fines, license revocations and, in certain specific cases, termination of the franchise, although license revocation and franchise termination are rare. The Communications Act specifies causes for the termination of licenses, including, for example, the failure to comply with license requirements and conditions or to pay fines or fees in a timely manner. Such sanctions by the TRB and/or FCC can be appealed to, and reviewed by, Puerto Rican courts and U.S. federal courts.

In May 2018, the FCC established the Uniendo a Puerto Rico Fund (**UPR Fund**) to provide subsidies for the deployment and hardening of fixed wireline and mobile wireless communications networks in Puerto Rico. Stage 1 of the UPR Fund made $51 million of new funding available for Puerto Rico telecommunications providers following Hurricanes Maria and Irma in 2017 (the **2017 Hurricanes**). Stage 2 of the UPR fund made additional funding available to providers of services over fixed wireline networks through a competitive bidding process, and to mobile wireless providers subject to those providers meeting certain conditions.

To be eligible for Stage 2 UPR funding for fixed services, Liberty Puerto Rico requested that TB designate it as an Eligible Telecommunications Carrier (**ETC**), which the TB did in June 2018. As part of its obligations as an ETC, Liberty Puerto Rico must offer services to low income customers under the federal Lifeline Program and low-cost services to schools and libraries under the Schools and Libraries Program (**E-Rate**). Both programs provide FCC subsidies to ensure access to telecommunications and broadband access services for specified classes of customers. Liberty Puerto Rico began offering Lifeline services in April 2019 and will bid on Funding Year 2022 for E-Rate subsidies.

In September 2019, the FCC established rules governing UPR Fund Stage 2 funding to support certain fixed and mobile providers of voice and broadband service in Puerto Rico. The FCC stated that it would award up to $505 million over 10 years to eligible providers of fixed voice and broadband services in Puerto Rico through a single round competitive bidding process that would select one support recipient in each of the 78 municipalities in Puerto Rico, using a specified formula for evaluating bids. Entities winning Stage 2 support must also: (1) submit to the FCC's Wireline Competition Bureau (**Bureau)** a detailed network deployment plan as well as a plan that describes and commits to the methods and procedures that will be used to prepare for and respond to disasters in Puerto Rico; and (2) participate in the FCC's Disaster Information Report System, which is a web-based system that communications companies can use to report to the FCC communications infrastructure status during disasters.

On February 5, 2020, the Bureau released a Public Notice that established the application requirements and submission process for the UPR Fund Stage 2 Competition. The Bureau later released an application form and instructions, and announced the application deadline. On November 2, 2020 LCPR received preliminary approval from the FCC for an award of approximately $71.54 million through the UPR Fund. The funds are in support of providing high-speed broadband access to all locations within 43 of Puerto Rico's 78 municipalities, representing service to over 914,000 locations. Liberty Puerto Rico is in the process of submitting all required materials to finalize its award and is awaiting final FCC action.

With respect to Stage 2 UPR funding for mobile wireless providers, the FCC also established in September 2019 that mobile wireless providers providing service in Puerto Rico as of June 2017 were eligible to receive up to $254 million over three years based on their relative number of subscribers for such service as of June 2017. In order to obtain such support, the mobile providers were required to confirm the number of mobile wireless subscribers they served as of June 2017, and obtain FCC approval of a plan that describes and commits to the methods and procedures that will be used to prepare for and respond to disasters in Puerto Rico. Liberty's predecessor wireless provider in Puerto Rico (AT&T) submitted the required documentation and in June 2020, the FCC authorized that entity to receive approximately $33M in funding over three years.

That entity had previously obtained the required ETC designation in Puerto Rico. Liberty, having purchased that business in the AT&T Acquisition, will now receive those funds.

In Puerto Rico, antitrust regulation is governed by the U.S. Sherman Act, other federal antitrust legislation, and the Puerto Rico Anti-Monopoly Law. In particular, the Sherman Act seeks to prevent anti-competitive practices in the marketplace and requires governmental review of certain business combinations, among other things. The Puerto Rico Anti-Monopoly Law substantially parallels the Sherman Act and authorizes the Puerto Rico Department of Justice to investigate and impose competition-related conditions on transactions. The Attorney General of Puerto Rico is permitted to investigate a transaction under federal law or under the Puerto Rico Anti-Monopoly Law.

Puerto Rico Law 5 of 1973, as amended, created the Puerto Rico Department of Consumer Affairs, which regulates marketing campaigns, publicity, and breach of service contracts, and prohibits false advertising. The Puerto Rico Telecommunications Act of 1996 (**Law 213**), which created the TRB, requires that rates for telecommunication services be cost-based, forbids cross-subsidies and focuses on encouraging, preserving and enforcing competition in the cable and telecommunications markets. Although Law 213 does not require Liberty Puerto Rico to obtain any approval of rate increases for cable television or telecommunication services, any such increases must be in compliance with Law 213's requirements, including notification to the TRB before such increases take effect.

Video. The provision of cable television services requires a franchise issued by the TRB. Franchises are subject to termination proceedings in the event of a material breach or failure to comply with certain material provisions set forth in the franchise agreement governing a franchisee's system operations, although such terminations are rare. In addition, franchises require payment of a franchise fee as a requirement to the grant of authority. Franchises establish comprehensive facilities and service requirements, as well as specific customer service standards and monetary penalties for non- compliance. Franchises are generally granted for fixed terms of up to ten years and must be periodically renewed.

Our pay television service in Puerto Rico is subject to, among other things, subscriber privacy regulations and must-carry and retransmission consent rights of broadcast television stations. The Communications Act and FCC rules govern aspects of the carriage relationship between broadcast television stations and cable companies. To ensure that every qualifying local television station can be received in its local market without requiring a cable subscriber to switch between cable and off-air signals, the FCC allows every qualifying full-power television broadcast station to require that all local cable systems transmit that station's primary digital channel to their subscribers within the station's market (the **"must-carry" rule**) pursuant to the Cable Television Consumer Protection and Competition Act of 1992. Alternatively, a station may elect every three years to forego its must carry rights and seek a negotiated agreement to establish the terms of its carriage by a local cable system, referred to as retransmission consent.

Internet. Liberty Puerto Rico offers high-speed internet access throughout its entire footprint. In March 2015, the FCC issued an order classifying mass-market broadband internet access service as a "telecommunications service," changing its long-standing treatment of this offering as an "information service," which the FCC traditionally has subjected to limited regulation. The rules adopted by the FCC prohibited, among other things, broadband providers from: (i) blocking access to lawful content, applications, services or non-harmful devices; (ii) impairing or degrading lawful internet traffic on the basis of content, applications, services or non-harmful devices; and (iii) favoring some lawful internet traffic over other lawful internet traffic in exchange for consideration (collectively, **2015 Restrictions**). In addition, the FCC prohibited broadband providers from unreasonably interfering with users' ability to access lawful content or use devices that do not harm the network, or with edge providers' ability to disseminate their content, and imposed more detailed disclosure obligations on broadband providers than were previously in place. On December 14, 2017, the FCC adopted a Declaratory Ruling, Report and Order (the **2017 Order**) that, in large part, reversed the regulations issued by the FCC in 2015. The 2017 Order, among other things, restores the classifications of broadband Internet access as an information service under Title I of the Communications Act, and mobile broadband Internet access service as a private mobile service, and eliminates the 2015 Restrictions. The 2017 Order does require ISPs to disclose information to consumers regarding practices such as throttling, paid prioritization and affiliated prioritization, and restores broadband consumer protection authority to the Federal Trade Commission. On October 1, 2019, the United States Court of Appeals for the District of Columbia Circuit (**D.C. Circuit**) ruled on numerous appeals of the 2017 Order by interested parties. The D.C. Circuit largely upheld the 2017 Order. However, it vacated that portion of the 2017 Order preempting inconsistent state or local regulations, and remanded the 2017 Order to the FCC for further consideration of its effect on public safety, pole attachment regulation, and the Lifeline support program. The D.C. Circuit's ruling may be subject to further judicial review. Legislative proposals regarding the net neutrality rules also are pending in Congress.

Fixed-Line Telephony Services. Liberty Puerto Rico offers fixed-line telephony services, including both circuit-switched telephony and VoIP. Its circuit-switched telephony services are subject to FCC and local regulations regarding the quality and technical aspects of service. All local telecommunications providers, including Liberty Puerto Rico, are obligated to provide telephony service to all customers within the service area, subject to certain exceptions under FCC regulations, and must give long distance telephony service providers equal access to their network. Under the Communications Act, competitive local exchange carriers (**CLECs**), like us, may require interconnection with the incumbent local exchange carrier (**ILEC**), and the ILEC must negotiate a reasonable and nondiscriminatory interconnection agreement with the CLEC. Such arrangement requires the ILEC to interconnect with the CLEC at any technically feasible point within the ILEC's network, provide access to certain unbundled network elements of the ILEC's network, and allow physical collocation of the CLEC's equipment in the ILEC's facilities to permit interconnection or access to unbundled network element services. Therefore, we have the right to interconnect with the incumbent local exchange carrier Puerto Rico Telcom (**PRTC**). We have negotiated an interconnection agreement with PRTC, and the physical interconnection between both companies has been activated.

All of the circuit-switched telephony and VoIP services of Liberty Puerto Rico are subject to a charge for the federal Universal Service Fund (**USF**), which is a fund created under the Communications Act to subsidize telecommunication services in high-cost areas, to provide telecommunications services for low-income consumers, and to provide certain subsidies for schools, libraries and rural healthcare facilities. The FCC has redirected the focus of USF to support broadband deployment in high-cost areas. In addition, our circuit-switched telephony and VoIP services are subject to a charge for a local Puerto Rico Universal Service Fund, which was created by law to subsidize telecommunications services for low-income families under the federal USF Lifeline and Link-Up programs.

The FCC has adopted other regulations for VoIP services, including the requirement that interconnected VoIP providers and facilities-based broadband internet access providers must comply with the Communications Assistance for Law Enforcement Act, which requires carriers to provide certain assistance to federal law enforcement authorities. VoIP providers are also required to offer basic and enhanced 911 emergency calling services, which requires disclosure to all VoIP customers. VoIP providers are also subject to federal customer proprietary network information rules related to customer privacy.

Mobile Services. Liberty Mobile Puerto Rico and Liberty Mobile U.S. Virgin Islands offer mobile services in Puerto Rico and the U.S. Virgin Islands. The FCC regulates virtually all aspects of United States wireless communications systems, including spectrum licensing, tower and antenna construction, modification and operation, the ownership and sale of wireless systems and licenses, as well as the acquisition and use of wireless spectrum. Local governments, such as in Puerto Rico and the U.S. Virgin Islands, typically regulate the placement of wireless towers and similar facilities via zoning laws. At present, neither the FCC nor state or local governments regulate specific service offerings or rate plans. In addition, other federal and state agencies have asserted jurisdiction over consumer protection and the elimination and prevention of anticompetitive business practices in the wireless industry. The specific issues as to which our United States mobile services operations are subject to regulatory oversight include: roaming, interconnection, spectrum allocation and licensing, facilities siting, pole attachments, intercarrier compensation, Universal Service Fund ("USF") contributions and distributions (such as through the UPR program), network neutrality, 911 services, consumer protection, consumer privacy, and cybersecurity. Failure to comply with applicable regulations could subject us to fines, forfeitures, and other penalties (including, in extreme cases, revocation of our spectrum licenses), even if any non-compliance was unintentional.

Competition

We operate in an emerging region of the world, where market penetration of telecommunication services such as broadband and mobile data is lower than in more developed markets. Generally, our markets are at a relatively nascent stage of the global shift to a "data-centric" world. Although there has been strong growth in data consumption in our key markets, data consumption in our operating regions still lags significantly when compared to international benchmarks. We believe that we have the opportunity to capitalize upon this underlying growth trend in the majority of our markets, and benefit from increasing penetration of our data services as well as economic growth, in all of our markets, over time.

However, technological advances and product innovations have increased and are likely to continue to increase giving customers several options for the provision of their communications services. Our customers want access to high quality communication services that allow for seamless connectivity. Accordingly, our ability to offer converged services (video, internet, fixed telephony and mobile) is a key component of our strategy. In many of our markets, we compete with companies that provide converged services, as well as companies that are established in one or more communication products and services. Consequently, our businesses face significant competition. In all markets, we seek to differentiate our communications services by focusing on customer service, competitive pricing and offering quality high-speed connectivity.

Mobile and Telephony Services

In many of our markets we are either the leading or one of the leading mobile providers. In the markets where we are one of the top mobile providers, we continue to seek additional bandwidth to deliver our wide range of services to our customers and increase our LTE coverage. We also offer various calling plans, such as unlimited network, national or international calling, unlimited off-peak calling and minute packages, including calls to fixed and mobile phones. In addition, we use our bundled offers with our video and high-speed internet services to gain mobile subscribers where possible. Our ability to offer fixed-mobile convergence services is expected to be a key driver. In several of our markets, we expect to increase focus on converged services, including mobile, fixed-line, broadband and video.

- *C&W Caribbean and Networks.* We typically operate in duopoly mobile market structures and face competition from Digicel Group Ltd. (**Digicel**) in most of our C&W Caribbean and Networks' residential markets, and ALIV in the Bahamas.

- *C&W Panama*. In Panama, our most competitive mobile market, we compete with subsidiaries of Millicom International Cellular S.A. (**Millicom**), América Móvil, S.A.B. de C.V. (**Claro**) and Digicel. Millicom entered the market through the acquisition of Movistar's assets in Panama in 2019.

- *Liberty Puerto Rico.* Liberty Puerto Rico competes with T-Mobile US, Claro, Worldnet, and Neptuno for the provision of mobile services.

- *VTR*. Movistar, Claro and Empresa Nacional de Telecomunicaciones S.A. (**Entel**) are the primary companies that offer mobile telephony in Chile. In mid-2015, WOM S.A. (**WOM**) entered the mobile services market through its acquisition of the Nextel Chile network. As an MVNO, VTR offers its mobile services on a standalone basis. To attract and retain customers, VTR focuses on its triple-play and double-play customer bases, offering them postpaid mobile accounts at an attractive price.

The market for fixed-line telephony services is mature across our markets. Changes in market share are driven by the combination of price and quality of services provided and the inclusion of telephony services in bundled offerings. In most of our C&W Caribbean and Networks' markets, we are the incumbent telecommunications provider with long established customer relationships. In our other markets, our fixed-line telephony services compete against the incumbent telecommunications operator in the applicable market. In these markets, the incumbent operators have substantially more experience in providing fixed-line telephony, greater resources to devote to the provision of such services and long-standing customer relationships. In all of our markets, we also compete with VoIP operators offering services across broadband lines and over-the-top (OTT) telephony providers, such as WhatsApp. In many countries, our businesses also face competition from other cable telephony providers, FTTx-based providers or other indirect access providers.

Competition exists in both the residential and business fixed-line telephony products due to market trends, the offering of carrier pre-select services, number portability, the replacement of fixed-line with mobile telephony and the growth of VoIP services, as well as continued deregulation of telephony markets and other regulatory action, such as general price competition. Carrier pre-select allows the end user to choose the voice services of operators other than the incumbent while using the incumbent's network. Our fixed-line telephony strategy is focused around value leadership, and we position our services as "anytime" or "any destination." Our portfolio of calling plans includes a variety of innovative calling options designed to meet the needs of our subscribers. In many of our markets, we provide product innovation, such as telephone applications that allow customers to make and receive calls from their fixed-line call packages on smart phones. In addition, we offer varying plans to meet customer needs and, similar to our mobile services, we use our telephony bundle options with our digital video and internet services to help promote our telephony services and flat rate offers are standard.

- *C&W Caribbean and Networks*. We face competition in the provision of fixed-telephony services from Digicel in our Caribbean markets and Cable Bahamas Limited (**Cable Bahamas**) in the Bahamas. These companies all have competitive pricing on similar services, and the intensified level of competition we are experiencing in several of our markets has added increased pressure on the pricing of our services.

- *C&W Panama*. We face competition from a subsidiary of Millicom in Panama. Millicom entered the Panama market through its acquisition of an 80% stake in Cable Onda S.A. (**Cable Onda**) in 2019.

- *Liberty Puerto Rico.* Liberty Puerto Rico primarily competes with Claro who is the incumbent fixed operator in Puerto Rico. For B2B, Liberty Puerto Rico primarily competes with Claro and WorldNet.

- *VTR*. VTR faces fixed-telephony competition from the incumbent telecommunications operator, Movistar and other telecommunications operators. Movistar has substantial experience in providing telephony services, resources to devote to the provision of telephony services and long-standing customer relationships. Price is a key factor as are bundles with quality services. We distinguish our services by delivering reliable market leading internet access speeds with attractive bundled offers.

Broadband Internet

With respect to broadband internet services and online content, our businesses face competition in a rapidly evolving marketplace from incumbent and non-incumbent telecommunications companies, mobile operators and cable-based ISPs, many of which have substantial resources. The internet services offered by these competitors include both fixed-line broadband internet services using cable, DSL or FTTx networks and wireless broadband internet services. These competitors have a range of product offerings with varying speeds and pricing, as well as interactive services, data and other non-video services offered to homes and businesses. With the demand for mobile internet services increasing, competition from wireless services using various advanced technologies is a competitive factor. In several of our markets, competitors offer high-speed mobile data via LTE wireless networks. In addition, other wireless technologies, such as WiFi, are available in almost all of our markets. In this intense competitive environment, speed, bundling, and pricing are key drivers for customers.

A key component of our strategy is speed leadership. Our focus is on increasing the maximum speed of our connections as well as offering varying tiers of services and prices, a variety of bundled product offerings and a range of value added services. We update our bundles and packages on an ongoing basis to meet the needs of our customers. Our top download speeds generally range from 50 Mbps to speeds of up to 600 Mbps. In Barbados we also deliver speeds of up to 1 Gbps for our customers. In many of our markets, we offer the highest download speeds available via our cable and FTTx networks. The focus is on high-speed internet products to safeguard our high-end customer base and allow us to become more aggressive at the low- and medium-end of the internet market. By fully utilizing the technical capabilities of DOCSIS 3.0 technology on our cable systems, we can compete with local FTTx initiatives and create a competitive advantage compared to DSL infrastructures and LTE initiatives on a national level.

In several of our C&W Caribbean and Networks' markets, we are the incumbent phone company offering broadband internet products through a variety of technologies, ranging from DSL to FTTx. In these markets and our other Latin American markets, our key competition for internet services is from cable and IPTV operators and mobile data service providers. To compete effectively, we are expanding our LTE service areas and increasing our download speeds. In most of our markets, we offer our internet service through bundled offerings that include video and fixed-line telephony. We also offer a wide range of mobile products either on a prepaid or postpaid basis.

- *C&W Caribbean and Networks*. Where C&W Caribbean and Networks is the incumbent telecommunications provider, it competes with cable operators, the largest of which are Cable Bahamas in the Bahamas and Digicel in certain of C&W Caribbean and Networks' markets. To distinguish itself from these competitors, C&W Caribbean and Networks is investing in footprint expansion and upgrades and uses its bundled offers with video and telephony to promote its broadband internet services.

- *C&W Panama*. The largest competitor in Panama is Cable Onda.

- *VTR*. VTR faces competition primarily from non-cable-based ISPs, such as Movistar, Entel, and Mundo Pacifico, and from other cable-based providers, such as Claro and GTD Manquehue (**GTD**). Competition is particularly intense with each of these companies offering competitively priced services, including bundled offers with high-speed internet services. Mobile broadband competition is significant as well. Movistar, Claro and Entel have launched LTE networks for high-speed mobile data. To compete effectively, VTR is expanding its two-way coverage and offering attractive bundling with fixed-line telephony and digital video service and high-speed internet with download speeds of up to 600 Mbps.

- *Liberty Puerto Rico*. Liberty Puerto Rico competes primarily with Claro and other operators using fiber networks or fixed wireless access technologies. To compete with these providers, Liberty Puerto Rico offers its high-speed internet with download speeds of up to 500 Mbps.

Video Distribution

Our video services compete primarily with traditional free-to-air (**FTA**) broadcast television services, DTH satellite service providers and other fixed-line telecommunications carriers and broadband providers, including operations offering (i) services over hybrid fiber coaxial networks, (ii) DTH satellite services, (iii) internet protocol television (**IPTV**) over broadband internet connections using asymmetric DSL or VDSL or an enhancement to VDSL called "vectoring," (iv) IPTV over FTTx networks, or (v) LTE services. Many of these competitors have a national footprint and offer features, pricing and video services individually and in bundles comparable to what we offer. In certain markets, we also compete with other cable or FTTx based providers who have overbuilt portions of our systems.

OTT aggregators and SVOD services utilizing our or our competitors' high-speed broadband connections are also a significant competitive factor as are other video service providers that overlap our service areas. OTT video providers (such as HBO Go/Max, Amazon Prime Video, Disney+ and Netflix in most of our markets, and Hulu, DirecTV Now, Sling, and Digicel Play in selected markets) offer rich VOD catalogues and/or linear channels. In some cases, these AVOD services are provided free-of-charge (such as YouTube and Pluto TV). Typically these services are available on multiple devices in and out of the home. To enhance our video offering, we are developing cloud-based, next generation user interfaces based on advanced technologies, and are providing our subscribers with TV Everywhere applications, and in some markets, we feature leading premium and AVOD OTT video services in our video platforms (such as HubTV in Puerto-Rico), and our users can subscribe to these OTT services, search and discover and consume programs through our UI. Our businesses also compete to varying degrees with other sources of entertainment and information, such as online entertainment, newspapers, magazines, books, live entertainment/concerts and sporting events.

Piracy and other unauthorized uses and distribution of content, including through web-based applications, devices and online platforms, also present challenges for our video business. These platforms illegally stream copyrighted content, for example, Premier League games that can be viewed with an internet connection. While piracy is a challenge in most jurisdictions in which we operate, it is particularly prevalent in those jurisdictions that lack developed copyright laws and effective enforcement of copyright laws.

We believe that our deep-fiber access, where available, provides us with several competitive advantages. For instance, our cable networks allow us to concurrently deliver internet access, together with real-time television and VoD content, without impairing our high-speed internet service. In addition, our cable infrastructure in most of our footprint allows us to provide triple-play bundled services of broadband internet, television and fixed-line telephony services without relying on a third-party service provider or network. Where mobile is available, our mobile networks, together with our fixed fiber-rich networks, will allow us to provide a comprehensive set of converged mobile and fixed-line services. Our capacity is designed to support peak consumer demand. In serving the business market, many aspects of the network can be leveraged at very low incremental costs given that business demand peaks at a time when consumer demand is low, and peaks at lower levels than consumer demand. In response to the continued growth in OTT viewing, we have launched a number of innovative video services, including Flow ToGo and +TV Go in C&W Caribbean and Networks' markets, LibertyGo in Puerto Rico and VTR Play in Chile.

Our ability to attract and retain customers depends on our continued ability to acquire appealing content and services on competitive terms and to make such content available on multiple devices and outside the home. Some competitors have obtained long-term exclusive contracts for certain sports programs, which limits the opportunities for other providers to offer such programs. Other competitors also have obtained long-term exclusive contracts for programs, but our operations have limited access to certain of such programming through select contracts with those companies. If exclusive content offerings increase through other providers, programming options could be a deciding factor for subscribers on selecting a video service.

In this competitive environment, we enhance our offers with converged digital services, such as DVR and replay functionalities, and VoD and multiscreen services. In addition, we offer attractive content packages tailored to particular markets and discounts for bundled services. To improve the quality of the programming in our packages, our operations periodically modify their digital channel offerings. Where we offer mobile, we focus on our converged service offerings. We use these services, as well as bundles of our fixed-line services, as a means of driving video and other products where we can leverage convenience and price across our portfolio of available services.

- *C&W Caribbean and Networks*. C&W Caribbean and Networks competes with a variety of pay TV service providers, with several of these competitors offering double-play and triple-play packages. Fixed-mobile convergence services are not currently a significant factor in most of C&W Caribbean and Networks' residential markets. In several of its other markets, including Jamaica, Trinidad and Tobago and Barbados, C&W Caribbean and Networks is the largest or one of the largest video service providers. In these markets, its primary competition is from DTH providers, such as DIRECTV Latin America Holdings, Inc. (**DirecTV**), which is now called Vrio Corp., and operators of IPTV services over VDSL and FTTx, such as Digicel.
- *C&W Panama*. C&W Panama competes primarily with Cable Onda, which is 80% owned by Millicom and which offers video, internet and fixed-line telephony over its cable network, and with the DTH services of Claro. To compete effectively, C&W Panama invests in leading mobile and fixed networks and content.

- *VTR*. VTR competes primarily with DTH and IPTV service providers, including Movistar, Claro and DirecTV, among others. Movistar offers double-play and triple-play packages using IPTV for video in its FTTx footprint and OTT on its DSL footprint. Claro offers triple-play packages using DTH and, in most major cities in Chile, through a hybrid fiber coaxial cable network. It also offers mobile services. DirecTV offers video through DTH and does not bundle with any broadband or telephony services. To compete effectively, VTR focuses on enhancing its subscribers' viewing options in and out of the home through a broad non-linear content offering, catch-up television, DVR functionality, and a variety of premium channels. These services and its variety of bundled options, including internet and telephony, enhance VTR's competitive position.

- *Liberty Puerto Rico*. Liberty Puerto Rico is the largest provider of fixed-line video services in Puerto Rico. Liberty Puerto Rico's primary competition for video customers is from DTH satellite providers DirecTV and Dish Network Corporation (**Dish Network**). Dish Network is an aggressive competitor, offering low introductory offers, free HD channels and, in its top tier packages, a free multi-room DVR service. DirecTV is also a significant competitor offering similar programming in Puerto Rico compared to Dish Network. In order to compete, Liberty Puerto Rico focuses on offering video packages with attractive programming, including HD and Spanish language channels, plus a specialty video package of Spanish-only channels that has gained popularity. In addition, Liberty Puerto Rico uses its bundled offers that include high-speed internet with download speeds of up to 500 Mbps to drive its video services.

Business and Wholesale Services

Through C&W, we provide a variety of advanced, point-to-point, clear channel broadband capacity, IP, Multiprotocol Label Switching, Ethernet and managed services over our owned and operated, technologically advanced, subsea fiber optic cable network. Our subsea and terrestrial fiber routes combine to form a series of fully integrated networks that typically provide complete operational redundancy, stability and reliability, allowing us in most cases to provide our clients with superior service and minimal network downtime. Given the advanced technical state of the network combined with the challenges in securing the necessary governmental and environmental licenses in all of our operating markets, we believe the network is unlikely to be replicated in the region. Competing networks in the region connect fewer countries than we do and are either linear in design, or if ringed, have high latency protection routes. In addition, our network as of December 31, 2020, utilized less than 10% of its potential design capacity, and we believe that our ability to take advantage of this large unused carrying capacity, as well as the financial and time investment required to build a similar network, and the potential delays associated with acquiring governmental permissions, makes it unlikely that our network will be replicated in the near term.

We compete in the provision of B2B services with residential telecommunications operators as noted above. We also compete with regional and international service providers, particularly when addressing larger customers.

Human Capital Resources

Our Team. As of December 31, 2020, we employed approximately 11,900 full-time employees across our five reportable segments. Our employees are employed across our segments as follows: C&W Caribbean and Networks approximately 4,800 full-time employees, C&W Panama approximately 2,400 full-time employees, VTR/Cabletica approximately 2,300 employees and Liberty Puerto Rico approximately 2,200 employees. The remaining employees are employed by our corporate entities. Women represented 42% of our global employees and 38% of our managerial positions. Of our total employee population, approximately 4,000 are covered by contracts with various unions, primarily across our Caribbean markets, Panama and Puerto Rico.

During 2020, our total employee attrition rate, both voluntary and involuntary, was approximately 21%. The Employee Net Promoter Score is a widely-used methodology to measure the employee experience (eNPS). From 2018 to 2020, we saw an increase of 30 points (net change of 243%) in our eNPS as measured by our annual employee survey, and believe that we have a passionate, engaged and dedicated workforce.

Our Chief People Officer, who reports to the CEO and is part of the Executive Team, leads our People and Culture initiatives. Initiatives form part of the strategy and priorities of all leaders and our Chief People Officer regularly reports progress on these initiatives to our Board of Directors.

Talent Strategy. We manage our talent strategy through a cycle consisting of Talent Acquisition, Learning & Development, and Performance Management. We offer prospective candidates a compelling employee value proposition rooted in our culture, which combines a shared vision, philosophy and principles for how we work. We foster an environment where employees can learn, develop, and gain experience through new opportunities to work in different geographies. Unique to our region, we have revamped our performance management process from an annual performance rating to a more agile system that better aligns with our culture and ways of working as one team. We offer a simpler, meaningful, and engaging Agile

Performance Development (APD) experience for all our employees, focused on frequent conversations throughout the year combined with real-time feedback between managers and employees.

Our employees are the heart and soul of our business, helping us to deliver value to our customers, shareholders and communities. As our employees grow and develop, so will our company.

Equality, Diversity & Inclusion. Our employees comprise many races, ethnicities, beliefs, and cultures, and we are built on a set of strong principles including respect. We learned from the events and global dialogue in 2020 that we can always improve our efforts in this area, and in 2020 we took a number of actions in the areas of Equality, Diversity & Inclusion.

In 2020, we conducted a virtual listening tour across 22 countries to learn from our employees, understand their experiences within our company and in their community, and identify focus areas where we could implement initiatives that would drive progress. As an initial undertaking, this process of listening, asking questions, and being open to feedback created a heightened understanding of the need to continue to work on the areas of Equality, Diversity & Inclusion. As a result, we developed an Equality, Diversity and Inclusion strategy and established an employee volunteer team and a senior advisory team to oversee, guide and drive the strategy.

Our CEO signed the CEO Action for Diversity & Inclusion pledge with a focus on four components: creating an environment for open dialogue, conducting implicit bias training, sharing best practices and lessons learned, and developing dedicated Diversity & Inclusion plans in consultation with our Board of Directors.

We know that our success depends on our people. Having a diverse and inclusive workforce will help us become more innovative, more reflective of our customer base, and more creative when it comes to engaging with our customers and our communities.

COVID-19 Response. We had to adapt quickly to the impact of the pandemic and rapidly put into place measures that would protect our employees, our customers, and our communities. As we were deemed an essential business across our markets, providing critical connectivity and access, we mobilized and equipped our office personnel to be able to work remotely, while supplying our front-line team members with appropriate personal protective equipment and sanitation supplies. We took necessary precautions across our retail footprint as well, and complied with local government regulations.

We also created a COVID-19 Employee Assistance Fund where employees could apply for grants up to $500 USD to support financial needs created by the pandemic. We funded the Employee Assistance Fund through donations from members of our Board of Directors, our Executive Team and employees. We also extended our Employee Assistance Program providing 24/7 support via a helpline of trained counselors, psychologists and advisors to those who need it.

Corporate Social Responsibility. In addition to our core products and services, we contribute to the communities where we operate. Our communities are so much more than locations for our business. It's where we live, where our families grow, where we celebrate and connect. We believe we have a responsibility to enable progress and build more resilient communities. We bring this to life through a shared approach across our markets with a focus on four critical areas: Learning; Environment; Access; Disaster Relief. When our communities thrive, we all win.

Our employees lead many of our outreach programs, working alongside our local and regional charitable foundations. We proudly support and give back. In 2020, through our company-wide initiative, *Mission Week*, over 1,000 employees came together to make a positive impact in local communities through a wide range of volunteer activities.

Compensation, Benefits and Well-being. As part of our Employee Value Proposition, we offer compensation, benefits, and well-being packages that we believe are fair and competitive. We include a mix of base salary, short and long-term incentives (based on eligibility), as well as a wide range of programs that support our employees' overall well-being including: retirement savings plans, healthcare and insurance benefits, paid parental leave, paid time off, and employee assistance programs. These programs vary by employee level and geography.

Compliance and Ethics. We conduct our business with honesty and integrity in accordance with high ethical and legal standards, and with respect for each other and those with whom we do business. Our Code of Conduct sets out the basic rules, standards and behaviors necessary to achieve those objectives. Employees can confidentially and anonymously report any behavior or action they see or experience which goes against our Code of Conduct through SpeakUp, our employee hotline.

We expect our employees and directors to display responsible and ethical behavior, to follow consistently both the meaning and intent of our Code of Conduct and to act with integrity in all of our business dealings. We expect managers and supervisors to take such action as is necessary and appropriate to ensure that our business processes and practices are in full compliance with our company culture and principles.

We expect our business partners to also act with integrity in all business dealings with us and others. Our Business Partner Code of Conduct sets forth the basic rules, standards and behaviors that we expect of our business partners.

As part of our global onboarding process, we require all new employees to complete training on our Code of Conduct. Additionally, we periodically host seminars on anti-corruption, anti-bribery and other important compliance topics.

Health & Safety. Our vision is to have the safest operations in our industry and markets. To reduce the risk of serious injuries we invest in systems that enable us to receive reliable and structured data to enable informed decision making. We also work to improve our safety practices in the field and in our retail and office locations to prevent work-related illness and injuries.

Available Information

All our filings with the Securities and Exchange Commission (**SEC**), as well as amendments to such filings, are available on our internet website free of charge generally within 24 hours after we file such material with the SEC. Our website address is *www.lla.com.* The information on our website is not part of this Annual Report on Form 10-K and is not incorporated by reference herein.

Item 1A. RISK FACTORS

In addition to the other information contained in this Annual Report on Form 10-K, you should consider the following risk factors in evaluating our results of operations, financial condition, business and operations or an investment in the shares of our company.

The risk factors described in this section have been separated into five groups:

- risks that relate to the competition we face and the technology used in our businesses;
- risks that relate to our operating in overseas markets and being subject to foreign and domestic regulation;
- risks that relate to certain financial matters;
- risks relating to our corporate history and structure; and
- risks relating to our common shares and the securities market.

Although we describe below and elsewhere in this Annual Report on Form 10-K the risks we consider to be the most material, there may be other unknown or unpredictable economic, business, competitive, regulatory or other factors that also could have material adverse effects on our results of operations, financial condition, businesses or operations in the future. In addition, past financial performance may not be a reliable indicator of future performance and historical trends should not be used to anticipate results or trends in future periods.

If any of the events described below, individually or in combination, were to occur, our businesses, prospects, financial condition, results of operations and/or cash flows could be materially adversely affected.

Risks that Relate to the Competition we Face and the Technology Used in Our Businesses

We operate in increasingly competitive markets, and there is a risk that we will not be able to effectively compete with other service providers.

The markets for cable television, broadband internet, telephony and mobile services are highly competitive. In the provision of video services, we face competition from FTA and digital terrestrial television (**DTT**) broadcasters, DTH satellite providers, networks using DSL, VDSL or vectoring technology, Multi-channel Multipoint Distribution System operators, FTTx networks, OTT content providers, and, in some countries where parts of our systems are overbuilt, cable networks, among others. Our operating businesses are facing increasing competition from video services provided by, or over the networks of, other telecommunications operators and service providers. As the availability and speed of broadband internet increases, we also face competition from OTT providers, including telephony providers such as WhatsApp, utilizing our or our competitors' high-speed internet connections. Some of these providers offer services without charging a fee, which could erode relationships with customers and may lead to a downward pressure on prices and returns for telecommunication services providers. In the provision of telephony and broadband internet services, we are experiencing increasing competition from other telecommunications operators and other service providers in each country in which we operate, as well as other mobile providers of voice and data. Many of the other operators offer double-play, triple-play and quadruple-play bundles of services. In many countries, we also compete with other facilities-based operators and wireless providers. Developments in wireless technologies, such as LTE (the next generation of ultra-high-speed mobile data) and WiFi, are creating additional competitive challenges.

In almost all cases, our licenses are not exclusive. As a result, our competitors have similar licenses and have and may continue to build systems and provide services in areas in which we hold licenses. In the case of cable- and broadband-enabled services, the existence of more than one cable system operating in the same territory is referred to as an "overbuild." Overbuilds could increase competition or create competition where none existed previously, either of which could adversely affect our growth, financial condition and results of operations.

In some of our markets, national and local government agencies may seek to become involved, either directly or indirectly, in the establishment of FTTx networks, DTT systems or other communications systems. We intend to pursue available options to restrict such involvement or to ensure that such involvement is on commercially reasonable terms. There can be no assurance, however, that we will be successful in these pursuits. As a result, we may face competition from entities not requiring a normal commercial return on their investments. In addition, we may face more vigorous competition than would have been the case if there were no such government involvement. Increased competition could result in increased customer churn, reductions of customer acquisition rates for some products and services and significant price and promotional competition. In combination with difficult economic environments, these competitive pressures could adversely impact our business, results of operations and cash flows.

Changes in technology may limit the competitiveness of and demand for our services.

Technology in the video, telecommunications and data services industries is changing rapidly, including advances in current technologies and the emergence of new technologies. New technologies, products and services may impact consumer behavior and therefore demand for our products and services. Our ability to anticipate changes in technology and consumer tastes and to develop and introduce new and enhanced products and services on a timely basis will affect our ability to maintain, continue to grow, or increase our revenue and number of customers and remain competitive. New products and services, once marketed, may not meet consumer expectations or demand, can be subject to delays in development and may fail to operate as intended. A lack of market acceptance of new products and services that we may offer, or the development of significant competitive products or services by others, could have a material adverse impact on our results of operations and cash flows.

Our significant property and equipment additions may not generate a positive return.

Significant additions to our property and equipment are, or in the future may be, required to add customers to our networks and to upgrade or expand our broadband communications networks and upgrade customer premises equipment to enhance our service offerings and improve the customer experience. Additions to our property and equipment, including in connection with Network Extensions, require significant capital expenditures for equipment and associated labor costs to build out and/or upgrade our networks as well as for related customer premises equipment. Additionally, significant competition, the introduction of new technologies, the expansion of existing technologies, such as FTTx and advanced DSL technologies, the impact of natural disasters like hurricanes, or adverse regulatory developments could cause us to decide to undertake previously unplanned builds or upgrades of our networks and customer premises equipment.

No assurance can be given that any rebuilds, upgrades or extensions of our network will increase penetration rates, increase average monthly subscription revenue per average cable RGU or mobile subscriber, as applicable, or otherwise generate positive returns as anticipated, or that we will have adequate capital available to finance such rebuilds, upgrades or extensions. Additionally, costs related to our Network Extensions and property and equipment additions could end up being greater than originally anticipated or planned. If this is the case, we may require additional financing sooner than anticipated or we may have to delay or abandon some or all of our development and expansion plans or otherwise forego market opportunities. Additional financing may not be available on favorable terms, if at all, and our ability to incur additional debt will be limited by our debt agreements. If we are unable to, or elect not to, pay for costs associated with adding new customers, expanding, extending or upgrading our networks or making other planned or unplanned additions to our property and equipment, or are delayed in making such investments, our growth could be limited and our competitive position could be harmed.

We depend almost exclusively on our relationships with third-party programming providers and broadcasters for programming content, and a failure to acquire a wide selection of popular programming on acceptable terms could adversely affect our business.

The success of our video subscription business depends, in large part, on our ability to provide a wide selection of popular programming to our subscribers. We do not produce our own content and we depend on our agreements, relationships and cooperation with public and private broadcasters and collective rights associations to obtain such content. If we fail to obtain a diverse array of popular programming for our pay television services, including a sufficient selection of HD channels as well as non-linear content (such as a selection of attractive VoD content and rights for ancillary services such as DVRs and catch up or ‘Replay’ services), on satisfactory terms, we may not be able to offer a compelling video product to our customers at a price they are willing to pay. Additionally, we frequently negotiate and renegotiate programming agreements and our annual costs for programming can vary. There can be no assurance that we will be able to renegotiate or renew the terms of our programming agreements on acceptable terms or at all.

If we are unable to obtain or retain attractively priced competitive content, demand for our television services could decrease, thereby limiting our ability to attract new customers, maintain existing customers and/or migrate customers from lower tier programming to higher tier programming. Furthermore, we may be placed at a competitive disadvantage as certain OTT providers increasingly produce their own exclusive content and if certain of our competitors acquire exclusive programming rights, particularly with respect to popular sports.

We depend on third-party suppliers and licensors to supply and maintain necessary equipment, software and certain services required for our businesses.

We rely on third-party vendors for the equipment (including customer premises equipment, network infrastructure and mobile handsets), software and services that we require in order to provide services to our customers. Our suppliers often conduct business worldwide and their ability to meet our needs is subject to various risks, including political and economic instability, international regulations or sanctions, natural calamities, interruptions in transportation systems, power supplies, terrorism and labor issues. In addition, we rely on third parties (in particular, local municipalities, power companies and other telecommunications companies) for access to poles to attach our network equipment, and their ability to provide such access is subject to similar risks. As a result, we may not be able to obtain the equipment, software, access and services required for our businesses on a timely basis or on satisfactory terms. Any shortfall in our equipment could lead to delays in completing extensions to our networks and in connecting customers to our services and, accordingly, could adversely impact our ability to maintain or increase our RGUs, revenue and cash flows. Also, if demand exceeds the suppliers’ and licensors’ capacity or if they experience financial difficulties, the ability of our businesses to provide some services may be materially adversely affected, which in turn could affect our businesses’ ability to attract and retain customers. To the extent that we have minimum order commitments, we would be adversely affected in the event that we were unable to resell committed products or otherwise decline to accept committed products. Although we actively monitor the creditworthiness of our key third-party suppliers and licensors, the financial failure of a key third-party supplier or licensor could disrupt our operations and have an adverse impact on our revenue and cash flows. We rely upon intellectual property that is owned or licensed by us to use various technologies, conduct our operations and sell our products and services. Legal challenges could be made against our use of our owned or licensed intellectual property rights (such as trademarks, patents and trade secrets) and we may be required to enter into licensing arrangements on unfavorable terms, incur monetary damages or be enjoined from use of the intellectual property rights in question. We rely on power companies to provide power necessary to operate equipment necessary to conduct our operations and to operate our customer premises equipment. As a result of any long-term interruption in power supplies, we may not be able to deliver our services on a timely or satisfactory basis, which could accordingly adversely impact our ability to maintain or increase our RGUs, revenue and cash flows.

In addition, the operation, administration, maintenance and repair of our network, including our subsea cable network, requires the coordination and integration of sophisticated and highly specialized hardware and software technologies and equipment located throughout the Caribbean and Latin America and requires operating and capital expenses. Events outside of our control, such as natural disasters, technological failures, vandalism, war, terrorism, inadvertent cuts or extraordinary social or political events, could impact the continued operation of our network. We cannot assure you that our systems will continue to function as expected in a cost-effective manner.

VTR, which offers mobile telephony and data services, relies on the radio access network of a third-party wireless network provider to carry its mobile communications traffic.

VTR's services to mobile customers in Chile rely on the use of an MVNO arrangement in which VTR utilizes the radio access network of a third-party wireless network provider to carry its mobile communications traffic. If the MVNO arrangement is terminated, or if the third-party wireless network provider fails to provide the services required under the MVNO arrangement, or if a third-party wireless network provider fails to deploy and maintain its network, and VTR is unable to find a replacement network operator on a timely and commercially reasonable basis or at all, VTR could be prevented from continuing the mobile services relying on such MVNO arrangement.

Failure in our technology or telecommunications systems from security attacks or natural disasters could significantly disrupt our operations, which could reduce our customer base and result in lost revenue.

Our success depends, in part, on the continued and uninterrupted performance of our information technology and network systems as well as our customer service centers. The hardware supporting a large number of critical systems for our cable network in a particular country or geographic region is housed in a relatively small number of locations. Our systems and equipment (including our routers and set-top boxes) are vulnerable to damage or security breach from a variety of sources, including a cut in our terrestrial network or subsea cable network, telecommunications failures, power loss, malicious human acts, security flaws and natural disasters. In particular, our systems and equipment are in regions prone to hurricanes, earthquakes and other natural disasters, and they have been impacted by hurricanes in the recent past.

Moreover, despite security measures, our servers, systems and equipment are potentially vulnerable to physical or electronic break-ins, computer viruses and similar disruptive actions as further discussed below. See "*Cyberattacks or other network disruptions could have an adverse effect on our business.*"

Our disaster recovery, security and service continuity protection measures include back-up power systems, resilient ring network systems, procuring capacity in competing networks to further strengthen our reliability profile and network monitoring. We also are party to the Atlantic Cable Maintenance and Repair Agreement, which provides us with certain dedicated repair vessels and timely call out services with respect to our subsea cables through to the present. We cannot assure you, however, that these precautions will be sufficient to prevent loss of data or prolonged network downtime or that we will be able to renegotiate arrangements with the Atlantic Cable Maintenance and Repair Agreement on successful terms.

Despite the precautions we have taken, unanticipated problems affecting our systems could cause failures in our information technology systems or disruption in the transmission of signals over our networks or similar problems. Any disruptive situation that causes loss, misappropriation, misuse or leakage of data could damage our reputation and the credibility of our operations. Further, sustained or repeated system failures that interrupt our ability to provide service to our customers or otherwise meet our business obligations in a timely manner could adversely affect our reputation and result in a loss of customers and revenue.

Cyberattacks or other network disruptions could have an adverse effect on our business.

As described above, our success depends, in part, on the continued and uninterrupted performance of our information technology and network systems. The hardware supporting a large number of critical systems for our cable network in a particular country or geographic region is housed in a relatively small number of locations. In addition, through our operations, sales and marketing activities, we collect and store certain non-public personal information related to our customers, and we also gather and retain information about employees in the normal course of business. We may share information about such persons with vendors, contractors and other third-parties that assist with certain aspects of our business. Our and our vendors' servers, systems and equipment (including our routers and set-top boxes) are vulnerable to damage or security breach from a variety of sources, including a cut in our terrestrial network or subsea cable network, security flaws, and malicious human acts.

Despite security measures, our and our vendors' servers, systems and equipment are potentially vulnerable to physical or electronic break-ins, computer viruses, worms, phishing attacks and similar disruptive actions. Furthermore, our operating activities could be subject to risks caused by misappropriation, misuse, leakage, falsification or accidental release or loss of information maintained in our information technology systems and networks and those of our third-party vendors, including customer, personnel and vendor data. The techniques used to gain such access to our or our vendors' technology systems, data or customer information, disable or degrade service, or sabotage systems are constantly evolving, may be difficult to detect quickly, and often are not recognized until launched against a target. It is possible for such cyberattacks to go undetected for an extended period of time, increasing the potential harm to our customers, employees, assets, and reputation.

Cyberattacks against our or our vendors’ technological infrastructure or breaches of network information technology may cause equipment failures, disruption of our or their operation, and potentially unauthorized access to confidential customer or employee data, which could subject us to increased costs and other liabilities as discussed further below.

To date, we have not been subject to cyberattacks or network disruptions that, individually or in the aggregate, have been material to our operations or financial condition. Although we have not detected a material security breach or cybersecurity incident to date, we have been the target of events of this nature and expect to be subject to similar attacks in the future. We engage in a variety of preventive measures at an increased cost to us, in order to reduce the risk of cyberattacks and safeguard our infrastructure and confidential customer information, but as with all companies, these measures may not be sufficient for all eventualities and there is no guarantee that they will be adequate to safeguard against all cyberattacks, system compromises or misuses of data.

If hackers or cyberthieves gain improper access to our or our vendors’ technology systems, networks, or infrastructure, they may be able to access, steal, publish, delete, misappropriate, modify or otherwise disrupt access to confidential customer or employee data or our or our customers’ business systems or networks. Moreover, additional harm to customers or employees could be perpetrated by third parties who are given access to the confidential customer data or business systems or networks. A network disruption (including one resulting from a cyberattack) could cause an interruption or degradation of service and diversion of management attention, as well as permit access, theft, publishing, deletion, misappropriation, or modification to or of confidential customer data or business systems or networks. Due to the evolving techniques used in cyberattacks to disrupt or gain unauthorized access to technology networks, we may not be able to anticipate or prevent such disruption or unauthorized access.

The costs imposed on us as a result of a cyberattack or network disruption could be significant. Among others, such costs could include increased expenditures on cyber security measures, litigation, regulatory actions, fines, sanctions, lost revenue from business interruption, and damage to the public’s perception regarding our ability to provide a secure service. As a result, a cyberattack or network disruption could have a material adverse effect on our business, financial condition, cash flows, and operating results. We also face similar risks associated with security breaches affecting third parties with which we are affiliated or otherwise conduct business. While we maintain cyber liability insurance that provides both third-party liability and first-party insurance coverage, our insurance may not be sufficient to protect against all of our losses from any future disruptions or breaches of our systems or other events as described above.

We rely on information technology to operate our business and maintain our competitiveness, and any failure to invest in and adapt to technological developments and industry trends could harm our business.

We depend on the use of sophisticated information technologies and systems, including technology and systems used for website and mobile applications, network management systems, customer billing, financial reporting, human resources and various other processes and transactions. As our operations grow in size, scope and complexity, we must continuously improve and upgrade our systems and infrastructure to offer an increasing number of customers enhanced products, services, features and functionality, while maintaining or improving the reliability and integrity of our systems and infrastructure.

Our future success also depends on our ability to adapt our services and infrastructure to meet rapidly evolving consumer trends and demands while continuing to improve the performance, features and reliability of our services in response to competitive service and product offerings. The emergence of alternative platforms such as smartphone and tablet computing devices and the emergence of niche competitors who may be able to optimize products, services or strategies for such platforms have, and will continue to, require new and costly investments in technology. We may not be successful, or may be less successful than our current or new competitors, in developing technology that operates effectively across multiple devices and platforms and that is appealing to consumers, either of which would negatively impact our business and financial performance. New developments in other areas, such as cloud computing and software as a service provider, could also make it easier for competition to enter our markets due to lower up-front technology costs. In addition, we may not be able to maintain our existing systems or replace or introduce new technologies and systems as quickly as customers would like or in a cost-effective manner.

Unauthorized access to our network resulting in piracy could result in a loss of revenue.

We rely on the integrity of our technology to ensure that our services are provided only to identifiable paying customers. Increasingly, sophisticated means of illicit piracy of television, broadband and telephony services are continually being developed in response to evolving technologies. Furthermore, billing and revenue generation for television services rely on the proper functioning of encryption systems. While we continue to invest in measures to manage unauthorized access to our networks, any such unauthorized access to our cable television service could result in a loss of revenue, and any failure to respond to security breaches could raise concerns under our agreements with content providers, all of which could have a material adverse effect on our business and results of operations.

If we are unable to retain key employees, our ability to manage our business could be adversely affected.

Our operational results depend upon the retention and continued performance of our management team. Our ability to retain and hire new key employees for management positions could be impacted adversely by the competitive environment for management talent in the broadband communications industry. The loss of the services of key members of management and the inability or delay in hiring new key employees could adversely affect our ability to manage our business and our future operational and financial results.

We may not have sufficient insurance to cover damage due to natural catastrophe claims and future claims either due to coverage limits or as a result of insurance carriers seeking to deny coverage of such claims, which in either case could expose us to significant liabilities.

We maintain a program of third-party traditional and parametric wind risk insurance coverage against various liability, property and business interruption damage risks. We believe these insurance programs are an effective way to protect our assets against these risks. However, the potential damage that could arise from a natural catastrophe event or events in the future could exceed the coverage provided by such programs. In addition, our insurance carriers have in the past sought and may in the future seek to rescind or deny coverage with respect to pending or future claims related to such natural catastrophe damage. Additionally, if we sustain certain wind damage that does not trigger coverage under our parametric wind risk insurance, we may receive no proceeds or proceeds that do not fully cover such damage. If we do not have sufficient coverage under our policies, or if the insurance companies are successful in rescinding or denying coverage, we may be required to make material investments to repair such damage which could result in decreased capital investment, decreased liquidity or increased use of credit facilities or other existing or new debt or funding arrangements.

Data privacy regulations are expanding and compliance with, and any violations of, these regulations may cause us to incur significant expenses.

Privacy legislation, enforcement and policy activity in this area are expanding rapidly in many jurisdictions and creating a complex regulatory compliance environment. The cost of complying with and implementing these privacy-related and data protection measures could be significant. In addition, even our inadvertent failure to comply with federal, state or international privacy-related or data protection laws and regulations could result in proceedings against us by governmental entities or others, and substantial fines and damages. The theft, loss or misuse of personal data collected, used, stored or transferred by us to run our business could result in significantly increased business and security costs or costs related to defending legal claims.

We are involved in disputes and legal proceedings that, if determined unfavorably to us, could have a material adverse effect on our business, financial condition and results of operations.

We are continually involved in disputes and legal proceedings arising out of the regular course of our business, including disputes and legal proceedings initiated by regulatory, competition and tax authorities as well as proceedings with competitors and other parties, including legal proceedings that programmers may institute against us and proceedings that may arise from acquisitions and other transactions we may consummate. For example, certain copyright agencies have asserted, and may in the future assert, claims against us and our subsidiaries regarding the transmission of any of the musical works within such agencies' repertoire. Such claims seek injunctive relief as well as monetary damages. Additionally, VTR is subject to various legal proceedings in Chilean courts. For more information on these VTR legal proceedings, see Item 3. *Legal Proceedings* included in Part I of this Annual Report on Form 10-K. We cannot assure you that we will obtain a final favorable decision with regard to any particular proceeding. Any such disputes or legal proceedings could be expensive and time consuming, could divert the attention of our management and, if resolved adversely to us, could harm our reputation and increase our costs, all of which could result in a material adverse effect on our business, financial condition and results of operations.

Risks that Relate to Our Operating in Overseas Markets and Being Subject to Foreign and Domestic Regulation

Our businesses are conducted almost exclusively outside of the U.S., which gives rise to numerous operational risks.

Our businesses operate almost exclusively in countries outside the U.S., and we have substantial physical assets and derive a substantial portion of our revenues from operations in Latin America and the Caribbean. Therefore, we are subject to the following inherent risks:

- fluctuations in foreign currency exchange rates;

- difficulties in staffing and managing operations consistently through our several operating areas;
- export and import restrictions, custom duties, tariffs and other trade barriers;
- burdensome tax, customs, duties or regulatory assessments based on new or differing interpretations of law or regulations, including increases in taxes and governmental fees;
- economic and political instability, social unrest, and public health crises, such as the occurrence of a contagious disease like the novel coronavirus;
- changes in foreign and domestic laws and policies that govern operations of foreign-based companies;
- interruptions to essential energy inputs;
- direct and indirect price controls;
- cancellation of contract rights and licenses;
- delays or denial of governmental approvals;
- a lack of reliable security technologies;
- privacy concerns; and
- uncertainty regarding intellectual property rights and other legal issues.

Operational risks that we may experience in certain countries include uncertain and rapidly changing political, regulatory and economic conditions, including the possibility of disruptions of services or loss of property or equipment that are critical to overseas businesses as a result of vandalism, expropriation, nationalization, war, insurrection, terrorism or general social or political unrest.

In certain countries and territories in which we operate, political, security and economic changes may result in political and regulatory uncertainty and civil unrest. Governments may expropriate or nationalize assets or increase their participation in the economy generally and in telecommunications operations in particular. Civil unrest in one or more of our markets may adversely affect our operations in the affected market or possibly in other markets depending on the scope of other operations supported by the affected market. For example, riots broke out in Chile in October 2019 in support of concerns over social inequality. These riots led to the injury or detainment of protesters and the dismissal of members of the Chilean President's cabinet. Continued internal turmoil could slow or halt the development of, or otherwise constrain the market for our VTR products and services, could impact foreign exchange rates, and could otherwise impair the business and financial condition of VTR. In addition, following these riots and protests the government announced that it would initiate a process to draft a new constitution for the country. On October 25, 2020, the government conducted a national plebiscite to determine whether to draft a new constitution and the process to do so. 78% of voters approved a proposal to adopt a new constitution and 79% approved a proposal to call a new constitutional convention (without participation of existing representatives in the Chilean Congress). Chile has scheduled another national vote on April 11, 2021 to elect the members of the constitutional convention. Chile anticipates holding another national vote in August 2022 to approve the new constitution. There is still significant uncertainty regarding the process to approve a new constitution and further protests and political instability cannot be ruled out. Furthermore, the existing constitution has been in place since 1980 and any new constitution could change Chile's political situation, potentially affecting the Chilean economy and business outlook, and ultimately VTR's financial condition, results of operations and prospects.

In addition, certain countries and territories in which we operate, or in which we may operate in the future, face significant challenges relating to the lack, or poor condition, of physical infrastructure, including transportation, electricity generation and transmission. Such countries and territories may also be subject to a higher risk of inflationary pressures, which could increase our operating costs and decrease consumer demand and spending power. Each of these factors could, individually or in the aggregate, have a material adverse effect on our business, financial condition, results of operations and prospects.

Moreover, in many foreign countries, particularly in certain developing economies, it is not uncommon to encounter business practices that are prohibited by certain regulations, such as the U.S. Foreign Corrupt Practices Act (**FCPA**) and similar laws. Although our subsidiaries and business affiliates have undertaken, and will continue to undertake, compliance efforts with respect to these laws, their respective employees, contractors and agents, as well as those companies to which they outsource certain of their business operations, may take actions in violation of their policies and procedures. Any such violation could result in penalties imposed on, and adversely affect the reputation of, these subsidiaries and business affiliates. Any failure by these subsidiaries and business affiliates to effectively manage the challenges associated with the international operation of their businesses could materially adversely affect their, and hence our, financial condition.

Public health crises, such as the recent outbreak of the novel coronavirus, in countries where we operate or where our contractors' or vendors' facilities are located could also have an effect on our financial condition or operations through impacts on our customers' ability to use our services, on the availability of our workforce or through adverse impacts to our supply chain.

We are exposed to foreign currency exchange rate risk.

We are exposed to foreign currency exchange rate risk with respect to our debt in situations where our debt is denominated in a currency other than the functional currency of the operations whose cash flows support our ability to service, repay or refinance such debt. Although we generally seek to match the denomination of our borrowings with the functional currency of the operations that are supporting the respective borrowings, market conditions or other factors may cause us to enter into borrowing arrangements that are not denominated in the functional currency of the underlying operations (unmatched debt). Our policy is generally to provide for an economic hedge against foreign currency exchange rate movements, whenever possible and when cost effective to do so, by using derivative instruments to synthetically convert unmatched debt into the applicable underlying currency.

In addition to the exposure that results from unmatched debt, we are exposed to foreign currency risk to the extent that we enter into transactions denominated in currencies other than our operating subsidiaries' respective functional currencies (non-functional currency risk), such as equipment purchases and programming contracts. Changes in exchange rates with respect to amounts recorded in our consolidated balance sheet related to these items will result in unrealized (based upon period-end exchange rates) or realized foreign currency transaction gains and losses upon settlement of the transactions. Moreover, to the extent that our revenue, costs and expenses are denominated in currencies other than our respective functional currencies, we will experience fluctuations in our revenue, costs and expenses solely as a result of changes in foreign currency exchange rates. Generally, we will consider hedging non-functional currency risks when the risks arise from agreements with third parties that involve the future payment or receipt of cash or other monetary items to the extent that we can reasonably predict the timing and amount of such payments or receipts and the payments or receipts are not otherwise hedged. In this regard, we have entered into foreign currency forward contracts to hedge certain of these risks. Certain non-functional currency risks related to our programming and other direct costs of services and other operating costs and expenses and property and equipment additions were not hedged as of December 31, 2020.

We also are exposed to unfavorable and potentially volatile fluctuations of the U.S. dollar (our reporting currency) against the currencies of our operating subsidiaries when their respective financial statements are translated into U.S. dollars for inclusion in our consolidated financial statements. Cumulative translation adjustments are recorded in accumulated other comprehensive earnings or loss as a separate component of equity. Any increase (decrease) in the value of the U.S. dollar against any foreign currency that is the functional currency of one of our operating subsidiaries will cause us to experience unrealized foreign currency translation losses (gains) with respect to amounts already invested in such foreign currencies. Accordingly, we may experience a negative impact on our comprehensive earnings or loss and equity with respect to our holdings solely as a result of FX. Our primary exposure to FX risk during 2020 was to the Chilean peso as 21.5% of our reported revenue during the period was derived from VTR, whose functional currency is the Chilean peso. In addition, our reported operating results are impacted by changes in the exchange rates for other local currencies in Latin America and the Caribbean. We generally do not hedge against the risk that we may incur non-cash losses upon the translation of the financial statements of our operating subsidiaries and affiliates into U.S. dollars.

Failure to comply with economic and trade sanctions, and similar laws could have a materially adverse effect on our reputation, results of operations or financial condition, or have other adverse consequences.

We operate in the Caribbean and Latin America, and similar to other international companies, we are subject to economic and trade sanctions programs, including certain of which that are administered by OFAC, which prohibit or restrict transactions or dealings with specified countries, their governments, and in certain circumstances, their nationals, and with individuals and entities that are specially designated. These regulations are extensive and complex, and they differ from one sanctions regime to another. Failure to comply with these regulations could subject us to legal and reputational consequences, including civil and criminal penalties.

For example, certain of our companies provide (and may in the future provide), directly or indirectly, certain services to governmental entities in Cuba (*e.g.*, C&W sells IP and international transport telecommunication services to La Empresa de Telecomunicaciones de Cuba S.A. (**ETECSA**), the Cuba state-owned telecommunications provider and to three international telecommunications providers that in turn sell telecom services to ETECSA). All these services are provided outside of Cuba and the provision of non-facilities based telecom services to Cuba are permissible under a general license from OFAC.

We also have interconnection and services contracts with telecommunications carriers located in Venezuela. With respect to Cuba, we believe we have designed our activities to comply with certain telecommunications and information systems general license and exemptions. With respect to Venezuela, we have advised OFAC that we believe that our activities there are not covered by the OFAC regulations or are otherwise allowed under a general license and exemptions or, in the alternative, should be licensed by OFAC.

We believe that our activities with respect to these countries are known to OFAC. We note, however, that OFAC regulations and related interpretive guidance are complex and subject to varying interpretations. Due to this complexity, OFAC's interpretation of its own regulations and guidance vary on a case to case basis. As a result, we cannot provide any guarantees that OFAC will not challenge any of our activities in the future, which could have a material adverse effect on our results of operations.

Any violations of applicable economic and trade sanctions could limit certain of our business activities until they are satisfactorily remediated and could result in civil and criminal penalties, including fines, that could damage our reputation and have a materially adverse effect on our results of operation or financial condition.

Our businesses are subject to risks of adverse regulation.

Our businesses are subject to the unique regulatory regimes of the countries in which they operate. Video distribution, broadband internet, telephony and mobile businesses are subject to licensing or registration eligibility rules and regulations, which vary by country. Our ability to provide telecommunications services depends on applicable law, telecommunications regulations and the terms of the licenses and concessions we are granted under such laws and regulations. In particular, we are reliant on access with mutually beneficial terms to spectrum for both existing and next generation telecommunication services, entrance into interconnection agreements with other telecommunications companies and are subject to a range of decisions by regulators, including in respect of pricing, for example, for termination rates. The provision of electronic communications networks and services requires our licensing from, or registration with, the appropriate regulatory authorities. It is possible that countries in which we operate may adopt laws and regulations regarding electronic commerce, which could dampen the growth of the internet services being offered and developed by these businesses. In a number of countries, our ability to increase the prices we charge for our cable television service or make changes to the programming packages we offer is limited by regulation or conditions imposed by competition authorities, or is subject to review by regulatory authorities or termination rights of customers. In addition, regulatory authorities may grant new licenses to third parties and, in any event, in most of our markets new entry is possible without a license, although there may be registration eligibility rules and regulations, resulting in greater competition in territories where our businesses may already be active. More significantly, regulatory authorities may require us to grant third parties access to our bandwidth, frequency capacity, infrastructure, facilities or services to distribute their own services or resell our services to end customers. For example, certain regulators are seeking to mandate third-party access to portions of C&W's network infrastructure. Consequently, our businesses must adapt their ownership and organizational structure as well as their pricing and service offerings to satisfy the rules and regulations to which they are subject. A failure to comply with applicable rules and regulations could result in penalties, restrictions on our business or loss of required licenses or other adverse conditions. We may continue to operate in jurisdictions where governments fail to grant or renew licenses for our operations, which could result in penalties, fines or restrictions that could have a material adverse impact on our business and financial condition.

Adverse changes in rules and regulations could:

- impair our ability to use our bandwidth in ways that would generate maximum revenue and cash flow;
- create a shortage of capacity on our networks, which could limit the types and variety of services we seek to provide our customers;
- impact our ability to access spectrum for our mobile services;
- strengthen our competitors by granting them access and lowering their costs to enter into our markets; and
- otherwise have a significant adverse impact on our results of operations.

Businesses, including ours, that offer multiple services, such as video distribution as well as internet, telephony, and/or mobile services, often face close regulatory scrutiny from competition authorities in countries in which they operate. This is particularly the case with respect to any proposed business combinations, which will often require clearance from national competition authorities. The regulatory authorities in several countries in which we do business have considered from time to time what access rights, if any, should be afforded to third parties for use of existing cable television networks and have imposed access obligations in certain countries. This has resulted, for example, in video must carry obligations in many markets in which we operate. For more information, see Item 1. *Business—Description of Business—Regulatory Matters*.

Regulations may be especially strict in the markets of those countries in which we are considered to hold a significant market position. We have been, in the past, and may be in the future, subject to allegations and complaints by our competitors and other third parties regarding our competitive behavior as a significant market operator.

When we acquire additional communications companies, these acquisitions may require the approval of governmental authorities, which can block, impose conditions on, or delay an acquisition, thus hampering our opportunities for growth. If conditions are imposed and we fail to meet them in a timely manner, the governmental authority may impose fines and, if in connection with an acquisition transaction, may require restorative measures, such as mandatory disposition of assets or divestiture of operations, similar to the divestiture with respect to the AT&T Acquisition. The acquisition of C&W in May 2016 triggered regulatory approval requirements in certain jurisdictions in which C&W operates. The regulatory authorities in all of these jurisdictions, except for Trinidad and Tobago, have completed their review of the May 16, 2016 acquisition of C&W (the **C&W Acquisition**) and have granted their approval. While we expect to receive this outstanding approval, such approval may include binding conditions or requirements that could have an adverse impact on C&W's operations and financial condition.

Furthermore, the governments in the countries and territories in which we operate differ widely with respect to political structure, constitution, economic philosophy, stability and level of regulation. Many of our operations depend on governmental approval and regulatory decisions, and we provide services to governmental organizations in certain markets (and in certain cases, like Venezuela, governmental organizations are our biggest customers). Moreover, in several of C&W's key markets, including Panama and the Bahamas, governments are C&W's partners and co-owners. The Government of the Bahamas is a part-owner in C&W Bahamas and the Government of Panama is a part-owner in CWP, and each of the governments have the right to appoint members to the board of directors of the respective entity. In both the Bahamas and Panama, we hold licenses or have received concessions from the government or independent regulatory bodies to operate our business, including our mobile and fixed networks. Consequently, we may not be able to fully utilize C&W's contractual or legal rights or all options that may otherwise be available, where to do so might conflict with broader regulatory or governmental considerations. In addition, we are, and in the future may be, a party to certain disputes with regulators and governments from time to time that could have a material adverse effect on our business and results of operations.

Changes to existing legislation and new legislation may significantly alter the regulatory regime applicable to us, which could adversely affect our competitive position and profitability, and we may become subject to more extensive regulation if we are deemed to possess significant market power in any of the markets in which we operate.

Significant changes to the existing regulatory regime applicable to the provision of cable television, telephony and internet services have been and are still being introduced. In addition, we are subject to review by competition or national regulatory authorities in certain countries concerning whether we exhibit significant market power. A finding of significant market power could result in us becoming subject to access and pricing obligations and other requirements that could provide a more favorable operating environment for existing and potential competitors. Government regulation or administrative policies may change unexpectedly and negatively affect our interests. For example, there has been a general trend for governments to seek greater access to telecommunications records and to communications for law enforcement purposes and a trend in certain countries experiencing civil unrest to restrict access to telecommunications on national security grounds. Adverse regulatory developments could subject our businesses to a number of risks. For more information, see Item 1. *Business—Description of Business—Regulatory Matters*.

For various reasons, governments may seek to increase the regulation of the use of the internet, particularly with respect to user privacy and data protection, access rights content, pricing, copyrights, consumer protection, distributions and characteristics and quality of products and services. Application of existing laws, including those addressing property ownership and personal privacy in the context of rapidly evolving technological developments remains uncertain and in flux. New interpretations of such laws could have an adverse effect on our business. Governments may also seek to regulate the content of communications in all of our revenue streams, which could reduce the attractiveness of our services. Governments may also change their attitude towards foreign investment or extract extra concessions from businesses. Or governments may elect to intervene directly in our markets by constructing their own infrastructure. In Jamaica for example, the government recently announced an intention to explore the possibility of constructing its own national broadband backbone, connecting schools, hospitals, government ministries and fire and police stations. Accordingly, our operations may be constrained by the relevant political environment and may be adversely affected by such constraints, as well as by changes to the political structure or government in any of the markets in which we operate.

Future changes to regulation or changes in political administrations or a significant deterioration in our relationship with relevant regulators in the jurisdictions in which we operate, as well as failure to acquire and retain the necessary consents and approvals or in any other way comply with regulatory requirements, or excessive costs of complying with new or more onerous regulations and restrictions could have a material adverse effect on our business, reputation, financial condition, results of operations and prospects.

We may not be successful in acquiring future spectrum or other licenses that we need to offer new mobile data or other services.

We offer mobile data services through licensed spectrum in a number of markets. While these licenses, and other licenses that we possess, enable us to offer mobile data services today, as technology develops and customer needs change, it may be necessary to acquire new spectrum or other licenses in the future to provide us with additional capacity and/or offer new technologies or services. While we actively engage with regulators and governments to ensure that our spectrum needs are met, there can be no guarantee that future spectrum licenses will be made available in certain or all territories or that they will be made available on commercially viable terms. We will likely require additional spectrum licenses for LTE networks, and there may be competition for their acquisition. In addition, we may need other types of licenses for the new products and services that we contemplate or will consider offering. Failure to acquire necessary new spectrum licenses or other required licenses for new services or products, or to do so on commercially viable terms, could have a material adverse effect on our business, financial condition and results of operations.

We cannot be certain that we will be successful in acquiring new businesses or integrating acquired businesses with our existing operations, or that we will achieve the expected returns on our acquisitions.

Part of our business strategy is to grow and expand our businesses, in part, through selective acquisitions that enable us to take advantage of existing networks, local service offerings and region-specific management expertise. Our ability to acquire new businesses may be limited by many factors, including availability of financing, debt covenants, the prevalence of complex ownership structures among potential targets, government regulation and competition from other potential acquirers, including private equity funds. Even if we are successful in acquiring new businesses, the integration of these businesses, such as in the AT&T Acquisition and Telefonica-Cost Rica Acquisition, may present significant costs and challenges associated with: realizing economies of scale in interconnection, programming and network operations; eliminating duplicative overheads; integrating personnel, networks, financial systems and operational systems; greater than anticipated expenditures required for compliance with regulatory standards or for investments to improve operating results; and failure to achieve the business plan with respect to any such acquisition. We cannot be assured that we will be successful in acquiring new businesses or realizing the anticipated benefits of any completed acquisition.

In addition, we anticipate that any companies we may acquire will be located in the Caribbean or Latin America. Such companies may not have disclosure controls and procedures or internal controls over financial reporting that are as thorough or effective as those required by U.S. securities laws and the FCPA. While we intend to conduct appropriate due diligence and to implement appropriate controls and procedures as we integrate acquired companies, we may not be able to certify as to the effectiveness of these companies' disclosure controls and procedures or internal controls over financial reporting until we have fully integrated them.

We may not be successful in renewing the necessary regulatory licenses, concessions or other operating agreements needed to operate our businesses upon expiration, and such licenses may be subject to termination, revocation or material alteration in the event of a breach or to promote the public interest or as a result of triggering a change of control clause.

While we actively engage with the applicable governments and other regulatory bodies in advance of the expiry of our licenses, concessions and operating agreements, there can be no guarantee that when such licenses, concessions and operating agreements expire, we will be able to renew them on similar or commercially viable terms, or at all. For instance, C&W's licenses in the Cayman Islands and the Turks and Caicos Islands are scheduled to expire in the next year; however, we have already applied for renewals in both jurisdictions. In addition, in some of the ECTEL states, we are operating under expired licenses and have applied for renewal of such licenses.

Some of these licenses may also include clauses that allow the grantor to terminate or revoke or alter them in the event of a default or other failure by us to comply with applicable conditions of the license or to promote the public interest. Further, a number of our operating licenses include change of control clauses, which may be triggered by the sale of a business to which those clauses relate, or certain types of corporate restructurings. Some of these change of control clauses may restrict our strategic options, including the ability to complete any potential disposal of individual businesses, a combination of businesses or the entire company unless a consent or waiver is obtained, and, if triggered, may lead to some licenses being terminated. Failure to hold or to continue to hold or obtain the necessary licenses, concessions and other operating agreements required to operate our businesses could have a material adverse effect on our business, financial condition, results of operations and prospects.

We do not have complete control over the prices that we charge.

Our businesses are in some countries subject to regulation or review by various regulatory, competition or other government authorities responsible for the regulation or the review of the charges to our customers for our services. Such authorities, in certain cases, could potentially require us to repay such fees to the extent they are found to be excessive or discriminatory. We also may not be able to enforce future changes to our subscription prices. Additionally, in certain markets, our ability to bundle or discount our services may be constrained if we are held to be dominant with respect to any product we offer. This may have an adverse impact on our revenue, profitability of new products and services and our ability to respond to changes in the markets in which we operate.

Strikes, work stoppages and other industrial actions could disrupt our operations or make it more costly to operate our businesses.

We are exposed to the risk of strikes, work stoppages and other industrial actions. In the future we may experience lengthy consultations with labor unions or strikes, work stoppages or other industrial actions. Strikes and other industrial actions, as well as the negotiation of new collective bargaining agreements or salary increases in the future, could disrupt our operations and make it more costly to operate our facilities. In addition, strikes called by employees of any of our key providers of materials or services could result in interruptions of the performance of our services. The occurrence of any of the above risks could have a material adverse effect on our business, financial condition and results of operations. We depend on third-party suppliers and licensors to supply necessary equipment, software and certain services required for our businesses.

We may have exposure to additional tax liabilities.

We are subject to income taxes as well as non-income based taxes in the Caribbean, parts of Latin America, parts of Europe and the U.S. In addition, most tax jurisdictions that we operate in have complex and subjective rules regarding the valuation of intercompany services, cross-border payments between affiliated companies and the related effects on income tax and transfer tax. Significant judgment is required in determining our provision for income taxes and other tax liabilities. In the ordinary course of our business, there are many transactions and calculations where the ultimate tax determination is uncertain. In addition, our business has undertaken acquisitions, restructurings and other transactions in prior years where the ultimate tax determination resulting from these transactions remains uncertain. We are regularly under audit by tax authorities in many of the jurisdictions in which we operate. Although we believe that our tax estimates are reasonable, any material differences as a result of final determinations of tax audits or tax disputes could have an adverse effect on our financial position and results of operations in the period or periods for which determination is made.

We are subject to changing tax laws, treaties and regulations in and between countries in which we operate or otherwise have a presence. Also, various income tax proposals in the jurisdictions in which we operate could result in changes to the existing laws on which our deferred taxes are calculated. A change in these tax laws, treaties or regulations, or in the interpretation thereof, could result in a materially higher income or non-income tax expense. Any such material changes could cause a material change in our effective tax rate.

Further changes in the tax laws of the foreign jurisdictions in which we operate could arise as a result of the base erosion and profit shifting project being undertaken by the Organization for Economic Cooperation and Development (**OECD)**. The OECD, which represents a coalition of member countries that includes Chile and the United States, has undertaken studies and is publishing action plans that include recommendations aimed at addressing what they believe are issues within tax systems that may lead to tax avoidance by companies. The OECD has extended inclusion to non-OECD countries under their Inclusive Framework on Base Erosion and Profit Shifting (BEPS), bringing together over 100 countries to collaborate on the implementation of the OECD BEPS Package. This framework allows interested countries and jurisdictions to work with the OECD and G20 members on developing standards on BEPS-related issues and reviewing and monitoring the implementation of the whole BEPS Package. Included within this expanded group of countries are several jurisdictions in which we do business. It is possible that additional jurisdictions in which we do business could react to these initiatives or their own concerns by enacting tax legislation that could adversely affect us or our shareholders through increasing our tax liabilities.

Risks that Relate to Certain Financial Matters

The effects of the novel coronavirus (COVID-19) outbreak could continue to adversely impact our business and results of operations.

The outbreak and continuing exponential spread of COVID-19, which first surfaced in Wuhan, China in December 2019 and was declared a "pandemic" by the Word Health Organization in March 2020, may continue to lead to a significant number of adverse effects, both external and internal, on our business and results of operations. With respect to external impacts, the COVID-19 outbreak has resulted in a substantial curtailment of the global economy, including global travel, tourism, and business activities. As part of the global efforts to contain the spread of COVID-19, most of the countries in which we operate have imposed travel restrictions, with a significant number of airport closures, flight cancellations and suspensions, and port closures. These measures, coupled with the further spread of COVID-19, have resulted in a significant reduction of worldwide travel, including travel related to tourism, which is an important economic activity for many of the markets in which we operate. If these conditions continue for an extended period of time, we could experience reduced demand for our products and services, including a reduction in roaming charges incurred by tourists, which could continue to have a negative impact on our ability to enter into new customer contracts or renew existing customer contracts, specifically in our B2B operations and with hotels and other tourist-related businesses. In addition, a continued prolonged period of travel, commercial and other similar restrictions, or delays in vaccine rollouts, and the resulting reduced demand for air and sea travel as a result of the COVID-19 outbreak could continue to have a negative impact on the ability of our government customers to perform their obligations to us under their existing customer contracts, as many of these markets rely heavily on tourism to drive their respective economies.

With respect to internal impacts, the COVID-19 outbreak has resulted in significant uncertainty in many areas of our business. This continued uncertainty is expected to continue to negatively impact our operations. We may experience labor shortages if our employees are unable or unwilling to come to work due to being infected with COVID-19, quarantine measures, or related outcomes as a result of this outbreak. In this regard, our internal controls over financial reporting measures may be impacted by labor shortages and/or work from home initiatives. Similarly, some of our retail stores, offices and facilities either have been or may be temporarily shut down because of this outbreak, which certain of our customers frequently access to pay for our products and services. The inability of our customers to pay for our products and services, as well as continued government intervention precluding payment from customers for a certain period of time, whether in such retail stores, due to a continued general downturn in the global economy or otherwise, could continue to negatively impact our cash flows, liquidity, including working capital, and ability to borrow. To the extent to which any of the above materialize for a meaningful period of time, we would have to rely on committed liquidity facilities to bridge cash flow, working capital and or capital expenditure requirements. This may have a long term consequence for both our liquidity position and longer term leverage levels across the business. In turn, such results could impact our capital expenditures, including those earmarked for equipment and associated labor costs to build out and/or upgrade our networks as well as for related customer premises equipment. Additionally, certain of our product shipments from vendors may be delayed. If such a disruption were to extend over a prolonged period, it could have an impact on the continuity of our supply chain. Any disruption resulting from similar events on a larger scale or over a prolonged period could cause significant delays in shipments of products until we are able to resume such shipments or shift from the affected contractor or vendor to another third-party vendor. If our suppliers cannot deliver the supplies we need to operate our business, including handsets, set-top boxes, and other devices, and if we are unable to deliver our products to our customers, our business and results of operations could continue to be negatively impacted.

As of December 31, 2020, the impact of COVID-19 has had a significant impact on our results of operations, financial position, cash flows and liquidity. The extent of the impact of the continued outbreak on our operational and financial performance will depend on certain developments, including the duration and spread of the outbreak, vaccine rollouts, the impact on our customers and our sales cycles, the impact on our employees, and the effect on our vendors, all of which are uncertain and cannot be predicted. The outbreak has resulted in systemic disruption of the worldwide equity markets, and the market values of our publicly-traded equity declined significantly beginning in late February 2020. If, among other factors, (i) our equity values were to remain at these declined levels for a sustained period or were to decline further or (ii) the adverse impacts stemming from the COVID-19 outbreak, competition, economic, regulatory or other factors, including macro-economic and demographic trends, were to cause our results of operations or cash flows to be worse than anticipated, we could conclude in future periods that impairment charges are required in order to reduce the carrying values of goodwill or other long-lived assets. Any such impairment charges could be significant. Additionally, our ability to execute on cost-cutting measures and organizational change initiatives may impact our financial performance and results of operations, including less-than-anticipated cost savings. For instance, in the event demand for our products or services continue to be reduced as a result of the COVID-19 pandemic and related economic impacts, we may need to assess different corporate actions, organizational change initiatives, and cost-cutting measures, including reducing our workforce, reducing our operating and capital costs, or closing one or more of our retail stores, offices or facilities, and these actions could cause us to incur costs and expose us to other risks and inefficiencies, including whether we would be able to rehire our workforce or recommence operations at such facilities if our business experiences a subsequent recovery. Also, the expansion of our new Operations Center in Panama City, Panama, which is one of our key organizational change initiatives, may continue to be impacted as a result of the COVID-19 pandemic.

Our substantial leverage could limit our ability to obtain additional financing and have other adverse effects.

Our businesses are highly leveraged. At December 31, 2020, the outstanding principal amount of our debt, together with our finance lease obligations, aggregated $8,514 million, including $162 million that is classified as current in our consolidated balance sheet and $7,225 million that is not due until 2026 or thereafter. In addition, we may incur substantial additional debt in the future, including in connection with any future acquisitions. We believe that we have sufficient resources to repay or refinance the current portion of our debt and finance lease obligations and to fund our foreseeable liquidity requirements during the next 12 months. However, as our debt maturities grow in later years, we anticipate that we will seek to refinance or otherwise extend our debt maturities. No assurance can be given that we will be able to complete refinancing transactions or otherwise extend our debt maturities. In this regard, it is difficult to predict how political and economic conditions, sovereign debt concerns or any adverse regulatory developments will impact the credit and equity markets we access and our future financial position.

Our ability to service or refinance our debt and to maintain compliance with the leverage covenants in our credit agreements is dependent primarily on our ability to maintain or increase the cash flow of our operating subsidiaries and to achieve adequate returns on our property and equipment additions and acquisitions. Accordingly, if our cash provided by operations declines or we encounter other material liquidity requirements, we may be required to seek additional debt or equity financing in order to meet our debt obligations and other liquidity requirements as they come due. In addition, our current debt levels may limit our ability to incur additional debt financing to fund working capital needs, acquisitions, property and equipment additions, or other general corporate requirements. We can give no assurance that any additional debt or equity financing will be available on terms that are as favorable as the terms of our existing debt or at all or that we will be able to maintain compliance with the leverage covenants in our credit agreements, which could have a material adverse effect on our business, liquidity and results of operations.

We may not be able to generate sufficient cash to meet our debt service obligations.

Our ability to meet our debt service obligations or to refinance our debt, depends on our future operating and financial performance, which will be affected by our ability to successfully implement our business strategy as well as general macroeconomic, financial, competitive, regulatory and other factors beyond our control. In addition, we are dependent on customers, in particular local, municipal and national governments and agencies, to pay us for the services we provide in order for us to generate cash to meet our debt service obligations and to maintain our business. Accordingly, we are exposed to the risk that our government customers could default on their obligations to us and we cannot rule out the possibility that unexpected circumstances in a particular country's economic condition may render such government unable to meet its obligation to us. Any such event could have an adverse effect on our cash flows, results of operations, financial condition and/or liquidity. If we cannot generate sufficient cash to meet our debt service requirements or to maintain our business, we may, among other things, need to delay planned capital expenditures or investments or sell material assets to meet those obligations.

If we are not able to refinance any of our debt, obtain additional financing or sell assets on commercially reasonable terms or at all, we may not be able to satisfy our debt obligations. In that event, borrowings under other debt agreements or instruments that contain cross-default or cross-acceleration provisions with respect to other indebtedness of relevant members of each of our four borrowing groups (i.e. C&W, VTR, Cabletica, and Liberty Puerto Rico) may become payable on demand and we may not have sufficient funds to repay all of our debts. See Item 7. *Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources*.

Certain of our subsidiaries are subject to various debt instruments that contain restrictions on how we finance our operations and operate our businesses, which could impede our ability to engage in beneficial transactions.

Certain of our subsidiaries are subject to significant financial and operating restrictions contained in outstanding credit agreements, indentures and similar instruments of indebtedness. These restrictions will affect, and in some cases significantly limit or prohibit, among other things, the ability of those subsidiaries to:

- incur or guarantee additional indebtedness;
- pay dividends or make other upstream distributions;
- make investments;
- transfer, sell or dispose of certain assets, including their stock;

- merge or consolidate with other entities;
- engage in transactions with us or other affiliates; or
- create liens on their assets.

As a result of restrictions contained in these debt instruments, the companies party thereto, and their subsidiaries, could be unable to obtain additional capital in the future to:

- fund property and equipment additions or acquisitions that could improve our value;
- meet their loan and capital commitments to their business affiliates;
- invest in companies in which they would otherwise invest;
- fund any operating losses or future development of their business affiliates;
- obtain lower borrowing costs that are available from secured lenders or engage in advantageous transactions that monetize their assets; or
- conduct other necessary or prudent corporate activities.

In addition, some of the credit agreements to which these subsidiaries are parties include financial covenants that require them to maintain certain financial ratios. Their ability to meet these financial covenants may be affected by adverse economic, competitive, or regulatory developments and other events beyond their control, and we cannot assure you that these financial covenants will be met. In the event of a default under our subsidiaries' credit agreements or indentures, the lenders may accelerate the maturity of the indebtedness under those agreements or indentures, which could result in a default under other outstanding credit facilities or indentures. We cannot assure you that any of these subsidiaries will have sufficient assets to pay indebtedness outstanding under their credit agreements and indentures. Any refinancing of this indebtedness is likely to contain similar restrictive covenants.

We are exposed to interest rate risks and other adverse changes in the credit market. Shifts in such rates may adversely affect the debt service obligation of our subsidiaries.

We require a significant amount of capital to operate and grow our business. We fund our capital needs in part through borrowings in the public and private credit markets. Adverse changes in the credit markets, including increases in interest rates, could increase our cost of borrowing and/or make it more difficult for us to obtain financing for our operations or refinance existing indebtedness. In addition, our borrowing costs can be affected by short- and long-term debt ratings assigned by independent rating agencies, which are based, in significant part, on our performance as measured by customary credit metrics. A decrease in these ratings would likely increase our cost of borrowing and/or make it more difficult for us to obtain financing. A severe disruption in the global financial markets could impact some of the financial institutions with which we do business, and such instability could also affect our access to financing.

In particular, we are exposed to the risk of fluctuations in interest rates, primarily through the credit facilities of certain of our subsidiaries, which are indexed to the London Interbank Offered Rate (**LIBOR**) or other base rates. Although we enter into various derivative transactions to manage exposure to movements in interest rates, there can be no assurance that we will be able to continue to do so at a reasonable cost or at all. If we are unable to effectively manage our interest rate exposure through derivative transactions, any increase in market interest rates would increase our interest rate exposure and debt service obligations, which would exacerbate the risks associated with our leveraged capital structure. Regulators in the U.K. have announced that LIBOR will be phased out by the end of 2021. On November 30, 2020, the administrator of U.S. dollar LIBOR announced a delay in the phase out of a majority of the U.S. dollar LIBOR publications until June 30, 2023, with the remainder of LIBOR publications still being phased out at the end of 2021. Our loan documents contain customary provisions that contemplate alternative calculations of the applicable base rate once LIBOR is no longer available. We do not expect that these alternative calculations will be materially different from what would have been calculated under LIBOR at this time.

The phasing out of LIBOR and EURIBOR will result in a new reference rate being applied to our LIBOR-indexed debt which may not be the same as the new reference rate applied to our LIBOR-indexed derivative instruments, and will have to be adjusted for.

In July 2017, the U.K. Financial Conduct Authority (the authority that regulates LIBOR) announced that it intends to stop compelling banks to submit rates for the calculation of LIBOR after 2021. Additionally, the European Money Markets Institute (the authority that administers the Euro Interbank Offered Rate (**EURIBOR**)) has announced that measures will need to be undertaken by the end of 2021 to reform EURIBOR to ensure compliance with E.U. Benchmarks Regulation. Currently, it is not possible to predict the exact transitional arrangements for calculating applicable reference rates that may be made in the U.K., the U.S., the Eurozone or elsewhere given that a number of outcomes are possible, including the cessation of the publication of one or more reference rates. Our loan documents contain provisions that contemplate alternative calculations of the base rate applicable to our LIBOR-indexed debt to the extent LIBOR is not available, which alternative calculations we do not anticipate will be materially different from what would have been calculated under LIBOR. Additionally, no mandatory prepayment or redemption provisions would be triggered under our loan documents in the event that the LIBOR rate is not available. It is possible, however, that any new reference rate that applies to our LIBOR-indexed debt could be different than any new reference rate that applies to our LIBOR-indexed derivative instruments. We anticipate managing this difference and any resulting increased variable-rate exposure through modifications to our debt and/or derivative instruments, however future market conditions may not allow immediate implementation of desired modifications and the company may incur significant associated costs.

We are subject to increasing operating costs and inflation risks, which may adversely affect our results of operations.

While our operations attempt to increase our subscription rates to offset increases in programming and operating costs, there is no assurance that they will be able to do so. In certain countries in which we operate, our ability to increase subscription rates is subject to regulatory controls. For example, VTR is generally prohibited from increasing subscription rates over the rate of inflation. Also, our ability to increase subscription rates may be constrained by competitive pressures. Therefore, operating costs may rise faster than associated revenue, resulting in a material negative impact on our cash flow and results of operations. We are also impacted by inflationary increases in salaries, wages, benefits and other administrative costs in certain of our markets.

Uncertainties and challenging conditions in the global economy and in the countries in which we operate may adversely impact our business, financial condition and results of operations.

The macroeconomic environment can be highly volatile, and instability in global markets has contributed, and could in the future contribute, to a challenging global economic environment. Future developments are dependent upon a number of political and economic factors, and as a result, we cannot predict when challenging conditions will exist or the extent to which the markets in which we operate may deteriorate. Unfavorable economic conditions may impact a significant number of our customers and/or the prices we are able to charge for our products and services, and, as a result, it may be more difficult for us to attract new customers and more likely that customers will downgrade or disconnect their services. Countries may also seek new or increased revenue sources due to fiscal deficits, including increases in regulatory levels, and any such actions may adversely affect our company. In addition, as countries seek to recover from natural disasters like hurricanes, they may seek new or increased revenue sources from businesses such as ours, including by increasing taxes and levies. Accordingly, our results of operations and cash flows may be adversely affected if the macroeconomic environment becomes uncertain or declines or governments increase taxes or levies as a result of fiscal deficits or natural disasters. We are currently unable to predict the extent of any of these potential adverse effects.

Additional factors that could influence customer demand include access to credit, unemployment rates, affordability concerns, consumer confidence, capital and credit markets volatility, geopolitical issues and general macroeconomic factors. Certain of these factors drive levels of disposable income, which in turn affect many of our revenue streams. Business solutions customers may delay purchasing decisions, delay full implementation of service offerings or reduce their use of services. Our residential customers may similarly elect to use fewer higher margin services, switch from fixed to mobile services resulting in the so-called traffic substitution effect, reduce their consumption of our video services or similarly choose to obtain products and services under lower cost programs offered by our competitors. In addition, adverse economic conditions may lead to a rise in the number of our customers who are not able to pay for our services.

Adverse economic conditions can also have an adverse impact on tourism, which in turn can adversely impact our business. In tourist destinations, levels of gross domestic products and levels of foreign investment linked to tourism are closely tied to levels of tourist arrivals and length of stay. In addition to having a direct impact on our revenue, due, for example, to reduction of roaming charges incurred by tourists, these factors will in turn drive disposable income, with the corresponding impact on use of our products and services.

Due to the Caribbean's heavy reliance on tourism, the Caribbean economy has suffered during previous periods of global recession and fluctuations in exchange rates and is likely to be adversely affected if major economies again find themselves in recession or if consumer and/or business confidence in those economies erodes in the face of trends in the global financial markets and economies.

Should current economic conditions deteriorate, there may be volatility in exchange rates, increases in interest rates or inflation, liquidity shortfalls and an adverse effect on our revenue and profits. Recessionary pressures or country-specific issues could, among other things, affect products and services, the level of tourism experienced by some countries and the level of local consumer and business expenditure on telecommunications. In addition, most of our operations are in developing economies, which historically have experienced more volatility in their general economic conditions. The impact of poor economic conditions, globally or at a local or national level in the countries and territories in which we operate, could have a material adverse effect on our business, financial condition, results of operations.

We are exposed to sovereign debt and currency instability risks that could have an adverse impact on our liquidity, financial condition and cash flows.

Our operations are subject to macroeconomic and political risks that are outside of our control. For example, high levels of sovereign debt in the U.S., Puerto Rico and several other countries in which we operate, combined with weak growth and high unemployment, could potentially lead to fiscal reforms (including austerity measures), tax and levy increases, sovereign debt restructurings, currency instability, increased counterparty credit risk, high levels of volatility and disruptions in the credit and equity markets, as well as other outcomes that might adversely impact our company.

We are exposed to the risk of default by the counterparties to our derivative and other financial instruments, undrawn debt facilities and cash investments.

Although we seek to manage the credit risks associated with our derivative and other financial instruments, cash investments and undrawn debt facilities, we are exposed to the risk that our counterparties could default on their obligations to us. Also, even though we regularly review our credit exposures, defaults may arise from events or circumstances that are difficult to detect or foresee. At December 31, 2020, our exposure to counterparty credit risk included (i) cash and cash equivalents and restricted cash balances of $913 million and (ii) aggregate undrawn debt facilities of $1,173 million. While we currently have no specific concerns about the creditworthiness of any counterparty for which we have material credit risk exposures, the current economic conditions and uncertainties in global financial markets have increased the credit risk of our counterparties and we cannot rule out the possibility that one or more of our counterparties could fail or otherwise be unable to meet its obligations to us. Any such instance could have an adverse effect on our cash flows, results of operations, financial condition and/or liquidity. In this regard, (i) the financial failure of any of our counterparties could reduce amounts available under committed credit facilities and adversely impact our ability to access cash deposited with any failed financial institution, thereby causing a default under one or more derivative contracts, and (ii) tightening of the credit markets could adversely impact our ability to access debt financing on favorable terms, or at all.

The liquidity and value of our interests in certain of our partially-owned subsidiaries, as well as the ability to make decisions related to their operations, may be adversely affected by shareholder agreements and similar agreements to which we are a party.

We indirectly own equity interests in a variety of international video, broadband internet, telephony, mobile and other communications businesses. Certain of these equity interests, such as our interests in our operating subsidiaries of CWP and C&W Bahamas, are held pursuant to concessions or agreements that provide the terms of the governance of the subsidiaries as well as the ownership of such interests. These agreements contain provisions that affect the liquidity, and therefore the realizable value, of those interests by subjecting the transfer of such equity interests to consent rights or rights of first refusal of the other shareholders or partners or similar restrictions on transfer. In certain cases, a change in control of the subsidiary holding the equity interest will give rise to rights or remedies exercisable by other shareholders or partners. All of these provisions will restrict the ability to sell those equity interests and may adversely affect the prices at which those interests may be sold. Additionally, these agreements contain provisions granting us and the other shareholders or partners certain liquidity rights as well as certain governance rights, for example, with respect to material matters, including but not limited to acquisitions, mergers, dispositions, shareholder distributions, incurrence of debt, material expenditures and issuances of equity interests, which may prevent the respective subsidiary from making decisions or taking actions that would protect or advance the interests of our company, and could even result in such subsidiary making decisions or taking actions that adversely impact our company. Furthermore, our ability to access the cash of these non-wholly-owned subsidiaries may be restricted in certain circumstances under the respective shareholder, joint venture, partnership or similar agreements.

Goodwill and other identifiable intangible assets represent a significant portion of our total assets, and we may never realize the full value of our intangible assets.

As of December 31, 2020, we had goodwill of $4,886 million, which represented approximately 32% of our total assets. We evaluate goodwill and other indefinite-lived intangible assets (primarily spectrum licenses and cable television franchise rights) for impairment at least annually on October 1 and whenever facts and circumstances indicate that their carrying amounts may not be recoverable. As further described in note 9 to our consolidated financial statements, during the years ended December 31, 2020, 2019 and 2018, we incurred significant goodwill impairments. If, among other factors, (i) our equity values were to decline significantly or (ii) the adverse impacts of competition, economic, regulatory or other factors, including macro-economic and demographic trends, were to cause our results of operations or cash flows to be worse than anticipated, we could conclude in future periods that impairment charges are required in order to reduce the carrying values of the goodwill and, to a lesser extent, other long-lived assets of C&W, including C&W Panama. Any such impairment charges could be significant.

Risks Relating to our Corporate History and Structure

We are a holding company, and we could be unable in the future to obtain cash in amounts sufficient to service our financial obligations or meet our other commitments.

Our ability to meet our financial obligations at the parent company level depends upon our ability to access cash. As a holding company, our sources of cash are limited to our available cash balances, net cash from the operating activities of our wholly-owned subsidiaries that are available to us, any cash dividends and cash interest we may receive from our other subsidiaries and cash proceeds from any asset sales we may undertake in the future. The ability of our operating subsidiaries to pay cash dividends or to make other cash payments or advances to us depends on their individual operating results and any statutory, regulatory or contractual restrictions to which they may be or may become subject.

Certain of the company's directors and an executive officer overlap with Liberty Global, and certain directors and officers have financial interests in Liberty Global, which may lead to conflicting interests.

As a result of the Split-Off, Miranda Curtis and Paul A. Gould, who serve as directors of Liberty Global, and Liberty Global's chief financial officer, also serve as directors of Liberty Latin America. Additionally, the chief executive officer of Liberty Global, Michael Fries, also serves as our executive chairman. Our directors (including the executive chairman) have fiduciary duties to our company. Likewise, any such persons who serve in similar capacities at Liberty Global or any other public corporation have fiduciary duties to that corporation or to that corporation's shareholders. For example, there may be the potential for a conflict of interest when the company or Liberty Global pursues acquisitions and other corporate opportunities that may be suitable for each of them. In addition, all of our directors and executive officers, other than our directors Alfonso de Angoitia Noriega and Eric L. Zinterhofer, have financial interests in Liberty Global as a result of their ownership of Liberty Global ordinary shares and/or equity awards. As a result of these multiple fiduciary duties and financial interests, these directors and executive officers may have conflicts of interest or the appearance of conflicts of interest with respect to matters involving or affecting more than one of the companies to which they owe fiduciary duties or in which they have financial interests.

Our bye-laws provide that, to the fullest extent permitted by applicable law, we have waived and renounced on behalf of ourselves and our subsidiaries any breach of a fiduciary duty by each of our directors by reason of the fact that such person directs a corporate opportunity to another person or entity (such as Liberty Global) instead of the company, or does not refer or communicate information regarding such corporate opportunity to the company, unless such opportunity was expressly offered to such person solely in his or her capacity as a director of our company and such opportunity relates to a line of business in which we or any of our subsidiaries are then directly engaged. The waiver given to our directors in respect of the diversion of corporate opportunities does not amount to a general authorization to our directors to subordinate Liberty Latin America's interests to their personal interests. Our directors will continue to be bound by their common law and statutory duties under the Bermuda Companies Act to act honestly and in good faith with a view to the best interests of Liberty Latin America and to exercise the care, diligence and skill that a reasonably prudent person would exercise in comparable circumstances. Furthermore, our bye-laws contain a general waiver by shareholders for any claim or right of action a shareholder might have (whether individually or by or in the right of the company) against any director or officer of the company, arising from any action or inaction by such director or officer in the performance of their duties for us or any of our subsidiaries (but excluding any matter involving fraud or dishonesty). This general waiver does not eliminate directors' or officers' fiduciary duties to Liberty Latin America under Bermuda law. Rather, it prohibits actions from being taken by shareholders against directors or officers in the event of a breach of such duties, unless the breach involves fraud or dishonesty.

In addition, any potential conflict that qualifies as a "related party transaction" (as defined in Item 404 of Regulation S-K) is subject to review by an independent committee of the applicable company's board in accordance with its corporate governance guidelines. Any other potential conflicts that arise will be addressed on a case-by-case basis, keeping in mind the applicable fiduciary duties owed by the executive officers and directors of each company. From time to time, we may enter into transactions with Liberty Global and/or any of its subsidiaries or other affiliates. In the event of any potential conflict that qualifies as a "related party transaction" (as defined in Item 404 of Regulation S-K) involving Liberty Global and/or any of its subsidiaries or other affiliates, the audit committee or another independent body of Liberty Latin America would be required to review and approve the transaction. If the potential conflict or transaction involved an executive officer of Liberty Latin America, the audit committee of our company would be the independent committee charged by our corporate governance guidelines with this duty, and if the potential conflict or transaction involved a director of Liberty Latin America, a committee of the disinterested independent directors of Liberty Latin America would be the independent committee charged by our corporate governance guidelines with this duty. There can be no assurance that the terms of any such transactions will be as favorable to the company or any of its subsidiaries or affiliates as would be the case where there is no overlapping director or officer or where there are no financial interests in Liberty Global.

Risks Relating to Our Common Shares and the Securities Market

Different classes of our common shares have different voting rights, but all common shares vote together as one class; if you hold Class C common shares you will have no significant voting rights.

Holders of our Class A common shares are entitled to one vote per share; holders of our Class B common shares are entitled to 10 votes per share; and holders of our Class C common shares are not entitled to any votes in respect of their common shares, unless such common shares are required to carry the right to vote under applicable law, in which case holders of our Class C common shares will be entitled to 1/100 of a vote per share. Our bye-laws prescribe that all classes of common shares vote together as one class, meaning that those holding Class C common shares will have little to no ability to influence the outcome of a shareholder vote as they will be consistently outvoted by holders of our Class A and Class B common shares.

The division of our common shares into different classes with different relative voting rights does not affect the fiduciary duties owed by our directors. As a Bermuda company, our directors' fiduciary duties are owed primarily to Liberty Latin America rather to holders of our common shares, or any class of our common shares.

It may be difficult for a third-party to acquire us, even if doing so may be beneficial to our shareholders.

Certain provisions of our bye-laws and Bermuda law may discourage, delay or prevent a change in control of the company that a shareholder may consider favorable. These provisions include the following:

- authorizing a capital structure with multiple classes of shares: a Class B that entitles the holders to ten votes per share, a Class A that entitles the holders to one vote per share and a Class C that entitles the holder to no voting rights, except as otherwise required by applicable law (in which case, the holder is entitled to 1/100 of a vote per share);
- authorizing the issuance of "blank check" preferred shares, which could be issued by our board to increase the number of outstanding shares and thwart a takeover attempt;
- classifying our board with staggered three-year terms, which may lengthen the time required to gain control of our board;
- prohibiting shareholder action by written consent, thereby requiring all shareholder actions to be taken at a meeting of the shareholders;
- establishing advance notice requirements for nominations of candidates for election to our board or for proposing matters that can be acted upon by shareholders at shareholder meetings;
- requiring supermajority shareholder approval with respect to certain extraordinary matters, such as certain mergers, amalgamations, or consolidations of the company, or in the case of amendments to our bye-laws; and
- the existence of authorized and unissued shares which would allow our board to issue shares to persons friendly to current management, thereby protecting the continuity of its management, or which could be used to dilute the share ownership of persons seeking to obtain control of us.

Although our Class B common shares are eligible to trade on the OTC Grey Markets, there is no meaningful trading market for these shares and the market price of these shares is subject to volatility.

Our Class B common shares are not widely held, with over 75% of such outstanding shares beneficially owned by John C. Malone, a director emeritus of our company. Although our Class B common shares are eligible to trade on the OTC Grey Markets, they are sparsely traded and do not have an active trading market. The OTC Grey Markets tend to be highly illiquid, in part, because there is no national quotation system by which potential investors can track the market price of shares. OTC Grey

Market securities do not have bid or ask quotations in the OTC Link system or the OTC Bulletin Board. Broker-dealers must report OTC Grey Market trades to the Financial Industry Regulatory Authority, and therefore trade data is available on http://www.otcmarkets.com and other public sources. As a result, trading in the OTC Grey Markets is generally much more limited than trading on any national securities exchange. There is also a greater chance of market volatility for securities that trade on the OTC Grey Markets as opposed to a national exchange or quotation system due to many factors, including, among other things, a lack of readily available price quotations, lower trading volume, absence of consistent administrative supervision of "bid" and "ask" quotations and similar market conditions. Each Class B common share is convertible, at any time at the option of the holder, into one Class A common share.

We may be significantly influenced by one principal shareholder, and he may sell his shares, which may cause the price of our common shares to decrease.

As of December 31, 2020, John C. Malone beneficially owned a number of our common shares representing approximately 25% of the aggregate voting power of our outstanding common shares. As a result, Mr. Malone has significant influence over Liberty Latin America. Mr. Malone's rights to vote or dispose of his equity interest in Liberty Latin America are not subject to any restrictions in favor of Liberty Latin America other than as may be required by applicable law and except for customary transfer restrictions pursuant to incentive award agreements. The sale of a substantial number of our common shares by Mr. Malone within a short period of time, or the perception that such sale might occur, could cause our share price to decrease, make it more difficult for us to raise funds through future offerings of our common shares or acquire other businesses using our common shares as consideration.

Bermuda law may, in certain circumstances, afford less protection to our shareholders than the laws in effect in other jurisdictions.

We are incorporated and organized under the laws of Bermuda. As a result, our corporate affairs are governed by the Bermuda Companies Act. Bermuda law permits a company to specify thresholds for shareholder approval different from those applicable by default, either generally or for specific corporate actions. Our bye-laws prescribe a shareholder approval threshold that is higher than the default of a simple majority of votes cast at a quorate general meeting of shareholders for certain corporate actions. With respect to a Bermuda company's directors, there is no requirement for shareholder approval for transactions between directors and companies or their subsidiaries of which they are directors (except in the case of loans, guarantees or the provision of security by a company to its directors or certain connected persons in their personal capacity). In addition, the rights of our shareholders and the fiduciary responsibilities of our directors under Bermuda law are not as clearly established as under statutes or judicial precedent in other jurisdictions, where directors' duties are sometimes codified under applicable law. Therefore, our shareholders may have more difficulty protecting their interests than would shareholders of a public company incorporated in another jurisdiction.

We are a Bermuda company and it may be difficult for you to enforce judgments against us or our directors and executive officers.

We are a Bermuda exempted company organized under the laws of Bermuda. As a result, the rights of holders of our common shares are governed by Bermuda law and our memorandum of association and bye-laws. The rights of shareholders under Bermuda law may differ from the rights of shareholders of companies incorporated in other jurisdictions, including the U.S. and the U.K. Certain of our directors are not residents of the United States, and a substantial portion of our assets are located outside the United States. As a result, it may be difficult for investors to effect service of process on those persons in the United States or to enforce in the United States judgments obtained in U.S. courts against us or those persons based on the civil liability provisions of the U.S. securities laws. It is doubtful whether courts in Bermuda will enforce judgments obtained in other jurisdictions, including the United States, or entertain actions in Bermuda against us or our directors or officers under the securities laws of those jurisdictions.

We are a Bermuda company and the Bermuda Economic Substance Act 2018 may cause us to incur substantial additional costs, incur significant penalties or possibly require us to re-domicile.

Bermuda recently enacted the Economic Substance Act 2018 requiring affected Bermuda registered companies to maintain a substantial economic presence in Bermuda. This legislation could require us to incur substantial additional cost, and/or incur significant penalties and possibly require us to re-domicile our company to a jurisdiction with higher tax rates. Our results of operations could be materially and adversely affected if we become subject to these or other unanticipated tax liabilities.

Our bye-laws generally restrict shareholders from bringing legal action against our officers and directors.

Our bye-laws contain a general waiver by shareholders for any claim or right of action a shareholder might have (whether individually or by or in the right of the company) against any director or officer of the company, arising from any action or inaction by such director or officer in the performance of their duties for us or any of our subsidiaries (but excluding any matter involving fraud or dishonesty). Consequently, this waiver limits the right of shareholders to assert claims against our officers and directors unless the act or failure to act involves fraud or dishonesty.

There are regulatory limitations on the ownership and transfer of our common shares.

Our common shares may be offered or sold in Bermuda only in compliance with the provisions of the Bermuda Companies Act and the Bermuda Investment Business Act 2003, which regulates the sale of securities in Bermuda. In addition, the Bermuda Monetary Authority must approve all issues and transfers of shares of a Bermuda exempted company. However, the Bermuda Monetary Authority has, pursuant to its statement of June 1, 2005, given its general permission under the Exchange Control Act 1972 and related regulations for the issue and free transfer of our common shares to and among persons who are non-residents of Bermuda for exchange control purposes as long as any class of our common shares are listed on an appointed stock exchange, which includes Nasdaq. This general permission would cease to apply if none of our common shares were to be listed on Nasdaq or another appointed stock exchange.

Certain Searchlight parties may sell Class C common shares subject to a Registration Rights Agreement in the public market, which may cause the market price of our common shares to decrease, and therefore make it more difficult to raise equity financing or issue equity as consideration in an acquisition.

Our Registration Rights Agreement with certain Searchlight parties requires us to promptly register under the Securities Act the 9,500,000 Class C common shares subject to such agreement and held by such shareholders or their permitted transferee(s), upon their request. The registration rights for such Searchlight parties will allow them to sell such shares without compliance with the volume and manner of sale limitations under Rule 144 promulgated under the Securities Act and will facilitate the resale of such securities into the public market. The market value of our common shares could decline as a result of sales by such shareholders from time to time. In particular, the sale of a substantial number of our shares by such shareholders within a short period of time, or the perception that such sale might occur, could cause our share price to decrease, make it more difficult for us to raise funds through future offerings of our common shares or acquire other businesses using our common shares as consideration.

We have identified material weaknesses in our internal control over financial reporting, which could, if not remediated, result in material misstatements in our financial statements.

Section 404 of the Sarbanes-Oxley Act of 2002 requires any company subject to the reporting requirements of the U.S. securities laws to include in its annual report on Form 10-K an assessment of its and its consolidated subsidiaries' internal control over financial reporting. To comply with this statute, we are required to issue a statement as to whether or not our internal control over financial reporting is effective; and our independent auditors are required to issue an audit opinion on our internal control over financial reporting.

As of December 31, 2020, we did not maintain effective adequate internal control over financial reporting attributable to certain identified material weaknesses. We describe these material weaknesses in Item 9A. *Controls and Procedures* in this Annual Report on Form 10-K. A material weakness is defined as a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis. The material weaknesses will not be considered remediated until the applicable new or enhanced controls operate for a sufficient period and management has concluded, through testing, that these controls are operating effectively. As remediation has not yet been completed, these material weaknesses continued to exist with respect to our internal control over financial reporting as of December 31, 2020. If our remedial measures are insufficient to address the material weaknesses, or if one or more additional material weaknesses or significant deficiencies in our internal control over financial reporting are discovered or occur in the future, our consolidated financial statements may contain material misstatements and we could be required to restate our financial results, which could, in turn, harm our reputation or otherwise cause a decline in investor confidence and in the market price of our stock.

Item 1B. UNRESOLVED STAFF COMMENTS

None.

Item 2. PROPERTIES

At December 31, 2020, we leased our corporate office in Denver, Colorado, U.S. Additionally, through our C&W Caribbean and Networks segment, we own significant portions of our subsea network in the Caribbean region (see Item 1. *Business—Description of Business—Products and Services—Business Services*). Also, our subsidiaries either own or lease the fixed assets necessary for the operation of their respective businesses, including office space, transponder space, headend facilities, rights of way, cable television and telecommunications distribution equipment, telecommunications switches, base stations, poles, cell towers and customer premises equipment and other property necessary for their operations. The physical components of their broadband networks require maintenance and periodic upgrades to support the new services and products they introduce. Subject to these maintenance and upgrade activities, our management believes that our current facilities are suitable and adequate for our business operations for the foreseeable future.

Item 3. LEGAL PROCEEDINGS

VTR Class Action

On August 25, 2020, VTR was notified that the Chilean National Consumer Authority ("**SERNAC**", the Spanish acronym for Servicio Nacional del Consumidor) had filed a class action complaint against VTR in the 14th Civil Court of Santiago. The complaint relates to consumer complaints regarding VTR's broadband service and capacity during the pandemic and raises claims regarding, among other things, VTR's disclosure of its broadband speeds and aggregate capacity availability and VTR's response to address the causes of service instability during the pandemic. VTR was also notified in August about two additional class action complaints filed by two Chilean consumer associations (ODECU and AGRECU) making similar claims and allegations. The class action complaint of ODECU was filed in the 21st Civil Court of Santiago, and the class action complaint of AGRECU was filed in the 26th Civil Court of Santiago. The complaint of SERNAC and ODECU seeks (i) the Court declare that VTR has infringed the rules of the Consumer Protection Law; (ii) the responsibility of VTR for such infractions and, if so, establish the corresponding fines; and (iii) compensatory damages. In the case of AGRECU, the complaint only seeks compensatory damages. On October 22, 2020, VTR was notified of a fourth class action complaint filed by Conadecus in the 16th Civil Court of Santiago alleging that VTR did not adhere to certain call center, technical visit and service level requirements under applicable law. We believe that the allegations contained in the complaints are without merit, in particular as it relates to VTR's service and response during the pandemic and intend to defend the complaints vigorously. We cannot predict at this point the length of time that these actions will be ongoing.

In addition, from time to time, our subsidiaries and affiliates have become involved in litigation relating to claims arising out of their operations in the normal course of business. For additional information, see note 20 to our consolidated financial statements in Part II of this Annual Report on Form 10-K.

Item 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

Item 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED SHAREHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

General

The capitalized terms used in Part II of this Annual Report on Form 10-K are defined in the consolidated financial statements and the notes thereto. In the following text, the terms "**we**," "**our**," "**our company**" and "**us**" may refer, as the context requires, to Liberty Latin America or collectively to Liberty Latin America and its subsidiaries.

Market Information

Our outstanding share capital comprises Class A, Class B and Class C common shares. Our Class A and Class C common shares trade on the Nasdaq Global Select Market under the symbols "LILA" and "LILAK," respectively. Our Class B common shares are eligible to be traded on the OTC Grey Markets under the symbol "LILAB," although they do not have an established public trading market. The following table sets forth the range of highest and lowest prices for our Class B common shares for each of the periods indicated, as reported by Bloomberg, taking into account both opening and closing prices. Over-the-counter market prices reflect inter-dealer prices, without retail mark-up, mark-down or commission and may not necessarily represent actual transactions.

	Class B	
	High	**Low**
Year ended December 31, 2019		
First quarter	$ 23.80	$ 18.00
Second quarter	$ 18.00	$ 18.00
Third quarter (a)	$ 18.00	$ 18.00
Fourth quarter (a)	$ 18.00	$ 18.00
Year ended December 31, 2020		
First quarter	$ 15.00	$ 15.00
Second quarter	$ 17.00	$ 17.00
Third quarter (b)	$ 17.00	$ 17.00
Fourth quarter (b)	$ 17.00	$ 17.00

(a) The Class B common shares trade infrequently. During the third and fourth quarters of 2019, no trades occurred. As such, the high and low prices shown for this period relate to the second quarter of 2019.

(b) During the third and fourth quarters of 2020, no trades occurred. As such, the high and low prices shown for this period relate to the second quarter of 2020.

Holders

As of January 31, 2021, we had the following number of holders of record of our common stock: 10,905 Class A; 24 Class B; and 24,977 Class C. The foregoing does not include the number of shareholders whose shares are nominally held by banks, brokerage houses or other institutions, but include each such institution as one record holder.

Dividends

We have not paid any cash dividends on our shares, and we have no present intention of doing so. Any future payment of cash dividends will be determined by our board of directors in light of our earnings, financial condition and other relevant considerations**.** Except as noted in Item 7. *Management's Discussion and Analysis of Financial Condition and Results of Operations* and note 10 to our consolidated financial statements, there are currently no contractual restrictions on our ability to pay dividends in cash or shares.

Securities Authorized for Issuance Under Equity Compensation Plans

Information required by this item is incorporated by reference to our definitive proxy statement for our 2021 Annual General Meeting of Shareholders.

Recent Sales of Unregistered Securities; Use of Proceeds from Registered Securities

All information under this Item has been previously reported on our Current Reports on Form 8-K.

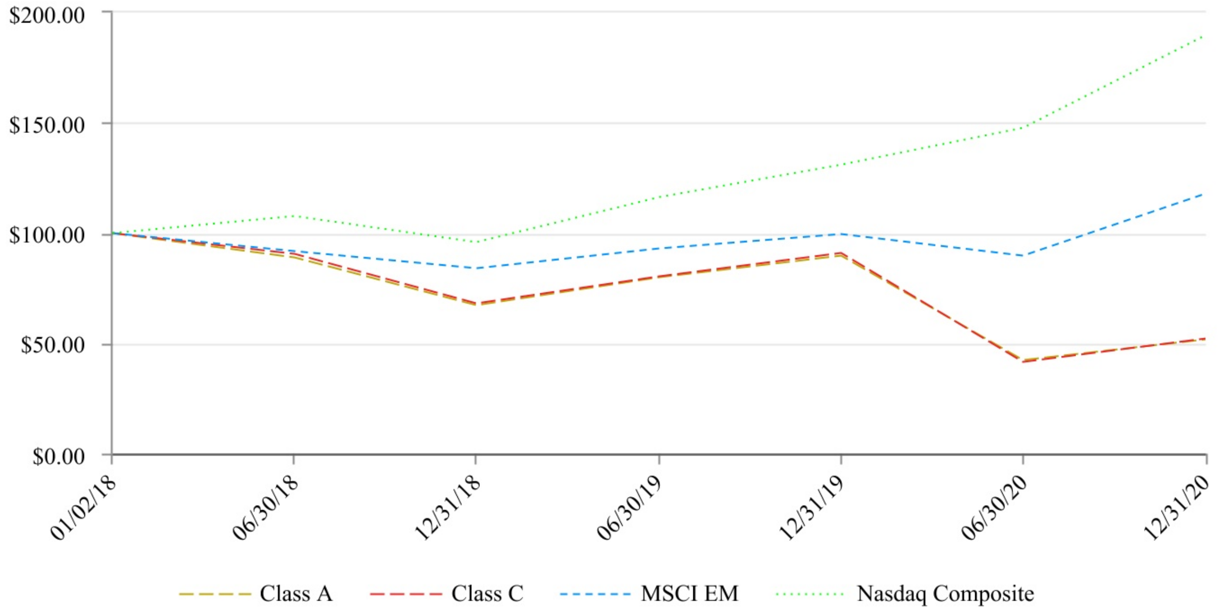
Issuer Purchase of Equity Securities

On March 17, 2020, we announced that our Directors authorized a share repurchase program, which authorizes us to repurchase from time to time up to $100 million of our Class A common shares and/or Class C common shares, as the case may be, over two years (the **Share Repurchase Program**). The Share Repurchase Program does not obligate us to repurchase any of our Class A or C common shares. Under the Share Repurchase Program, we may repurchase our common shares from time to time in open market purchases at prevailing market prices, in privately negotiated transactions, in block trades, derivative transactions and/or through other legally permissible means.

There were no repurchases of our Class A or C common shares during the three months ended December 31, 2020. At December 31, 2020, the remaining amount authorized for repurchases of Liberty Latin America Shares was $91 million.

Stock Performance Graph

The following graph compares the changes in the cumulative total shareholder return on our Liberty Latin America Class A and Class C ordinary shares from January 2, 2018 (the day the shares began trading following the Split-Off) to December 31, 2020, to the change in the cumulative total return on the MSCI Emerging Markets NTR Index and the Nasdaq Composite TR Index (assuming reinvestment of dividends, where applicable). The graph assumes that $100 was invested on January 2, 2018.



	January 2,	June 30,	December 31,	June 30,	December 31,
	2018			2019	
Liberty Latin America Shares - Class A	$ 100.00	$ 88.60	$ 67.10	$ 79.84	$ 89.43
Liberty Latin America Shares - Class C	$ 100.00	$ 90.60	$ 68.12	$ 80.36	$ 90.98
MSCI Emerging Markets NTR Index	$ 100.00	$ 91.79	$ 84.00	$ 92.90	$ 99.48
Nasdaq Composite TR Index	$ 100.00	$ 107.75	$ 95.72	$ 116.13	$ 130.84

	June 30,	December 31,
	2020	
Liberty Latin America Shares - Class A	$ 42.43	$ 51.58
Liberty Latin America Shares - Class C	$ 41.52	$ 51.85
MSCI Emerging Markets NTR Index	$ 89.75	$ 117.73
Nasdaq Composite TR Index	$ 147.42	$ 189.61

Item 6. SELECTED FINANCIAL DATA

The following tables present selected historical financial information of Liberty Latin America. The selected financial data (i) as of December 31, 2020 and 2019 and for the years ended December 31, 2020, 2019 and 2018 has been derived from our audited consolidated financial statements included elsewhere in this Annual Report on Form 10-K and (ii) as of December 31, 2018, 2017 and 2016 and for the years ended December 31, 2017 and 2016 has been derived from our audited consolidated financial statements that are not included in this Annual Report on Form 10-K. This information is only a summary and should be read in conjunction with Item 7. *Management's Discussion and Analysis of Financial Condition and Results of Operations* and our consolidated financial statements.

	December 31,				
	2020	2019	2018	2017	2016
	in millions				
Summary Balance Sheet Data (a):					
Goodwill	$ 4,885.5	$ 4,906.4	$ 5,133.3	$ 5,673.6	$ 6,353.5
Property and equipment, net	$ 4,911.4	$ 4,301.1	$ 4,236.9	$ 4,169.2	$ 3,860.9
Total assets (b)	$ 15,230.0	$ 14,937.5	$ 13,446.6	$ 13,616.9	$ 14,143.9
Debt and finance lease obligations, including current portion	$ 8,357.2	$ 8,370.0	$ 6,682.1	$ 6,371.5	$ 6,047.9
Total equity	$ 3,443.7	$ 870.1	$ 4,123.4	$ 4,690.6	$ 5,660.4

	Year ended December 31,				
	2020	2019	2018	2017	2016
	in millions, except per share amounts				
Summary Statement of Operations Data (a):					
Revenue	$ 3,764.6	$ 3,867.0	$ 3,705.7	$ 3,590.0	$ 2,723.8
Operating income (loss)	$ 91.7	$ 353.8	$ (23.6)	$ (162.9)	$ 315.3
Net loss	$ (808.9)	$ (182.4)	$ (635.8)	$ (798.7)	$ (404.0)
Net loss attributable to Liberty Latin America shareholders	$ (687.2)	$ (80.1)	$ (345.2)	$ (778.1)	$ (432.3)
Basic and diluted net loss per share attributable to Liberty Latin America shareholders (c)	$ (3.51)	$ (0.43)	$ (1.96)	$ (4.46)	$ (3.39)

(a) We completed the AT&T Acquisition on October 31, 2020 and acquired UTS effective March 31, 2019, Cabletica on October 1, 2018 and C&W on May 16, 2016.

(b) We adopted ASU 2016-02, as defined and described in note 2 to our consolidated financial statements, on January 1, 2019 using the effective date transition method. The main impact of the adoption of this standard was the recognition of right-of-use assets and lease liabilities.

(c) Amounts are calculated based on weighted average number of shares outstanding of 195,535,301**,** 184,369,078, 176,001,049, 174,490,845 and 127,542,735, respectively. The 2020, 2019 and 2018 amounts represent the weighted average number of Liberty Latin America common shares outstanding during the year, respectively. The 2017 amount represents (i) the weighted average number of LiLAC Shares outstanding during the year prior to the Split-Off and (ii) the weighted average number of Liberty Latin America common shares outstanding during the year subsequent to the Split-Off. The 2016 amount represents the actual weighted average number of LiLAC Shares outstanding, as adjusted to reflect the total 119,210,601 Class A and Class C LiLAC Shares issued to holders of Class A and Class C Liberty Global ordinary shares in recognition of the Liberty Global ordinary shares that were issued to acquire C&W as if such distribution was completed on the May 16, 2016 date of the C&W Acquisition.

Item 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis, which should be read in conjunction with our consolidated financial statements, is intended to assist in providing an understanding of our results of operations and financial condition and is organized as follows:

- *Overview.* This section provides a general description of our business and recent events.
- *Results of Operations.* This section provides an analysis of our results of operations for the years ended December 31, 2020, 2019 and 2018.
- *Liquidity and Capital Resources.* This section provides an analysis of our liquidity, consolidated statements of cash flows and contractual commitments.
- *Critical Accounting Policies, Judgments and Estimates.* This section discusses those material accounting policies that involve uncertainties and require significant judgment in their application.

Unless otherwise indicated, convenience translations into U.S. dollars are calculated, and operational data (including subscriber statistics) are presented, as of December 31, 2020.

Overview

General

We are an international provider of fixed, mobile and subsea telecommunications services. We provide residential and B2B services in (i) over 20 countries across Latin America and the Caribbean, through two of our reportable segments, C&W Caribbean and Networks and C&W Panama, (ii) Chile and Costa Rica, through our reportable segment, VTR/Cabletica, and (iii) Puerto Rico, through our reportable segment, Liberty Puerto Rico. Through our Networks & LatAm business, C&W Caribbean and Networks also provides (i) B2B services in certain other countries in Latin America and the Caribbean and (ii) wholesale communication services over its subsea and terrestrial fiber optic cable networks that connect over 40 markets in that region.

C&W owns less than 100% of certain of its consolidated subsidiaries, including C&W Bahamas (a 49%-owned entity that owns all of our operations in the Bahamas), C&W Jamaica (a 92%-owned entity that owns the majority of our operations in Jamaica), and CWP (a 49%-owned entity that owns most of our operations in Panama). In addition, we own Cabletica through our 80.0% ownership of its parent, LBT CT Communications, S.A..

Operations

At December 31, 2020, we (i) owned and operated fixed networks that passed 7,848,500 homes and served 6,186,300 revenue generating units (RGUs), comprising 2,763,900 broadband internet subscribers, 1,951,000 video subscribers and 1,471,400 fixed-line telephony subscribers and (ii) served 4,451,300 mobile subscribers.

During the fourth quarter of 2020, we completed an organizational change with respect to our C&W operations whereby management of the CWP subsidiary of C&W now reports directly to the Chief Operating Officer of Liberty Latin America and no longer reports to the former C&W segment decision maker. As a result, CWP is now a separate operating and reportable segment, herein referred to as the C&W Panama segment. Accordingly, as of December 31, 2020, our reportable segments are as follows:

- C&W Caribbean and Networks;
- C&W Panama;
- VTR/Cabletica; and
- Liberty Puerto Rico.

As a result of the aforementioned segment change, we have revised the presentation of the discussion and analysis set forth below in order to align with the current segment presentation included in our consolidated financial statements.

COVID-19

In December 2019, COVID-19 was reported in Wuhan, China. On March 11, 2020, the World Health Organization declared the outbreak a "pandemic," pointing to the sustained risk of further global spread. To date, confirmed cases of COVID-19 have been experienced in each of the markets in which we operate. During 2020, COVID-19 has negatively impacted our operations, primarily within our C&W Caribbean and Networks, C&W Panama and VTR/Cabletica segments, due to resulting lockdowns, moratoriums, cancellation of live sporting events, and mobility, travel and tourism restrictions across many of the markets in which we operate. The implications of these restrictions have been (i) the issuance of discounts to customers, (ii) the pause in certain managed service projects, particularly with government agencies, (iii) at VTR, customers experiencing network connection-related issues stemming from the significant increase, over a short period of time, in the capacity usage by our customers, and (iv) delayed or deferred customer payments and increased customer churn. In VTR, our most competitive consumer fixed market, we experienced increased RGU churn following network challenges related to the increased bandwidth demand earlier in the year. We have carried out a number of operational actions to improve the experience for our customers. Within our mobile operations, the lockdowns negatively impacted, primarily at C&W Caribbean and Networks and C&W Panama during the second quarter of 2020, our customers' ability to recharge their prepaid mobile devices. During the third and fourth quarters of 2020, we witnessed partial recovery. Since March 2020, we experienced declines in inbound roaming activity as a result of travel restrictions and reduced tourism activities in the markets in which we operate. These factors collectively resulted in declines in revenue within our B2B and mobile operations and lower ARPU (as defined below) associated with our residential fixed subscription services. The extent to which COVID-19 continues to impact our operational and financial performance will depend on certain developments, which include, among other factors:

- the duration and spread of the outbreak;
- the ability of governments and medical professionals in our markets to respond further to the outbreak, including securing access to a vaccine and vaccinating citizens;
- the actions by governments to require the extension of services for individuals regardless of payment status;
- the impact of changes to, or new, government regulations imposed in response to the pandemic, including laws and moratoriums;
- the impact on our customers and our sales cycles;
- the impact on actual and expected customer receivable collection patterns, including the impact of such patterns on our allowance for bad debt provisions following the adoption of ASU 2016-13 on January 1, 2020;
- the impact on our employees, including that from labor shortages or work from home initiatives;
- the impacts on foreign currency and interest rate fluctuations; and
- the effect on our vendors, as COVID-19 could have adverse impacts on our supply chain thereby impacting our customers' ability to use our services.

Given the impacts of COVID-19 continue to rapidly evolve, the extent to which COVID-19 may further impact our financial condition or results of operations continues to be uncertain and cannot be predicted at this time. The heightened volatility of global markets resulting from COVID-19 further expose us to risks and uncertainties.

As COVID-19 continues to spread, we have, and expect to continue to take, a variety of measures to promote the safety and security of our employees, and ensure the availability of our communication services. To this end, we upgraded our network in an effort to handle peak traffic, accelerated our digital transformation efforts, including self-installations for as many of our services and customers as possible, developed innovative pricing plans that meet customers' needs across our products and services, and changed our cost structure.

AT&T Acquisition

On October 9, 2019, Liberty Latin America's wholly-owned subsidiary, Liberty Puerto Rico, agreed to acquire AT&T's wireless and wireline operations in Puerto Rico and the U.S. Virgin Islands in an all-cash transaction. The AT&T Acquisition closed on October 31, 2020. In connection with the AT&T Acquisition we paid $1.9 billion, as further described in note 4 to the consolidated financial statements. We financed this acquisition through a combination of net proceeds from the 2026 SPV Credit Facility, the 2027 LPR Senior Secured Notes and available liquidity. In connection with the AT&T Acquisition, we expect to incur significant operating and capital costs to integrate the businesses of AT&T with our existing operations in Puerto Rico, including during 2021 approximately $35 million to $40 million of integration-related costs. We expect that we will generate synergies during 2021 of approximately $10 million.

As a regulatory condition to close, we were required to dispose of, among other assets, a small B2B business in our existing Puerto Rico operations. The disposal of this B2B business closed in early January 2021.

Rights Offering

On August 5, 2020, our Directors authorized the Rights Distribution of Class C Rights to holders of Liberty Latin America Shares to acquire Class C common shares in the Rights Offering. In the Rights Distribution, we distributed 0.269 of a Class C Right for each share of Class A, Class B or Class C common shares held as of September 8, 2020, which was the record date for the Rights Distribution. Fractional Class C Rights were rounded up to the nearest whole right. Each whole Class C Right entitled the holder to purchase, pursuant to the basic subscription privilege, one share of LILAK at a subscription price of $7.14, which was equal to an approximate 25% discount to the volume weighted average trading price of LILAK for the 3-day trading period ending on and including September 2, 2020. Each Class C Right also entitled the holder to subscribe for additional shares of LILAK that were unsubscribed for in the Rights Offering pursuant to an over-subscription privilege. The Rights Offering commenced on September 11, 2020, which was also the ex-dividend date for the Rights Distribution. The Rights Offering expired in accordance with its terms on September 25, 2020 and was fully subscribed with 49,049,073 shares of LILAK issued to those rights holders exercising basic and, if applicable, over-subscription privileges. The proceeds from the Rights Offering, which aggregated $350 million before expenses, are expected to be used to finance acquisitions, including the Telefónica-Costa Rica Acquisition, and for other general corporate purposes.

Telefónica-Costa Rica Acquisition

On July 30, 2020, we entered into a definitive agreement to acquire Telefónica S.A.'s wireless operations in Costa Rica in an all-cash transaction based upon an enterprise value of $500 million on a cash- and debt-free basis. The transaction is subject to certain customary closing conditions, including regulatory approvals, and is expected to close in the first half of 2021.

Strategy and Management Focus

From a strategic perspective, we are seeking to build or acquire broadband communications and mobile businesses that have strong prospects for future growth. As discussed further under *Liquidity and Capital Resources—Capitalization* below, we also seek to maintain our debt at levels that provide for attractive equity returns without assuming undue risk.

We strive to achieve "organic" revenue and customer growth in our operations by developing and marketing bundled entertainment, information and communications services, and extending and upgrading the quality of our networks where appropriate. As we use the term, organic growth excludes foreign currency translation effects (**FX**) and the estimated impact of acquisitions and disposals. While we seek to increase our customer base, we also seek to maximize the average revenue we receive from each household by increasing the penetration of our video, broadband internet, fixed-line telephony and mobile services with existing customers through product bundling and up-selling.

From an operational perspective, we are focused on our customer experience and increasing efficiencies. Beginning in 2019 and continuing on during 2020, we have been centralizing key parts of our business into our new operations center in Panama City, Panama. In addition, we embarked on digital transformation efforts across our company.

We are engaged in network extension and upgrade programs across Liberty Latin America. We collectively refer to these network extension and upgrade programs as the "Network Extensions." The Network Extensions will be completed in phases with priority given to the most accretive expansion opportunities. During 2020, our network extension and upgrade programs passed approximately 387,000 homes across Liberty Latin America. Depending on a variety of factors, including the financial and operational results of the programs, the Network Extensions may be continued, modified or cancelled at our discretion. See Item 1. *Business—Products and Services—Residential Services—Internet Services*.

For information regarding our expectation with regard to property and equipment additions as a percent of revenue during 2021, see *Liquidity and Capital Resources—Consolidated Statements of Cash Flows* below.

Competition and Other External Factors

We are experiencing significant competition from other telecommunications operators and other communication service providers in all of our markets. The significant competition we are experiencing, together with macroeconomic factors, has adversely impacted our revenue, RGUs and/or average monthly subscription revenue per average fixed residential RGU or mobile subscriber, as applicable, (ARPU) in a number of C&W's markets. In Chile, competition increased in 2019, as VTR's fixed-line competitors upgraded their networks at a faster rate than in prior years. For additional information regarding the revenue impact of changes in the RGUs and ARPU of our reportable segments, see discussion below.

Results of Operations

The comparability of our operating results during 2020, 2019 and 2018 is affected by acquisitions, a disposal and FX effects. As we use the term, "organic" changes exclude FX and the impacts of acquisitions and disposals, each as further discussed below.

In the following discussion, we quantify the estimated impact on the operating results of the periods under comparison that is attributable to acquisitions and disposals. We (i) acquired (a) AT&T's wireless and wireline operations in Puerto Rico and the U.S. Virgin Islands in October 2020, (b) a small B2B operation in the Cayman Islands in July 2020, (c) UTS in March 2019 and (d) Cabletica in October 2018, and (ii) disposed of our operations in the Seychelles in November 2019. With respect to acquisitions, organic changes and the calculations of our organic change percentages exclude the operating results of an acquired entity during the first 12 months following the date of acquisition. With respect to disposals, the prior-year operating results of disposed entities are excluded from organic changes and the calculations of our organic change percentages to the same extent that those operations are not included in the current year.

Changes in foreign currency exchange rates may have a significant impact on our operating results, as VTR, Cabletica and certain entities within C&W have functional currencies other than the U.S. dollar. Our primary exposure to FX risk is to the Chilean peso, as a significant portion of our revenue is derived from VTR. For example, the average FX rate (utilized to translate our consolidated financial statements) for the U.S. dollar per one Chilean peso appreciated by 12% for the year ended December 31, 2020, as compared to 2019, and appreciated by 10% for the year ended December 31, 2019, as compared to 2018. The impacts to the various components of our results of operations that are attributable to changes in FX are highlighted below. For information concerning our foreign currency risks and applicable foreign currency exchange rates, see Item 7A. *Quantitative and Qualitative Disclosures About Market Risk—Foreign Currency Risk* below. For information regarding foreign currency risk and implications resulting from the political unrest in Chile, see Item 1A. *Risk Factors* and Item 7. *Management's Discussion and Analysis of Financial Condition and Results of Operations—Overview* each set forth above.

The amounts presented and discussed below represent 100% of the revenue and expenses of each segment and our corporate operations. As we have the ability to control certain subsidiaries that are not wholly-owned, we include 100% of the revenue and expenses of these entities in our consolidated statements of operations despite the fact that third parties own significant interests in these entities. In October 2018, we acquired the remaining 40.0% interest in LCPR that we did not already own. During the third quarter of 2019, we completed the UTS NCI Acquisition, as further defined and described in note 19 to our consolidated financial statements. The noncontrolling owners' interests in the operating results of (i) certain subsidiaries of C&W, (ii) Cabletica and (iii) prior to October 17, 2018, LCPR, are reflected in net earnings or loss attributable to noncontrolling interests in our consolidated statements of operations.

On April 1, 2019, certain B2B operations in Puerto Rico were transferred from our C&W Caribbean and Networks segment to our Liberty Puerto Rico segment, and on January 1, 2020, our captive insurance operation was transferred from our C&W Caribbean and Networks segment to our corporate operations. These transfers did not have a significant impact on the financial results of our C&W Caribbean and Networks or Liberty Puerto Rico segments.

We are subject to inflationary pressures with respect to certain costs and foreign currency exchange risk with respect to costs and expenses that are denominated in currencies other than the respective functional currencies of our reportable segments. Any cost increases that we are not able to pass on to our subscribers would result in increased pressure on our operating margins.

Year Ended December 31, 2020 as Compared with Year Ended December 31, 2019

Consolidated Adjusted OIBDA

On a consolidated basis, Adjusted OIBDA is a non-U.S. GAAP measure. Adjusted OIBDA is the primary measure used by our chief operating decision maker to evaluate segment operating performance. Adjusted OIBDA is also a key factor that is used by our internal decision makers to (i) determine how to allocate resources to segments and (ii) evaluate the effectiveness of our management for purposes of incentive compensation plans. As we use the term, Adjusted OIBDA is defined as operating income or loss before share-based compensation, depreciation and amortization, provisions and provision releases related to significant litigation and impairment, restructuring and other operating items. Other operating items include (i) gains and losses on the disposition of long-lived assets, (ii) third-party costs directly associated with successful and unsuccessful acquisitions and dispositions, including legal, advisory and due diligence fees, as applicable, and (iii) other acquisition-related items, such as gains and losses on the settlement of contingent consideration. Our internal decision makers believe Adjusted OIBDA is a meaningful measure because it represents a transparent view of our recurring operating performance that is unaffected by our capital structure and allows management to (i) readily view operating trends, (ii) perform analytical comparisons and benchmarking between segments and (iii) identify strategies to improve operating performance in the different countries in which we operate. We believe our Adjusted OIBDA measure is useful to investors because it is one of the bases for comparing our performance with the performance of other companies in the same or similar industries, although our measures may not be directly comparable to similar measures used by other public companies. Adjusted OIBDA should be viewed as a measure of operating performance that is a supplement to, and not a substitute for, operating income or loss, net earnings or loss and other U.S. GAAP measures of income (loss). A reconciliation of total operating income (loss), the nearest U.S. GAAP measure, to Adjusted OIBDA on a consolidated basis, is presented below.

	Year ended December 31,	
	2020	2019
	in millions	
Operating income	$ 91.7	$ 353.8
Share-based compensation expense	97.5	57.5
Depreciation and amortization	914.6	871.0
Impairment, restructuring and other operating items, net	380.9	259.1
Consolidated Adjusted OIBDA	$ 1,484.7	$ 1,541.4

The following table sets forth organic and non-organic changes in Adjusted OIBDA for the period indicated:

	C&W Caribbean and Networks	C&W Panama	VTR/Cabletica	Liberty Puerto Rico	Corporate	Intersegment eliminations	Consolidated
				in millions			
Adjusted OIBDA for the twelve months ending:							
December 31, 2019	$ 732.1	$ 227.6	$ 433.6	$ 203.2	$ (55.1)	$ —	$ 1,541.4
Organic changes related to:							
Revenue	(58.2)	(82.5)	(21.5)	37.8	2.7	(3.8)	(125.5)
Programming and other direct costs	27.2	28.7	—	(6.1)	—	3.3	53.1
Other operating costs and expenses	30.3	3.4	(10.5)	(14.0)	7.9	0.5	17.6
Non-organic increases (decreases):							
FX	(11.8)	—	(39.7)	—	—	—	(51.5)
Acquisitions/disposition, net	(6.4)	—	—	56.0	—	—	49.6
December 31, 2020	$ 713.2	$ 177.2	$ 361.9	$ 276.9	$ (44.5)	$ —	$ 1,484.7

Adjusted OIBDA Margin

The following table sets forth the Adjusted OIBDA margins (Adjusted OIBDA divided by revenue) of each of our reportable segments:

	Year ended December 31,	
	2020	2019
	%	
C&W Caribbean and Networks	41.8	40.4
C&W Panama	35.4	39.1
VTR/Cabletica	38.1	40.4
Liberty Puerto Rico	44.4	49.3

Adjusted OIBDA margin is impacted by organic changes in revenue, programming and other direct costs of services and other operating costs and expenses, as further discussed below, which include the impacts relating to COVID-19. The organic changes in Adjusted OIBDA for the VTR market of our VTR/Cabletica segment, was negatively impacted by $21 million from foreign currency impact of contracts denominated in U.S. dollars during the year ended December 31, 2020, of which $15 million related to programming and the remaining in various other cost categories. The significant decrease in the Adjusted OIBDA margin for Liberty Puerto Rico is primarily related to lower Adjusted OIBDA margins associated with the new mobile operations at Liberty Puerto Rico following the closing of the AT&T Acquisition. For additional information regarding the impacts of COVID-19, see discussion in *Overview* above.

Revenue

All of our segments derive their revenue primarily from (i) residential fixed services, including video, broadband internet and fixed-line telephony, (ii) residential mobile services, including, beginning in November 2020, at Liberty Puerto Rico following the closing of the AT&T Acquisition, and (iii) B2B services. C&W also provides wholesale communication services over its subsea and terrestrial fiber optic cable networks.

While not specifically discussed in the below explanations of the changes in revenue, we are experiencing significant competition in all of our markets. This competition has an adverse impact on our ability to increase or maintain our RGUs and/or ARPU.

Variances in the subscription revenue that we receive from our customers are a function of (i) changes in the number of RGUs or mobile subscribers during the period and (ii) changes in ARPU. Changes in ARPU can be attributable to (i) changes in prices, (ii) changes in bundling or promotional discounts, (iii) changes in the tier of services selected, (iv) variances in subscriber usage patterns and (v) the overall mix of fixed and mobile products during the period. In the following discussion, we discuss ARPU changes in terms of the net impact of the above factors on the ARPU that is derived from our video, broadband internet, fixed-line telephony and mobile products**.**

For the 2020 and 2019 comparison below, revenue variances, including changes in ARPU, were influenced by the impacts of COVID-19, as further discussed below and in the *Overview* above.

The following table sets forth revenue by reportable segment:

	Year ended December 31,		Increase (decrease)	
	2020	2019	$	%
	in millions, except percentages			
C&W Caribbean and Networks	$ 1,706.8	$ 1,812.8	$ (106.0)	(5.8)
C&W Panama	500.2	582.7	(82.5)	(14.2)
VTR/Cabletica	949.0	1,073.8	(124.8)	(11.6)
Liberty Puerto Rico	624.1	412.1	212.0	51.4
Corporate	2.7	—	2.7	N.M.
Intersegment eliminations	(18.2)	(14.4)	(3.8)	N.M.
Total	$ 3,764.6	$ 3,867.0	$ (102.4)	(2.6)

N.M. — Not Meaningful.

Consolidated. The decrease during 2020, as compared to 2019, includes (i) an increase of $209 million associated with the impact of acquisitions and (ii) a decrease of $49 million associated with the impact of a disposal and (iii) a decrease of $137 million attributable to FX. Excluding the effects of acquisitions, a disposal and FX, revenue decreased $126 million or 3.2%. The organic decrease primarily includes increases (decreases) of ($58 million), ($83 million), ($22 million) and $38 million at C&W Caribbean and Networks, C&W Panama, VTR/Cabletica and Liberty Puerto Rico, respectively, as further discussed below.

C&W Caribbean and Networks. C&W Caribbean and Networks's revenue by major category is set forth below:

	Year ended December 31,		Increase (decrease)	
	2020	2019	$	%
	in millions, except percentages			
Residential revenue:				
Residential fixed revenue:				
Subscription revenue:				
Video	$ 142.4	$ 150.1	$ (7.7)	(5.1)
Broadband internet	250.0	225.1	24.9	11.1
Fixed-line telephony	74.6	79.5	(4.9)	(6.2)
Total subscription revenue	467.0	454.7	12.3	2.7
Non-subscription revenue	42.2	47.5	(5.3)	(11.2)
Total residential fixed revenue	509.2	502.2	7.0	1.4
Residential mobile revenue:				
Service revenue	294.1	339.1	(45.0)	(13.3)
Interconnect, inbound roaming, equipment sales and other (a)	44.4	65.3	(20.9)	(32.0)
Total residential mobile revenue	338.5	404.4	(65.9)	(16.3)
Total residential revenue	847.7	906.6	(58.9)	(6.5)
B2B revenue:				
Service revenue	600.4	659.3	(58.9)	(8.9)
Subsea network revenue	258.7	246.9	11.8	4.8
Total B2B revenue	859.1	906.2	(47.1)	(5.2)
Total	$ 1,706.8	$ 1,812.8	$ (106.0)	(5.8)

(a) Revenue from inbound roaming was $14 million and $34 million, respectively. For additional information regarding a change in presentation of revenue by product, see note 21 to the consolidated financial statements.

The details of the changes in C&W Caribbean and Networks's revenue during 2020, as compared to 2019, are set forth below (in millions):

Increase (decrease) in residential fixed subscription revenue due to change in:	
Average number of RGUs (a)	$ 27.7
ARPU (b)	(10.9)
Decrease in residential fixed non-subscription revenue (c)	(3.4)
Total increase in residential fixed revenue	13.4
Decrease in residential mobile service revenue (d)	(29.2)
Decrease in residential mobile interconnect, inbound roaming, equipment sales and other (e)	(20.9)
Decrease in B2B service revenue (f)	(38.0)
Increase in B2B subsea network revenue (g)	16.5
Total organic decrease	(58.2)
Net impact of acquisitions and a disposal	(14.1)
Impact of FX	(33.7)
Total	$ (106.0)

(a) The increase is attributable to higher average broadband internet and video RGUs. The increase in broadband internet RGUs is partially attributable to an increase in telecommuting during COVID-19 due to work-from-home mandates.

(b) The decrease is primarily due to the net effect of (i) lower ARPU from video and fixed-line telephony services and (ii) higher ARPU from broadband internet services.

(c) The decrease is primarily attributable to lower volumes of interconnect revenue across our markets.

(d) The decrease is primarily attributable to (i) lower ARPU from mobile services, as COVID-19 lockdowns and travel restrictions reduced (a) demand for mobile data services and (b) outbound roaming activity, and (ii) lower average prepaid mobile subscribers, primarily due to declines in the Bahamas, as a result of COVID-19 impacts, as further discussed in the *Overview* above.

(e) The decrease is primarily attributable to an organic decrease of $18 million in inbound roaming fees, primarily related to travel restrictions associated with COVID-19.

(f) The decrease is primarily due to (i) lower revenues from mobile and fixed services partially due to discounts and credits related to reduced or suspended service across our markets as a result of the COVID-19 lockdowns and (ii) lower wholesale interconnect revenues.

(g) The increase is primarily attributable to (i) an increase of $7 million associated with revenue recognized on a cash basis for services provided to a significant customer and (ii) an increase in the demand for telecommunications capacity on our subsea network during COVID-19.

C&W Panama. C&W Panama's revenue by major category is set forth below:

	Year ended December 31,		Increase (decrease)	
	2020	2019	$	%
	in millions, except percentages			
Residential revenue:				
Residential fixed revenue:				
Subscription revenue:				
Video	$ 27.8	$ 31.0	$ (3.2)	(10.3)
Broadband internet	39.0	34.9	4.1	11.7
Fixed-line telephony	18.8	22.4	(3.6)	(16.1)
Total subscription revenue	85.6	88.3	(2.7)	(3.1)
Non-subscription revenue	11.8	14.5	(2.7)	(18.6)
Total residential fixed revenue	97.4	102.8	(5.4)	(5.3)
Residential mobile revenue:				
Service revenue	160.1	183.8	(23.7)	(12.9)
Interconnect, inbound roaming, equipment sales and other (a)	41.0	56.8	(15.8)	(27.8)
Total residential mobile revenue	201.1	240.6	(39.5)	(16.4)
Total residential revenue	298.5	343.4	(44.9)	(13.1)
B2B service revenue	201.7	239.3	(37.6)	(15.7)
Total	$ 500.2	$ 582.7	$ (82.5)	(14.2)

(a) Revenue from inbound roaming was $2 million and $3 million, respectively. For additional information regarding a change in presentation of revenue by product, see note 21 to the consolidated financial statements.

The details of the changes in C&W Panama's revenue during 2020, as compared to 2019, are set forth below (in millions):

Increase (decrease) in residential fixed subscription revenue due to change in:	
Average number of RGUs (a)	$ 8.4
ARPU (b)	(11.1)
Decrease in residential fixed non-subscription revenue (c)	(2.7)
Total decrease in residential fixed revenue	(5.4)
Decrease in residential mobile service revenue (d)	(23.7)
Decrease in residential mobile interconnect, inbound roaming, equipment sales and other revenue (e)	(15.8)
Decrease in B2B service revenue (f)	(37.6)
Total organic decrease	$ (82.5)

(a) The increase is primarily attributable to higher average broadband internet RGUs, partially attributable to an increase in telecommuting during COVID-19 due to work-from-home mandates.

(b) The decrease is primarily due to lower ARPU from fixed-line telephony and video services.

(c) The decrease is primarily attributable to (i) a decrease in payphone revenue and (ii) lower interconnect volumes.

(d) The decrease is primarily attributable to (i) lower ARPU from mobile services, as COVID-19 lockdowns and travel restrictions negatively impacted customers' ability to recharge handset devices, and (ii) lower average mobile subscribers, primarily resulting from the impacts of COVID-19 and competition, as further discussed in the *Overview* above.

(e) The decrease is primarily attributable to (i) lower volumes of handset sales, as COVID-19 related lockdowns negatively impacted customers' ability to purchase handsets and (ii) lower interconnect volumes.

(f) The decrease is primarily due to (i) lower revenues from managed services, primarily driven by certain non-recurring projects that have been put on hold due to the economic uncertainty of the impact of COVID-19, (ii) lower revenues from mobile and fixed services partially due to discounts and credits related to reduced or suspended service as a result of the COVID-19 lockdowns.

VTR/Cabletica. VTR/Cabletica's revenue by major category is set forth below:

	Year ended December 31,		Increase (decrease)	
	2020	2019	$	%
	in millions, except percentages			
Residential revenue:				
Residential fixed revenue:				
Subscription revenue:				
Video	$ 370.6	$ 422.1	$ (51.5)	(12.2)
Broadband internet	382.7	412.0	(29.3)	(7.1)
Fixed-line telephony	77.2	100.7	(23.5)	(23.3)
Total subscription revenue	830.5	934.8	(104.3)	(11.2)
Non-subscription revenue	24.3	34.3	(10.0)	(29.2)
Total residential fixed revenue	854.8	969.1	(114.3)	(11.8)
Residential mobile revenue:				
Service revenue	55.7	62.7	(7.0)	(11.2)
Interconnect, inbound roaming, equipment sales and other	8.2	12.0	(3.8)	(31.7)
Total residential mobile revenue	63.9	74.7	(10.8)	(14.5)
Total residential revenue	918.7	1,043.8	(125.1)	(12.0)
B2B service revenue	30.3	30.0	0.3	1.0
Total	$ 949.0	$ 1,073.8	$ (124.8)	(11.6)

The details of the changes in VTR/Cabletica's revenue during 2020, as compared to 2019, are set forth below (in millions):

Increase (decrease) in residential fixed subscription revenue due to change in:	
Average number of RGUs (a)	$ 4.6
ARPU (b)	(20.2)
Decrease in residential fixed non-subscription revenue (c)	(7.6)
Total decrease in residential fixed revenue	(23.2)
Increase in residential mobile service revenue (d)	0.3
Decrease in residential mobile interconnect, inbound roaming, equipment sales and other revenue (e)	(2.8)
Increase in B2B service revenue (f)	4.2
Total organic decrease	(21.5)
Impact of FX	(103.3)
Total	$ (124.8)

(a) The increase is primarily attributable to the net effect of (i) higher average broadband internet RGUs, partially attributable to an increase in telecommuting during COVID-19 due to work-from-home mandates, and (ii) lower average fixed-line telephony RGUs at VTR.

(b) The decrease, which relates to VTR, is primarily due to lower ARPU from (i) video, primarily attributable to declines associated with the cancellation of live soccer matches broadcast on our premium programming, and (ii) fixed-line telephony.

(c) The decrease is primarily attributable to (i) lower activations and installations at VTR as a result of COVID-19 and (ii) lower equipment sales at Cabletica.

(d) The increase, which relates to VTR, is due to the net effect of (i) higher average numbers of mobile subscribers and (ii) lower ARPU from mobile services.

(e) The decrease, which relates to VTR, is primarily attributable to declines in (i) interconnect revenue due to decreased rates, partially offset by higher traffic, and (ii) handset sales due to the temporary closure of physical stores, as a result of COVID-19-related lockdowns.

(f) The increase is largely attributable to higher broadband internet and fixed-line telephony services at VTR.

Liberty Puerto Rico Liberty Puerto Rico's revenue by major category is set forth below:

	Year ended December 31,		Increase (decrease)	
	2020	**2019**	**$**	**%**
	in millions, except percentages			
Residential fixed revenue:				
Subscription revenue:				
Video	$ 147.2	$ 140.9	$ 6.3	4.5
Broadband internet	204.7	175.0	29.7	17.0
Fixed-line telephony	25.5	23.4	2.1	9.0
Total subscription revenue	377.4	339.3	38.1	11.2
Non-subscription revenue	17.7	21.7	(4.0)	(18.4)
Total residential fixed revenue	395.1	361.0	34.1	9.4
Residential mobile revenue:				
Service revenue	82.9	—	82.9	N.M.
Interconnect, inbound roaming, equipment sales and other (a)	50.6	—	50.6	N.M.
Total residential mobile revenue	133.5	—	133.5	N.M.
Total residential revenue	528.6	361.0	167.6	46.4
B2B service revenue	89.8	51.1	38.7	75.7
Other revenue (b)	5.7	—	5.7	N.M.
Total	$ 624.1	$ 412.1	$ 212.0	51.4

N.M. — Not Meaningful.

(a) Revenue from inbound roaming was $11 million in 2020.

(b) Amount relates to funds received from the FCC related to Liberty Mobile following the closing of the AT&T Acquisition.

The details of the changes in Liberty Puerto Rico's revenue during the year ended December 31, 2020, as compared to 2019, are set forth below (in millions):

Increase in residential fixed subscription revenue due to change in:	
Average number of RGUs (a)	$ 33.2
ARPU (b)	4.9
Decrease in residential fixed non-subscription revenue (c)	(4.0)
Total increase in residential fixed revenue	34.1
Increase in B2B service (d)	3.7
Total organic increase	37.8
Impact of an acquisition	174.2
Total	$ 212.0

(a) The increase is primarily attributable to higher average broadband internet RGUs, as we experienced increased demand due in part to the impact of COVID-19 work-from-home mandates.

(b) The increase is primarily attributable to the net effect of (i) higher ARPU from broadband internet and video services and (ii) $2 million of credits issued to customers in connection with the earthquakes that impacted Puerto Rico in January 2020.

(c) The decrease is primarily due to reconnect and late fee revenues, as such fees were generally waived during the second and third quarters in response to impacts of COVID-19.

(d) The increase primarily relates to the transfer of certain B2B operations in Puerto Rico from our C&W Caribbean and Networks segment to our Liberty Puerto Rico segment.

Programming and other direct costs of services

Programming and other direct costs of services include programming and copyright costs, interconnect and access costs, commissions, costs of mobile handsets and other devices, and other direct costs related to our operations. Programming and copyright costs, which represent a significant portion of our operating costs, may increase in future periods as a result of (i) higher costs associated with the expansion of our digital video content, including rights associated with ancillary product offerings and rights that provide for the broadcast of live sporting events, (ii) rate increases or (iii) growth in the number of our video subscribers.

The following table sets forth the organic and non-organic changes in programming and other direct costs of services on a consolidated basis:

	Year ended December 31,		Increase (decrease)	Increase (decrease) from:		
	2020	2019		FX	Acquisition (disposition), net	Organic
	in millions					
Programming and copyright	$ 389.3	$ 404.8	$ (15.5)	$ (21.5)	$ (0.9)	$ 6.9
Interconnect and commissions	249.9	280.0	(30.1)	(12.2)	3.4	(21.3)
Equipment and other	206.8	193.0	13.8	(2.8)	55.3	(38.7)
Total programming and other direct costs	$ 846.0	$ 877.8	$ (31.8)	$ (36.5)	$ 57.8	$ (53.1)

C&W Caribbean and Networks. The following table sets forth the organic and non-organic changes in programming and other direct costs of services for our C&W Caribbean and Networks segment.

	Year ended December 31,			Decrease from:		
	2020	2019	Decrease	FX	Acquisition (disposition), net	Organic
	in millions					
Programming and copyright	$ 88.8	$ 105.3	$ (16.5)	$ (1.3)	$ (2.8)	$ (12.4)
Interconnect and commissions	163.0	174.4	(11.4)	(6.8)	(2.6)	(2.0)
Equipment and other	59.1	75.0	(15.9)	(0.9)	(2.2)	(12.8)
Total programming and other direct costs	$ 310.9	$ 354.7	$ (43.8)	$ (9.0)	$ (7.6)	$ (27.2)

- **Programming and copyright:** The organic decrease is primarily due to the net effect of (i) lower sports content costs and (ii) the net negative impact of $9 million, resulting from the reassessment and release of various accruals in certain of our markets during 2020 and 2019.
- **Interconnect and commissions:** The organic decrease is primarily due to the net effect of (i) lower wholesale call volumes and (ii) the negative impact resulting from the reassessment of an accrual during 2019.
- **Equipment and other:** The organic decrease is primarily due to lower volume of mobile handset sales.

C&W Panama. The following table sets forth the organic changes in programming and other direct costs of services for our C&W Panama segment.

	Year ended December 31,		
	2020	2019	Organic decrease
	in millions		
Programming and copyright	$ 13.9	$ 14.6	$ (0.7)
Interconnect and commissions	41.1	52.0	(10.9)
Equipment and other	74.0	91.1	(17.1)
Total programming and other direct costs	$ 129.0	$ 157.7	$ (28.7)

- **Interconnect and commissions:** The organic decrease is primarily due to lower wholesale call volumes.
- **Equipment and other:** The organic decrease is primarily due to (i) lower volume of mobile handset sales and (ii) a decrease driven by certain non-recurring projects that have been put on hold due to the economic uncertainty of the impact of COVID-19, .

VTR/Cabletica. The following table sets forth the organic and non-organic changes in programming and other direct costs of services for our VTR/Cabletica segment.

	Year ended December 31,			Increase (decrease) from:	
	2020	2019	Decrease	FX	Organic
	in millions				
Programming and copyright	$ 194.7	$ 199.9	$ (5.2)	$ (20.2)	$ 15.0
Interconnect and commissions	45.0	57.4	(12.4)	(5.4)	(7.0)
Equipment and other	18.2	28.1	(9.9)	(1.9)	(8.0)
Total programming and other direct costs	$ 257.9	$ 285.4	$ (27.5)	$ (27.5)	$ —

- **Programming and copyright:** The organic increase, mostly in the VTR market, is primarily due to the net effect of (i) an increase of $15 million in the foreign currency impact of programming contracts denominated in U.S. dollars, and (ii) a net decrease in certain premium and basic content costs, primarily due to (a) a decline associated with the renegotiation of a programming contract that governs content rates for live soccer matches that were cancelled, (b) an increase in rates in other premium and basic content cost and (c) lower subscribers of other premium and basic content.

- **Interconnect and commissions:** The organic decrease, which relates to the VTR market, is primarily due to lower rates that were partially offset by higher volumes.

- **Equipment and other:** The organic decrease, mostly in the VTR market, is primarily due to the net effect of (i) lower volumes of equipment sales as a result of changes in market dynamics and customer usage due to COVID-19-related restrictions and (ii) an increase of $3 million in the foreign currency impact on costs of handsets sales.

Liberty Puerto Rico. The following table sets forth the organic changes in programming and other direct costs of services for our Liberty Puerto Rico segment.

	Year ended December 31,			Increase from:	
	2020	2019	Increase	Acquisition	Organic
			in millions		
Programming and copyright	$ 91.9	$ 85.0	$ 6.9	$ 1.9	$ 5.0
Interconnect and commissions	14.2	7.5	6.7	6.0	0.7
Equipment and other	58.2	0.3	57.9	57.5	0.4
Total programming and other direct costs	$ 164.3	$ 92.8	$ 71.5	$ 65.4	$ 6.1

- **Programming and copyright:** The organic increase is primarily due to (i) a higher average number of video subscribers, (ii) an accrual recorded in the second quarter of 2020 related to an audit of programming services provided in 2018 and 2019 and (iii) higher programming rates.

- **Interconnect and commissions:** The organic increase is primarily due to the transfer of certain B2B operations in Puerto Rico from our C&W Caribbean and Networks segment to our Liberty Puerto Rico segment during the first quarter of 2019.

Other operating costs and expenses

Other operating costs and expenses set forth in the tables below comprise the following cost categories:

- **Personnel and contract labor-related** costs, which primarily include salary-related and cash bonus expenses, net of capitalizable labor costs, and temporary contract labor costs;

- **Network-related** expenses, which primarily include costs related to network access, system power, core network, and CPE repair, maintenance and test costs;

- **Service-related** costs, which primarily include professional services, information technology-related services, audit, legal and other services;

- **Commercial**, which primarily includes sales and marketing costs, such as advertising, commissions and other sales and marketing-related costs, and customer care costs related to outsourced call centers;

- **Facility, provision, franchise and other**, which primarily includes facility-related costs, provision for bad debt expense, franchise-related fees, bank fees, insurance, travel and entertainment and other operating-related costs; and

- **Share-based compensation** costs that relate to (i) SARs, RSUs and PSUs issued to our employees and Directors and (ii) bonus-related expenses that will be paid in the form of equity.

Consolidated. The following table sets forth the organic and non-organic changes in other operating costs and expenses on a consolidated basis.

	Year ended December 31,		Increase (decrease)	Increase (decrease) from:		
	2020	2019		FX	Acquisition (disposition), net	Organic
			in millions			
Personnel and contract labor	$ 483.6	$ 500.4	$ (16.8)	$ (13.0)	$ 14.1	$ (17.9)
Network-related	261.4	264.4	(3.0)	(11.4)	1.1	7.3
Service-related	161.7	149.9	11.8	(5.0)	9.7	7.1
Commercial	168.1	172.6	(4.5)	(11.2)	5.4	1.3
Facility, provision, franchise and other	359.1	360.5	(1.4)	(8.4)	22.4	(15.4)
Share-based compensation expense	97.5	57.5	40.0	(1.0)	0.8	40.2
Total other operating costs and expenses	$ 1,531.4	$ 1,505.3	$ 26.1	$ (50.0)	$ 53.5	$ 22.6

In the following section, we provide a discussion and analysis of the organic changes of other operating costs and expenses, which excludes, where applicable, the impact of acquisitions, dispositions and FX for each of our reportable segments and our Corporate operations. For additional information regarding our share-based compensation, see *Results of Operations (below Adjusted OIBDA)—2020 compared to 2019* discussion and analysis below and note 17 to our consolidated financial statements.

C&W Caribbean and Networks. The following table sets forth the organic and non-organic changes in other operating costs and expenses for our C&W Caribbean and Networks segment.

	Year ended December 31,		Increase (decrease)	Increase (decrease) from:		
	2020	2019		FX	Acquisition (disposition), net	Organic
			in millions			
Personnel and contract labor	$ 254.2	$ 270.6	$ (16.4)	$ (5.1)	$ 0.6	$ (11.9)
Network-related	140.5	147.3	(6.8)	(3.2)	(1.4)	(2.2)
Service-related	70.6	70.6	—	(0.6)	1.8	(1.2)
Commercial	45.4	57.4	(12.0)	(1.2)	(0.3)	(10.5)
Facility, provision, franchise and other	171.9	180.0	(8.1)	(2.8)	(0.8)	(4.5)
Share-based compensation expense	28.4	16.5	11.9	(0.1)	0.8	11.2
Total other operating costs and expenses	$ 711.0	$ 742.4	$ (31.4)	$ (13.0)	$ 0.7	$ (19.1)

- **Personnel and contract labor:** The organic decrease is primarily due to the net effect of (i) lower salaries and other personnel costs, primarily associated with the benefit of certain ongoing restructuring activities, (ii) $7 million of estimated bonus-related expenses that have been recognized as share-based compensation expense, as certain 2020 bonuses will be paid in the form of equity, as further discussed below under S*hare-based compensation expense*, and (iii) lower capitalized labor costs due to the curtailment of certain projects as a result of the impact of COVID-19.

- **Commercial:** The organic decrease is primarily due to lower marketing and sales costs, largely due to reductions in promotional and sponsorship costs, as a result of certain adverse economic impacts caused by the COVID-19 pandemic across our markets.

- **Facility, provision, franchise and other costs:** The organic decrease is primarily due to the net effect of:

  - lower (i) travel and entertainment costs and (ii) office-related expenses due to the curtailment of such costs as a result of the impact of COVID-19;

◦ an increase due to the negative impact of a $10 million decline in 2019 associated with withholding taxes on third-party supplier services, primarily related to the expiration of statute of limitations;

◦ lower insurance costs of $4 million due in part to our Weather Derivative, as further described below and in notes 3 and 5 to our consolidated financial statements; and

◦ bad debt expense, which remained relatively unchanged, as (i) higher bad debt provisions due to the impacts of COVID-19, which have generally resulted in (a) delays in collections, (b) higher expected credit losses associated with certain B2B customers and (c) changes in our general expectations related to our customers' ability to pay, were offset by (ii) the beneficial impacts of (a) a $3 million provision in 2019 related to certain B2B customers and (b) a $2 million provision in 2019 related to the impact of Hurricane Dorian.

C&W Panama. The following table sets forth the organic changes in other operating costs and expenses for our C&W Panama segment.

	Year ended December 31,		Organic increase (decrease)
	2020	2019	
	in millions		
Personnel and contract labor	$ 70.9	$ 70.2	$ 0.7
Network-related	39.7	43.0	(3.3)
Service-related	13.3	15.8	(2.5)
Commercial	20.5	22.0	(1.5)
Facility, provision, franchise and other	49.6	46.4	3.2
Share-based compensation expense	2.7	0.9	1.8
Total other operating costs and expenses	$ 196.7	$ 198.3	$ (1.6)

- **Personnel and contract labor:** The organic increase is net of the impact of $1 million of estimated bonus-related expense that has been recognized as share-based compensation expense, as certain 2020 bonuses will be paid in the form of equity, as further discussed below under S*hare-based compensation expense.*

- **Facility, provision, franchise and other costs:** The organic increase is primarily due to the net effect of (i) higher bad debt provisions during 2020, as the impacts of COVID-19 have generally resulted in (a) delays in collections, (b) higher expected credit losses associated with certain B2B customers and (c) changes in our general expectations related to our customers' ability to pay, and (ii) the beneficial impact of a $2 million increase to the bad debt provision during 2019, primarily related to certain government customers.

VTR/Cabletica. The following table sets forth the organic and non-organic changes in other operating costs and expenses for our VTR/Cabletica segment.

	Year ended December 31,		Increase (decrease)	Increase (decrease) from:	
	2020	2019		FX	Organic
			in millions		
Personnel and contract labor	$ 76.1	$ 91.5	$ (15.4)	$ (7.9)	$ (7.5)
Network-related	75.8	71.1	4.7	(8.2)	12.9
Service-related	38.4	39.9	(1.5)	(4.4)	2.9
Commercial	83.2	82.3	0.9	(10.0)	10.9
Facility, provision, franchise and other	55.7	70.0	(14.3)	(5.6)	(8.7)
Share-based compensation expense	8.9	4.9	4.0	(0.9)	4.9
Total other operating costs and expenses	$ 338.1	$ 359.7	$ (21.6)	$ (37.0)	$ 15.4

- **Personnel and contract labor:** The organic decrease, mostly related to the VTR market, is primarily due to (i) a decrease in salary-related costs, which includes $3 million of estimated bonus-related expense that has been recognized as share-based compensation expense, as certain 2020 bonuses will be paid in the form of equity, as further discussed below under *Share-based compensation expense*, and (ii) higher capitalized labor costs associated with certain development-related projects.

- **Network-related:** The organic increase, mostly related to the VTR market, is primarily due to (i) higher volumes of network access-related contracted labor and (ii) higher costs related to CPE refurbishment activity.

- **Service-related:** The organic increase, mostly related to the VTR market, is primarily due to (i) increased information technology costs associated with software maintenance and support and (ii) higher professional consultancy services.

- **Commercial:** The organic increase is primarily due to the net effect of (i) an increase in call center volumes as a result of the impact from COVID-19, (ii) a decrease in marketing and advertising expenses and (iii) higher sales commissions to third-party dealers.

- **Facility, provision, franchise and other costs:** The organic decrease is primarily due to (i) lower travel and entertainment costs due to curtailment of such costs as a result of the impact of COVID-19, (ii) lower bank-related fees and (iii) lower bad debt and collection expenses.

Liberty Puerto Rico. The following table sets forth the organic changes in other operating costs and expenses for our Liberty Puerto Rico segment.

	Year ended December 31,			Increase (decrease) from:	
	2020	2019	Increase	Acquisition	Organic
			in millions		
Personnel and contract labor	$ 62.1	$ 39.5	$ 22.6	$ 13.5	$ 9.1
Network-related	6.7	4.5	2.2	2.5	(0.3)
Service-related	24.9	10.6	14.3	7.9	6.4
Commercial	19.0	10.9	8.1	5.7	2.4
Facility, provision, franchise and other	70.2	50.6	19.6	23.2	(3.6)
Share-based compensation expense	5.1	2.2	2.9	—	2.9
Total other operating costs and expenses	$ 188.0	$ 118.3	$ 69.7	$ 52.8	$ 16.9

- **Personnel and contract labor:** The organic increase is primarily due to the net effect of (i) annual salary increases, (ii) higher sales commissions and (iii) $1 million of estimated bonus-related expense that has been recognized as share-based compensation expense, as certain 2020 bonuses will be paid in the form of equity, as further discussed below under *Share-based compensation expense.*

- **Service-related:** The organic increase is primarily due to integration costs of $6 million associated with the AT&T Acquisition.

- **Facility, provision, franchise and other:** The organic decrease is primarily due to lower bad debt expense driven by improved collections.

Corporate. The following tables set forth the organic changes in other operating costs and expenses for our corporate operations.

	Year ended December 31, 2020	Year ended December 31, 2019	Organic increase (decrease)
	in millions		
Personnel and contract labor	$ 20.3	$ 28.6	$ (8.3)
Network-related	1.1	—	1.1
Service-related	14.5	13.0	1.5
Facility, provision, franchise and other	11.7	13.5	(1.8)
Share-based compensation expense	52.4	33.0	19.4
Total other operating costs and expenses	$ 100.0	$ 88.1	$ 11.9

- **Personnel and contract labor:** The organic decrease is primarily attributable to $6 million of estimated bonus-related expense that has been recognized as share-based compensation expense, as certain 2020 bonuses will be paid in the form of equity, as further discussed below under *Share-based compensation expense*.

- **Facility, provision, franchise and other:** The organic decrease is primarily attributable to the net effect of (i) lower travel and entertainment costs due to curtailment of such costs as a result of the impact of COVID-19 and (ii) higher expenses associated with a mobile handset insurance program that began during the fourth quarter of 2020 following the closing of the AT&T Acquisition.

Results of operations (below Adjusted OIBDA)—2020 compared to 2019

Share-based compensation expense (included in other operating costs and expenses)

Share-based compensation expense increased $40 million during 2020, as compared to 2019. This increase is primarily due to (i) an increase of $19 million related to estimated bonus-related expenses that will be paid in the form of equity. Accordingly, such expenses have been included in share-based compensation expense effective January 1, 2020 and (ii) an increase of $7 million related to the extension of the expiration period for certain Liberty Global awards held by our employees.

For additional information regarding our share-based compensation, see note 17 to our consolidated financial statements.

Depreciation and amortization

Our depreciation and amortization expense increased $44 million or 5.0% during 2020**,** as compared to 2019. Excluding the impacts of FX, acquisitions and a disposal, depreciation and amortization expense increased $48 million or 5.5%. The organic increase is primarily due to the net effect of (i) an increase in property and equipment additions, primarily associated with the installation of CPE, baseline additions, support-related equipment expenditures and the expansion and upgrade of our networks and other capital initiatives**,** and (ii) a decrease associated with certain assets becoming fully depreciated.

Impairment, restructuring and other operating items, net

We recognized impairment, restructuring and other operating items, net, of $381 million and $259 million during 2020 and 2019, respectively.

The 2020 amount primarily includes (i) impairment charges of $283 million, (ii) direct acquisition and disposition costs of $64 million and (iii) restructuring charges of $28 million. The impairment charges, which are primarily due to the economic impacts associated with COVID-19, include (i) $177 million related to an impairment of goodwill at C&W Panama and (ii) $99 million related to an impairment of goodwill at various reporting units within the C&W Caribbean and Networks segment. The restructuring charges, which are primarily related to C&W Caribbean and Networks, VTR and C&W Panama, include employee severance and termination costs related to certain reorganization activities and contract termination and other related charges. The direct acquisition costs are primarily related to the AT&T Acquisition.

The 2019 amount primarily includes (i) impairment charges of $199 million, (ii) restructuring charges of $46 million, (iii) $10 million of direct acquisition and disposition costs and (iv) a $3 million loss due to the Seychelles Disposition. The impairment charges primarily include (i) $182 million related to an impairment of goodwill at C&W Panama and (ii) $16 million related to charges at C&W Caribbean and Networks primarily to reduce the carrying value of property and equipment as a result of the impact of Hurricane Dorian. The restructuring charges, which are primarily at C&W Caribbean and Networks and VTR, include employee severance and termination costs related to certain reorganization activities and contract termination and other related charges. The direct acquisition costs and disposition costs relate to the AT&T Acquisition and, to a lesser extent, the UTS Acquisition and the Seychelles Disposition.

For additional information regarding our impairment and restructuring charges, see notes 9 and 12 to our consolidated financial statements.

Interest expense

Our interest expense increased $34 million during 2020, as compared to 2019. The increase is primarily due to (i) the net effect of (a) higher average outstanding debt balances and (b) lower weighted-average interest rates and (ii) higher amortization of (a) discounts and premiums, net, and (b) deferred financing costs.

For additional information regarding our outstanding indebtedness, see note 10 to our consolidated financial statements.

It is possible that the interest rates on (i) any new borrowings could be higher than the current interest rates on our existing indebtedness and (ii) our variable-rate indebtedness could increase in future periods. As further discussed in note 5 to our consolidated financial statements and under Item 7A. *Qualitative and Quantitative Disclosures about Market Risk* below, we use derivative instruments to manage our interest rate risks.

Realized and unrealized losses on derivative instruments, net

Our realized and unrealized gains or losses on derivative instruments primarily include (i) unrealized changes in the fair values of our derivative instruments that are non-cash in nature until such time as the derivative contracts are fully or partially settled and (ii) realized gains or losses upon the full or partial settlement of the derivative contracts. The details of our realized and unrealized losses on derivative instruments, net, are as follows:

	Year ended December 31,	
	2020	**2019**
	in millions	
Cross-currency and interest rate derivative contracts (a) (b)	$ (328.6)	$ (21.0)
Foreign currency forward contracts	(7.8)	9.4
Weather Derivatives (c)	(16.3)	(5.6)
Total	$ (352.7)	$ (17.2)

(a) The loss during 2020 includes a realized gain of $71 million associated with the settlement of certain cross-currency interest rate swaps at VTR in June 2020 that were unwound in connection with the July 2020 refinancing of certain VTR debt. For additional information regarding the refinancing, see note 10 to our consolidated financial statements.

(b) The loss during 2020 is primarily attributable to the net effect of (i) changes in interest rates and (ii) changes in FX rates, predominantly due to changes in the value of the Chilean peso relative to the U.S. dollar. In addition, the loss during 2020 includes a net gain of $47 million resulting from changes in our credit risk valuation adjustments, which are primarily due to increased credit risk stemming from market reaction to the COVID-19 outbreak. The loss during 2019 is primarily attributable to (i) changes in interest rates and (ii) changes in FX rates, predominantly due to changes in the value of the Chilean peso relative to the U.S. dollar. In addition, the loss during 2019 includes a net gain of $4 million resulting from changes in our credit risk valuation adjustments.

(c) Amounts represent the amortization of the premiums associated with our Weather Derivatives, which we initially entered into during the second quarter of 2019.

For additional information concerning our derivative instruments, see notes 5 and 6 to our consolidated financial statements and Item 7A. *Qualitative and Quantitative Disclosures about Market Risk* below.

Foreign currency transaction gains (losses), net

Our foreign currency transaction gains or losses primarily result from the remeasurement of monetary assets and liabilities that are denominated in currencies other than the underlying functional currency of the applicable entity. Unrealized foreign currency transaction gains or losses are computed based on period-end exchange rates and are non-cash in nature until such time as the amounts are settled. The details of our foreign currency transaction gains (losses), net, are as follows:

	Year ended December 31,	
	2020	2019
	in millions	
U.S. dollar-denominated debt issued by a Chilean peso functional currency entity	$ 61.7	$ (98.4)
Intercompany payables and receivables denominated in a currency other than the entity's functional currency	(53.2)	(10.0)
British pound sterling-denominated debt issued by a U.S. dollar functional currency entity	—	(3.7)
Other	(7.3)	(0.4)
Total	$ 1.2	$ (112.5)

Losses on debt modification and extinguishment, net

We recognized losses on debt modification and extinguishment, net, of $45 million and $20 million during 2020 and 2019, respectively. The losses during 2020 are associated with (i) the payment of redemption premiums and the write-off of unamortized deferred financing costs related to the repayment of the VTR Finance Senior Notes and (ii) the write-off of unamortized discounts and deferred financing costs related to the repayment of the C&W Term Loan B-4 Facility. The loss during 2019 primarily includes the payment of redemption premiums.

For additional information concerning our losses on debt modification and extinguishment, see note 10 to our consolidated financial statements.

Other income (expense), net

Our other income and expense, net, generally includes (i) certain amounts associated with our defined benefit plans, including interest expense and expected return on plan assets, and (ii) interest income on cash, cash equivalents and restricted cash.

We recognized other income, net, of nil and $14 million during 2020 and 2019, respectively. The amount during 2020 primarily relates to the net effect of (i) interest income, including interest on the AT&T Acquisition Restricted Cash, and (ii) other individually insignificant expenses. The amount during 2019 primarily relates to interest income.

For additional information regarding our defined benefit plans, see note 16 to our consolidated financial statements.

Income tax benefit (expense)

Liberty Latin America was formed as a corporation in Bermuda and, therefore, the "statutory" or "expected" tax rate for the 2020 and 2019 tax years is 0% as we are exempt from income taxes on ordinary income and capital gains. However, a majority of our subsidiaries operate in jurisdictions where income tax is imposed at local applicable statutory rates. For additional information, see note 15 to our consolidated financial statements.

We recognized income tax benefit of $29 million and $98 million during 2020 and 2019, respectively.

The income tax benefit attributable to our loss before income taxes during 2020 differs from the amounts computed using the statutory tax rate (based on the Bermuda statutory tax rate of 0%), primarily due to the beneficial effects of (i) international rate differences, (ii) changes in enacted tax laws (but which are nearly entirely offset by valuation allowance), and (iii) net favorable changes in uncertain tax positions. These beneficial impacts to our effective tax rate were partially offset by the negative effects of (i) increases in valuation allowances, (ii) permanent items, such as non-deductible goodwill impairment and other non-deductible expenses, as well as (iii) the inclusion of withholding taxes on cross-border payments.

The income tax expense attributable to our loss before income taxes during 2019 differs from the amounts computed using the statutory tax rate (based on the Bermuda statutory tax rate of 0%), primarily due to the beneficial effects of (i) net favorable changes in uncertain tax positions, (ii) international rate differences, (iii) basis adjustments associated with investments in

Liberty Latin America entities and (iv) enacted tax rate changes, which are offset by the detrimental effects of (i) increases in valuation allowances, (ii) non-deductible goodwill impairments and (iii) net unfavorable permanent difference.

For additional information regarding our income taxes, see note 15 to our consolidated financial statements.

Net loss

The following table sets forth selected summary financial information of our net loss:

	Year ended December 31,	
	2020	2019
	in millions	
Operating income	$ 91.7	$ 353.8
Net non-operating expenses	$ (929.9)	$ (634.4)
Income tax benefit	$ 29.3	$ 98.2
Net loss	$ (808.9)	$ (182.4)

Gains or losses associated with (i) changes in the fair values of derivative instruments and (ii) movements in foreign currency exchange rates are subject to a high degree of volatility and, as such, any gains from these sources do not represent a reliable source of income. In the absence of significant gains in the future from these sources or from other non-operating items, our ability to achieve earnings is largely dependent on our ability to increase our aggregate Adjusted OIBDA to a level that more than offsets the aggregate amount of our (i) share-based compensation expense, (ii) depreciation and amortization, (iii) impairment, restructuring and other operating items, (iv) interest expense, (v) other non-operating expenses and (vi) income tax expenses.

Due largely to the fact that we seek to maintain our debt at levels that provide for attractive equity returns, as discussed under *Liquidity and Capital Resources—Capitalization* below, we expect that we will continue to report significant levels of interest expense for the foreseeable future. For information concerning our expectations with respect to trends that may affect certain aspects of our operating results in future periods, see the discussion under *Overview* above.

Net loss attributable to noncontrolling interests

We reported net losses attributable to noncontrolling interests of $122 million and $102 million during 2020 and 2019, respectively. The change during 2020, as compared to 2019, is primarily attributable to net increases in losses incurred by our less-than-wholly-owned subsidiaries at C&W.

Year Ended December 31, 2019 as Compared with Year Ended December 31, 2018

Consolidated Adjusted OIBDA

As further described above, consolidated Adjusted OIBDA is a non-U.S. GAAP measure. A reconciliation of total operating income (loss), the nearest U.S. GAAP measure, to Adjusted OIBDA on a consolidated basis, is presented below.

	Year ended December 31,	
	2019	2018
	in millions	
Operating income (loss)	$ 353.8	$ (23.6)
Share-based compensation expense	57.5	39.8
Depreciation and amortization	871.0	829.8
Impairment, restructuring and other operating items, net	259.1	640.5
Consolidated Adjusted OIBDA	$ 1,541.4	$ 1,486.5

The following table sets forth organic and non-organic changes in Adjusted OIBDA for the period indicated:

	C&W Caribbean and Networks	C&W Panama	VTR/Cabletica	Liberty Puerto Rico	Corporate	Intersegment eliminations	Consolidated
				in millions			
Adjusted OIBDA for the twelve months ending:							
December 31, 2018	$ 664.3	$ 251.4	$ 421.1	$ 195.8	$ (46.1)	$ —	$ 1,486.5
Organic changes related to:							
Revenue	9.9	(18.2)	20.2	76.5	—	(1.1)	87.3
Programming and other direct costs	25.9	(11.8)	4.7	(13.4)	—	0.9	6.3
Other operating costs and expenses	25.7	6.1	(16.0)	(7.2)	(9.0)	0.2	(0.2)
Business interruption loss recovery	(11.0)	—	—	(48.5)		—	(59.5)
Non-organic increases (decreases):							
FX	(8.0)	0.1	(33.3)	—	—	—	(41.2)
Acquisitions/disposition, net	25.3	—	36.9	—	—	—	62.2
December 31, 2019	$ 732.1	$ 227.6	$ 433.6	$ 203.2	$ (55.1)	$ —	$ 1,541.4

Adjusted OIBDA Margin

The following table sets forth the Adjusted OIBDA margins of each of our reportable segments:

	Year ended December 31,	
	2019	2018
	%	
C&W Caribbean and Networks	40.4	38.2
C&W Panama	39.1	41.8
VTR/Cabletica	40.4	40.3
Liberty Puerto Rico	49.3	58.3

Adjusted OIBDA margin is impacted by organic changes in revenue, programming and other direct costs of services and other operating costs and expenses, as further discussed below. The decrease in Liberty Puerto Rico's Adjusted OIBDA margin, is attributable to (i) a 1,460 basis point decrease resulting from the 2018 insurance settlement related to the 2017 Hurricanes and (ii) a 330 basis point decrease due to funding from the FCC received during 2018. Excluding the impacts of the insurance settlement and FCC funding, Liberty Puerto Rico's Adjusted OIBDA margin increased, primarily due to an increase in revenue following the recovery from the 2017 Hurricanes.

Revenue

The following table sets forth revenue by reportable segment:

	Year ended December 31,		Increase (decrease)	
	2019	**2018**	**$**	**%**
	in millions, except percentages			
C&W Caribbean and Networks	$ 1,812.8	$ 1,738.7	$ 74.1	4.3
C&W Panama	582.7	600.9	(18.2)	(3.0)
VTR/Cabletica	1,073.8	1,043.7	30.1	2.9
Liberty Puerto Rico	412.1	335.6	76.5	22.8
Intersegment eliminations	(14.4)	(13.2)	(1.2)	N.M.
Total	$ 3,867.0	$ 3,705.7	$ 161.3	4.4

N.M. — Not Meaningful.

Consolidated. The increase during 2019, as compared to 2018, includes (i) a net increase of $185 million attributable to the impacts of acquisitions and a disposal and (ii) a decrease of $111 million attributable FX. Excluding the effects of acquisitions, a disposal and FX, revenue increased $87 million or 2.4%. The organic increase primarily includes increases (decreases) of $10 million, ($18 million), $20 million and $77 million at C&W Caribbean and Networks, C&W Panama, VTR/Cabletica and Liberty Puerto Rico, respectively, as further discussed below.

C&W Caribbean and Networks. C&W Caribbean and Networks's revenue by major category is set forth below:

	Year ended December 31,		Increase (decrease)	
	2019	**2018**	**$**	**%**
	in millions, except percentages			
Residential revenue:				
Residential fixed revenue:				
Subscription revenue:				
Video	$ 150.1	$ 143.0	$ 7.1	5.0
Broadband internet	225.1	194.3	30.8	15.9
Fixed-line telephony	79.5	76.6	2.9	3.8
Total subscription revenue	454.7	413.9	40.8	9.9
Non-subscription revenue	47.5	50.0	(2.5)	(5.0)
Total residential fixed revenue	502.2	463.9	38.3	8.3
Residential mobile revenue:				
Service revenue	339.1	344.5	(5.4)	(1.6)
Interconnect, inbound roaming, equipment sales and other (a)	65.3	71.8	(6.5)	(9.1)
Total residential mobile revenue	404.4	416.3	(11.9)	(2.9)
Total residential revenue	906.6	880.2	26.4	3.0
B2B revenue:				
Service revenue	659.3	610.5	48.8	8.0
Subsea network revenue	246.9	248.0	(1.1)	(0.4)
Total B2B revenue	906.2	858.5	47.7	5.6
Total	$ 1,812.8	$ 1,738.7	$ 74.1	4.3

(a) Revenue from inbound roaming was $34 million and $35 million, respectively. For additional information regarding a change in presentation of revenue by product, see note 21 to the consolidated financial statements.

The details of the changes in C&W Caribbean and Networks's revenue during 2019, as compared to 2018, are set forth below (in millions):

Increase (decrease) in residential fixed subscription revenue due to change in:	
Average number of RGUs (a)	$ 22.8
ARPU (b)	(4.7)
Decrease in residential fixed non-subscription revenue (c)	(3.8)
Total increase in residential fixed revenue	14.3
Decrease in residential mobile service revenue (d)	(23.4)
Decrease in residential mobile interconnect, inbound roaming, equipment sales and other (e)	(10.4)
Increase in B2B service revenue (f)	25.5
Increase in B2B subsea network revenue	3.9
Total organic increase	9.9
Net impact of an acquisition and a disposal	86.4
Impact of FX	(22.2)
Total	$ 74.1

(a) The increase is primarily attributable to higher broadband internet and video RGUs. The increase is partially offset by a decrease in RGUs as a result of Hurricane Dorian in the Bahamas.

(b) The decrease is primarily due to the net effect of (i) lower ARPU from fixed-line telephony and video services and (ii) higher ARPU from broadband internet services. The decrease also includes a reduction in ARPU as a result of Hurricane Dorian in the Bahamas.

(c) The decrease is primarily attributable to lower interconnect revenue, mainly due to lower (i) volumes in Barbados and other markets in this segment and (ii) fixed termination rates in other markets in this segment.

(d) The decrease is primarily attributable to lower ARPU in the Bahamas and other markets in this segment. In addition, the decrease in mobile service revenue in the Bahamas includes an estimated $3 million attributable to the impact of Hurricane Dorian.

(e) The decrease is primarily attributable to (i) lower handset sales, primarily a result of (a) decreased volumes in our Cayman Islands operations, the Bahamas and other markets in this segment and (b) customers purchasing lower priced products in the Bahamas and other markets in this segment and (ii) lower interconnect revenue, primarily associated with reduced rates.

(f) The increase is primarily due to the net effect of (i) higher managed services revenue at Networks & LatAm and Jamaica, (ii) lower revenue from fixed-line telephony services, primarily in Jamaica and the Bahamas and (iii) increased interconnect revenue, primarily driven by higher volumes in Jamaica. The increase in B2B service revenue is partially offset by an estimated $3 million decrease related to the impact of Hurricane Dorian. The change also includes a decrease related to the transfer of certain B2B operations in Puerto Rico from our C&W Caribbean and Networks segment to our Liberty Puerto Rico segment.

C&W Panama. C&W Panama's revenue by major category is set forth below:

	Year ended December 31,		Increase (decrease)	
	2019	2018	$	%
	in millions, except percentages			
Residential revenue:				
Residential fixed revenue:				
Subscription revenue:				
Video	$ 31.0	$ 29.0	$ 2.0	6.9
Broadband internet	34.9	31.0	3.9	12.6
Fixed-line telephony	22.4	24.4	(2.0)	(8.2)
Total subscription revenue	88.3	84.4	3.9	4.6
Non-subscription revenue	14.5	18.3	(3.8)	(20.8)
Total residential fixed revenue	102.8	102.7	0.1	0.1
Residential mobile revenue:				
Service revenue	183.8	211.3	(27.5)	(13.0)
Interconnect, inbound roaming, equipment sales and other (a)	56.8	56.2	0.6	1.1
Total residential mobile revenue	240.6	267.5	(26.9)	(10.1)
Total residential revenue	343.4	370.2	(26.8)	(7.2)
B2B service revenue	239.3	230.7	8.6	3.7
Total	$ 582.7	$ 600.9	$ (18.2)	(3.0)

(a) Revenue from inbound roaming was $3 million and $4 million, respectively. For additional information regarding a change in presentation of revenue by product, see note 21 to the consolidated financial statements.

The details of the changes in C&W Panama's revenue during 2019, as compared to 2018, are set forth below (in millions):

Increase (decrease) in residential fixed subscription revenue due to change in:	
Average number of RGUs (a)	$ 10.1
ARPU (b)	(6.2)
Decrease in residential fixed non-subscription revenue (c)	(3.8)
Total increase in residential fixed revenue	0.1
Decrease in residential mobile service revenue (d)	(27.5)
Increase in residential mobile interconnect, inbound roaming, equipment sales and other revenue	0.6
Increase in B2B service revenue (e)	8.6
Total organic decrease	$ (18.2)

(a) The increase is primarily attributable to higher video and broadband internet RGUs.

(b) The decrease is primarily due lower ARPU from fixed-line telephony and video services.

(c) The decrease is primarily attributable to lower interconnect volumes.

(d) The decrease is due to lower ARPU and average subscribers as a result of increased competition in our prepaid mobile business.

(e) The increase is primarily due to the net effect of (i) higher managed services revenue, driven by an increase in nonrecurring projects and (ii) lower revenue from fixed-line telephony services.

VTR/Cabletica. VTR/Cabletica's revenue by major category is set forth below:

	Year ended December 31,		Increase (decrease)	
	2019	2018	$	%
	in millions, except percentages			
Residential revenue:				
Residential fixed revenue:				
Subscription revenue:				
Video	$ 422.1	$ 401.4	$ 20.7	5.2
Broadband internet	412.0	386.5	25.5	6.6
Fixed-line telephony	100.7	123.8	(23.1)	(18.7)
Total subscription revenue	934.8	911.7	23.1	2.5
Non-subscription revenue	34.3	30.2	4.1	13.6
Total residential fixed revenue	969.1	941.9	27.2	2.9
Residential mobile revenue:				
Service revenue	62.7	62.9	(0.2)	(0.3)
Interconnect, inbound roaming, equipment sales and other	12.0	13.2	(1.2)	(9.1)
Total residential mobile revenue	74.7	76.1	(1.4)	(1.8)
Total residential revenue	1,043.8	1,018.0	25.8	2.5
B2B service revenue	30.0	25.7	4.3	16.7
Total	$ 1,073.8	$ 1,043.7	$ 30.1	2.9

The details of the changes in VTR/Cabletica's revenue during 2019, as compared to 2018, are set forth below (in millions):

Increase (decrease) in residential fixed subscription revenue due to change in:	
Average number of RGUs (a)	$ 5.7
ARPU (b)	2.3
Decrease in residential fixed non-subscription revenue	(0.6)
Total increase in residential fixed revenue	7.4
Increase in residential mobile service revenue (c)	5.8
Decrease in residential mobile interconnect, inbound roaming, equipment sales and other revenue	(0.2)
Increase in B2B service revenue (d)	7.2
Total organic increase	20.2
Impact of the Cabletica Acquisition	98.3
Impact of FX	(88.4)
Total	$ 30.1

(a) The increase is attributable to the net effect of (i) higher broadband internet and video RGUs and (ii) lower fixed-line telephony RGUs.

(b) The increase is due to the net effect of (i) higher ARPU from broadband internet services, (ii) an improvement in product mix and (iii) lower ARPU from video and fixed-line telephony services. The increase in ARPU from video services is partially offset by $2 million in discounts given to customers due to content not provided as a result of civil unrest in Chile during the fourth quarter of 2019.

(c) The increase is due to the net effect of (i) a higher average number of mobile subscribers and (ii) lower ARPU from mobile services.

(d) The increase is primarily attributable to higher average numbers of broadband internet, video and fixed-line telephony RGUs.

Liberty Puerto Rico Liberty Puerto Rico's revenue by major category is set forth below:

	Year ended December 31,		Increase (decrease)	
	2019	2018	$	%
	in millions, except percentages			
Residential fixed revenue:				
Subscription revenue:				
Video	$ 140.9	$ 118.9	$ 22.0	18.5
Broadband internet	175.0	132.5	42.5	32.1
Fixed-line telephony	23.4	18.6	4.8	25.8
Total subscription revenue	339.3	270.0	69.3	25.7
Non-subscription revenue	21.7	17.4	4.3	24.7
Total residential fixed revenue	361.0	287.4	73.6	25.6
B2B service revenue	51.1	37.1	14.0	37.7
Other revenue	—	11.1	(11.1)	(100.0)
Total	$ 412.1	$ 335.6	$ 76.5	22.8

Liberty Puerto Rico's revenue increased $77 million during 2019, as compared to 2018. Revenue during 2018 includes $11 million received from the FCC in August 2018, which is included in other revenue. The FCC granted these funds to help restore and improve coverage and service quality from damages caused by the 2017 Hurricanes. The increase in revenue also includes $8 million related to the transfer of certain B2B operations in Puerto Rico from our C&W Caribbean and Networks segment to our Liberty Puerto Rico segment. Excluding the impact of the FCC funding and the transfer of the B2B operations discussed above, the increase is primarily attributable to recovery following the 2017 Hurricanes.

Programming and other direct costs of services

The following table sets forth the organic and non-organic changes in programming and other direct costs of services on a consolidated basis for the period indicated:

	Year ended December 31,		Increase (decrease)	Increase (decrease) from:		
	2019	2018		FX	Acquisition (disposition), net	Organic
	in millions					
Programming and copyright	$ 404.8	$ 401.1	$ 3.7	$ (17.0)	$ 25.1	$ (4.4)
Interconnect and commissions	280.0	298.7	(18.7)	(9.4)	6.5	(15.8)
Equipment and other	193.0	177.4	15.6	(3.8)	5.5	13.9
Total programming and other direct costs	$ 877.8	$ 877.2	$ 0.6	$ (30.2)	$ 37.1	$ (6.3)

C&W Caribbean and Networks. The following table sets forth the organic and non-organic changes in programming and other direct costs of services for our C&W Caribbean and Networks segment.

	Year ended December 31,		Increase (decrease)	Increase (decrease) from:		
	2019	2018		FX	Acquisition (disposition), net	Organic
	in millions					
Programming and copyright	$ 105.3	$ 128.4	$ (23.1)	$ (0.1)	$ 2.4	$ (25.4)
Interconnect and commissions	174.4	175.8	(1.4)	(4.3)	2.5	0.4
Equipment and other	75.0	74.3	0.7	(1.3)	2.9	(0.9)
Total programming and other direct costs	$ 354.7	$ 378.5	$ (23.8)	$ (5.7)	$ 7.8	$ (25.9)

- **Programming and copyright:** The organic decrease is primarily due to the net effect of (i) a $13 million benefit during 2019 from content accrual adjustments, largely related to the entry into new agreements with various content providers and, to a lesser extent, reassessments of content accruals, (ii) lower sports content costs, (iii) higher costs associated with an increase in subscribers during 2019, and (iv) a benefit from an accrual adjustment related to settlement discussions on a copyright dispute.

- **Interconnect and commissions:** The organic increase is primarily due to the net effect of (i) an increase in wholesale call volumes in Jamaica, (ii) the beneficial impact of the reassessment of an accrual during the second quarter of 2019 and (iii) lower rates.

C&W Panama. The following table sets forth the organic and non-organic changes in programming and other direct costs of services for our C&W Panama segment.

	Year ended December 31,		Organic increase (decrease)
	2019	2018	
	in millions		
Programming and copyright	$ 14.6	$ 12.2	$ 2.4
Interconnect and commissions	52.0	56.3	(4.3)
Equipment and other	91.1	77.4	13.7
Total programming and other direct costs	$ 157.7	$ 145.9	$ 11.8

- **Programming and copyright:** The organic increase is primarily due higher costs associated with an increase in video subscribers.

- **Interconnect and commissions:** The organic decrease is primarily due to lower rates and wholesale call volumes.

- **Equipment and other:** The organic increase primarily relates to costs associated with B2B managed services projects.

VTR/Cabletica. The following table sets forth the organic and non-organic changes in programming and other direct costs of services for our VTR/Cabletica segment.

	Year ended December 31,		Increase (decrease)	Increase (decrease) from:		
	2019	**2018**		**FX**	**Acquisition**	**Organic**
			in millions			
Programming and copyright	$ 199.9	$ 191.6	$ 8.3	$ (16.9)	$ 22.7	$ 2.5
Interconnect and commissions	57.4	68.7	(11.3)	(5.1)	4.0	(10.2)
Equipment and other	28.1	25.0	3.1	(2.5)	2.6	3.0
Total programming and other direct costs	$ 285.4	$ 285.3	$ 0.1	$ (24.5)	$ 29.3	$ (4.7)

- **Programming and copyright:** The organic increase is primarily due to (i) higher costs associated with video-on-demand (**VoD**) services and catch-up television, (ii) an increase in copyright costs and (iii) an increase in certain premium and basic content costs, primarily resulting from higher rates. The increase in certain premium and basic content costs is partially offset by $2 million in lower costs due to certain premium services that were not provided during the fourth quarter of 2019.

- **Interconnect and commissions:** The organic decrease is primarily due to the net effect of (i) decreases in interconnect costs and MVNO charges due to lower rates and (ii) the impact of a $3 million credit received during the fourth quarter of 2018 in connection with the renegotiation of our MVNO contract.

- **Equipment and other:** The organic increase is primarily due to the net effect of (i) higher mobile handset sales in VTR and (ii) lower equipment sales at Cabletica.

Liberty Puerto Rico. The following table sets forth the organic changes in programming and other direct costs of services for our Liberty Puerto Rico segment.

	Year ended December 31,		Organic increase (decrease)
	2019	**2018**	
		in millions	
Programming and copyright	$ 85.0	$ 68.9	$ 16.1
Interconnect and commissions	7.5	9.8	(2.3)
Equipment and other	0.3	0.7	(0.4)
Total programming and other direct costs	$ 92.8	$ 79.4	$ 13.4

- **Programming and copyright:** The organic increase is mostly attributable to (i) the impact of $11 million in credits received from programming vendors in 2018 resulting from the 2017 Hurricanes and (ii) higher programming rates.

- **Interconnect and commission:** The organic decrease is primarily due to lower rates.

Other operating costs and expenses

The following table sets forth the organic and non-organic changes in other operating costs and expenses on a consolidated basis.

	Year ended December 31,			Increase (decrease) from:		
	2019	2018	Increase (decrease)	FX	Acquisition (disposition), net	Organic
			in millions			
Personnel and contract labor	$ 500.4	$ 475.3	$ 25.1	$ (11.5)	$ 31.6	$ 5.0
Network-related	264.4	266.6	(2.2)	(7.9)	16.2	(10.5)
Service-related	149.9	144.5	5.4	(4.0)	9.3	0.1
Commercial	172.6	166.7	5.9	(8.4)	3.6	10.7
Facility, provision, franchise and other	360.5	348.4	12.1	(7.5)	24.7	(5.1)
Share-based compensation expense	57.5	39.8	17.7	(0.4)	—	18.1
Total other operating costs and expenses	$ 1,505.3	$ 1,441.3	$ 64.0	$ (39.7)	$ 85.4	$ 18.3

In the following section, we provide a discussion and analysis of the organic changes of other operating costs and expenses, which excludes, where applicable, the impact of acquisitions, dispositions and FX for each of our reportable segments and our Corporate operations. For additional information regarding our share-based compensation, see *Results of Operations (below Adjusted OIBDA)* discussion and analysis below and note 17 to our consolidated financial statements.

C&W Caribbean and Networks. The following table sets forth the organic and non-organic changes in other operating costs and expenses for our C&W Caribbean and Networks segment.

	Year ended December 31,			Increase (decrease) from:		
	2019	2018	Increase (decrease)	FX	Acquisition (disposition), net	Organic
			in millions			
Personnel and contract labor	$ 270.6	$ 249.8	$ 20.8	$ (3.9)	$ 19.7	$ 5.0
Network-related	147.3	144.5	2.8	(1.8)	10.5	(5.9)
Service-related	70.6	76.3	(5.7)	(0.4)	8.0	(13.3)
Commercial	57.4	61.2	(3.8)	(0.7)	1.3	(4.4)
Facility, provision, franchise and other	180.0	175.2	4.8	(1.9)	13.8	(7.1)
Share-based compensation expense	16.5	11.5	5.0	—	—	5.0
Total other operating costs and expenses	$ 742.4	$ 718.5	$ 23.9	$ (8.7)	$ 53.3	$ (20.7)

- **Personnel and contract labor:** The organic increase is primarily due to lower capitalized labor costs.
- **Network-related:** The organic decrease is primarily due to lower (i) maintenance costs and (ii) hurricane restoration costs.
- **Service-related:** The organic decrease is primarily due to declines in professional service costs associated with legal and advisory-related services and lower information and technology-related costs.
- **Commercial:** The organic decrease is primarily due to lower marketing and sales costs mainly due to lower sponsorship costs and sales commissions.

- **Facility, provision, franchise and other costs:** The organic decrease is primarily due to the net effect of:

  - a decline of $10 million associated with withholding taxes on third-party supplier services, primarily related to the expiration of statute of limitations;

  - an increase of bad debt expense primarily due to the net effect of (i) changes in provisions during 2019, including (a) a $3 million increase in provisions primarily related to certain B2B customers, (b) the release of certain other provisions and (c) a $2 million provision related to the impact of Hurricane Dorian, (ii) improved collections in 2019 and (iii) a $3 million recovery in the first quarter of 2018 related to provisions established following the impacts of the 2017 Hurricanes; and

  - a decrease in insurance costs due in part to the impact of our Weather Derivative, as further described below and in notes 3 and 5 to our consolidated financial statements.

C&W Panama. The following table sets forth the organic and non-organic changes in other operating costs and expenses for our C&W Panama segment.

	Year ended December 31,		Organic increase (decrease)
	2019	2018	
	in millions		
Personnel and contract labor	$ 70.2	$ 73.9	$ (3.7)
Network-related	43.0	49.7	(6.7)
Service-related	15.8	18.9	(3.1)
Commercial	22.0	13.1	8.9
Facility, provision, franchise and other	46.4	47.9	(1.5)
Share-based compensation expense	0.9	0.9	—
Total other operating costs and expenses	$ 198.3	$ 204.4	$ (6.1)

- **Personnel and contract labor:** The organic decrease is primarily due to lower staff levels largely stemming from various restructuring activities.

- **Network-related:** The organic decrease is primarily due to lower maintenance and utility costs.

- **Commercial:** The organic increase is primarily due to increases in (i) outsourced call center costs and (ii) marketing and sales costs.

- **Facility, provision, franchise and other costs:** The organic decrease is primarily due to general declines in bad debt provisions, which was net of the impact of a $2 million increase in provisions primarily related to certain government customers.

VTR/Cabletica. The following table sets forth the organic and non-organic changes in other operating costs and expenses for our VTR/Cabletica segment.

	Year ended December 31,		Increase (decrease)	Increase (decrease) from:		
	2019	2018		FX	Acquisition	Organic
			in millions			
Personnel and contract labor	$ 91.5	$ 86.7	$ 4.8	$ (7.6)	$ 11.9	$ 0.5
Network-related	71.1	71.3	(0.2)	(6.1)	5.7	0.2
Service-related	39.9	32.9	7.0	(3.6)	1.3	9.3
Commercial	82.3	79.7	2.6	(7.7)	2.3	8.0
Facility, provision, franchise and other	70.0	66.7	3.3	(5.6)	10.9	(2.0)
Share-based compensation expense	4.9	3.4	1.5	(0.4)	—	1.9
Total other operating costs and expenses	$ 359.7	$ 340.7	$ 19.0	$ (31.0)	$ 32.1	$ 17.9

- **Network-related:** These costs remained relatively flat on an organic basis as higher costs related to CPE materials and refurbishment activity was mostly offset by a decrease resulting from higher proportions of capitalized labor associated with installation activities.

- **Service-related:** The organic increase is primarily due to (i) increased information technology costs associated with the implementation of a business support system and (ii) higher professional consultancy services.

- **Commercial:** The organic increase is primarily due to increased call center volume in the VTR market.

- **Facility, provision, franchise and other costs:** The organic decrease is primarily due to lower facility related costs.

Liberty Puerto Rico. The following table sets forth the organic changes in other operating costs and expenses for our Liberty Puerto Rico segment.

	Year ended December 31, 2019	Year ended December 31, 2018	Organic increase (decrease)
	in millions		
Personnel and contract labor	$ 39.5	$ 41.5	$ (2.0)
Network-related	4.5	2.0	2.5
Service-related	10.6	7.8	2.8
Commercial	10.9	12.6	(1.7)
Facility, provision, franchise and other	50.6	45.0	5.6
Share-based compensation expense	2.2	1.2	1.0
Total other operating costs and expenses	$ 118.3	$ 110.1	$ 8.2

- **Personnel and contract labor:** The organic decrease is primarily due to the net effect of (i) lower overtime-related personnel activities, as the 2018 period was impacted by the 2017 Hurricanes, and (ii) an increase resulting from a $2 million hurricane disaster relief credit received during the third quarter of 2018 from the Puerto Rico Treasury Department, representing relief for wages paid to employees during the period of time our business was inoperable as a result of the 2017 Hurricanes.

- **Network-related:** The organic increase is primarily due to (i) an increase in system power expenses, as the 2018 period was impacted by the 2017 Hurricanes and (ii) higher CPE repair costs.

- **Service-related:** The organic increase is primarily due to information and technology-related expenses, mostly driven by new software services.

- **Commercial:** The organic decrease is driven by declines in outsourced call center costs.

- **Facility, provision, franchise and other:** The organic change is primarily due to increased facility-related costs and franchise fees, as the 2018 period was impacted by the 2017 Hurricanes.

Corporate. The following tables set forth the organic changes in other operating costs and expenses for our corporate operations.

	Year ended December 31, 2019	Year ended December 31, 2018	Organic increase (decrease)
	in millions		
Personnel and contract labor	$ 28.6	$ 23.4	$ 5.2
Service-related	13.0	9.0	4.0
Facility, provision, franchise and other	13.5	13.6	(0.1)
Share-based compensation expense	33.0	22.8	10.2
Total other operating costs and expenses	$ 88.1	$ 68.8	$ 19.3

- **Personnel and contract labor**: The organic increase is primarily attributable to establishing our new operations center in Panama.

- **Service-related:** The organic increase is primarily attributable to higher professional consultancy services.

Results of operations (below Adjusted OIBDA)—2019 compared to 2018

Share-based compensation expense (included in other operating costs and expenses)

Share-based compensation expense increased $18 million during 2019, as compared to 2018. This increase is primarily due to share-based incentive awards granted during 2019 and 2018.

Depreciation and amortization

Our depreciation and amortization expense increased $41 million or 5.0% during 2019, as compared to 2018. Excluding the impacts of FX and acquisitions and a disposal, depreciation and amortization expense increased $25 million or 3.0%. The organic increase is primarily due to the net effect of (i) an increase resulting from property and equipment additions, largely associated with the expansion and upgrade of our networks and other capital initiatives, the installation of CPE, and baseline and product and enablers-related additions, and (ii) a decrease associated with certain assets becoming fully depreciated.

Impairment, restructuring and other operating items, net

We recognized impairment, restructuring and other operating items, net, of $259 million and $641 million during 2019 and 2018, respectively.

The 2019 amount primarily includes (i) impairment charges of $199 million, (ii) restructuring charges of $46 million, (iii) $10 million of direct acquisition and disposition costs and (iv) a $3 million loss due to the Seychelles Disposition. The impairment charges primarily include (i) $182 million related to an impairment of goodwill at C&W Panama and (ii) $16 million related to charges at C&W Caribbean and Networks primarily to reduce the carrying value of property and equipment as a result of the impact of Hurricane Dorian. The restructuring charges, which are primarily at C&W Caribbean and Networks and VTR, include (i) employee severance and termination costs related to certain reorganization activities and (ii) contract termination and other related charges. The direct acquisition costs and disposition costs relate to the AT&T Acquisition and, to a lesser extent, the UTS Acquisition and the Seychelles Disposition.

The 2018 amount primarily includes (i) impairment charges of $616 million, (ii) restructuring charges of $43 million, (iii) a $36 million benefit related to the recovery of damaged or destroyed property and equipment and (iv) $18 million of direct acquisition and disposition costs. The impairment charges include $608 million related to an impairment of goodwill at C&W Panama. The restructuring charges, which are primarily at C&W Caribbean and Networks, include (i) employee severance and termination costs related to certain reorganization activities and (ii) contract termination and other related charges. The direct acquisition costs and disposition costs primarily relate to the UTS Acquisition.

In December 2018, we settled our insurance claims for the 2017 Hurricanes, as further defined and described in note 8 to our consolidated financial statements, resulting in, among other things, the recovery associated with damaged or destroyed property and equipment.

For additional information regarding our impairment and restructuring charges, see notes 9 and 12 to our consolidated financial statements.

Interest expense

Our interest expense increased $56 million during 2019, as compared to 2018. The increase is primarily due to (i) higher average outstanding debt balances, largely due to borrowings related to the (a) AT&T Acquisition, (b) Cabletica Acquisition and (c) Convertible Notes, and (ii) higher amortization of discounts and premiums, net, and deferred financing costs.

For additional information regarding our outstanding indebtedness, see note 10 to our consolidated financial statements.

Realized and unrealized gains (losses) on derivative instruments, net

The details of our realized and unrealized gains (losses) on derivative instruments, net, are as follows:

	Year ended December 31,	
	2019	2018
	in millions	
Cross-currency and interest rate derivative contracts (a)	$ (21.0)	$ 69.6
Foreign currency forward contracts	9.4	25.2
Weather Derivatives (b)	(5.6)	—
Total	$ (17.2)	$ 94.8

(a) The loss during 2019 is primarily attributable to (i) changes in interest rates and (ii) changes in FX rates, predominantly due to changes in the value of the Chilean peso relative to the U.S. dollar. In addition, the loss during 2019 includes a net gain of $4 million resulting from changes in our credit risk valuation adjustments. The gain during 2018 is primarily attributable to (i) changes in FX rates, predominantly due to changes in the value of the Chilean peso relative to the U.S. dollar, and (ii) changes in interest rates. In addition, the gain during 2018 includes a net loss of $23 million resulting from changes in our credit risk valuation adjustments

(b) Represents the amortization of the premiums associated with our Weather Derivatives, which we entered into during the second quarter of 2019.

For additional information concerning our derivative instruments, see notes 5 and 6 to our consolidated financial statements and Item 7A. *Qualitative and Quantitative Disclosures about Market Risk* below.

Foreign currency transaction losses, net

The details of our foreign currency transaction losses, net, are as follows:

	Year ended December 31,	
	2019	2018
	in millions	
U.S. dollar-denominated debt issued by a Chilean peso functional currency entity	$ (98.4)	$ (164.0)
Intercompany payables and receivables denominated in a currency other than the entity's functional currency	(10.0)	(17.0)
British pound sterling-denominated debt issued by a U.S. dollar functional currency entity	(3.7)	11.4
Other	(0.4)	(10.4)
Total	$ (112.5)	$ (180.0)

Losses on debt modification and extinguishment, net

We recognized losses on debt modification and extinguishment, net, of $20 million and $32 million during 2019 and 2018, respectively. The net loss during 2019 primarily includes the payment of redemption premiums. The loss during 2018 primarily includes the payment of redemption premiums and the write-off of unamortized premiums, discounts and deferred financing costs.

For additional information concerning our losses on debt modification and extinguishment, see note 10 to our consolidated financial statements.

Other income (expense), net

We recognized other income of $14 million and nil during 2019 and 2018, respectively. During 2019, other income primarily relates to interest income. The amount during 2018, primarily includes the net effect of (i) a $16 million impairment charge on our investment in TSTT, (ii) pension-related credits of $12 million and (iii) interest income of $10 million.

For additional information regarding our defined benefit plans, see note 16 to our consolidated financial statements. For additional information regarding the impairment of our investment in TSTT, see note 7 to our consolidated financial statements.

Income tax benefit (expense)

We recognized income tax benefit (expense) of $98 million and ($51 million) during 2019 and 2018, respectively.

The income tax benefit attributable to our loss before income taxes during 2019 differs from the expected income tax benefit of nil (based on the Bermuda statutory income tax rate of 0%), primarily due to the beneficial effects of (i) net favorable changes in uncertain tax positions, (ii) international rate differences, (iii) basis adjustments associated with investments in Liberty Latin America entities and (iv) enacted tax rate changes, which are offset by the detrimental effects of (i) increases in valuation allowances, (ii) non-deductible goodwill impairments and (iii) net unfavorable permanent differences.

The income tax expense attributable to our loss before income taxes during 2018 differs from the expected income tax benefit of nil (based on the Bermuda statutory income tax rate of 0%), primarily due to (i) the beneficial effects of international rate differences, which are offset by (ii) the effect of non-deductible goodwill impairments, (iii) increases in valuation allowances and (iv) net unfavorable permanent differences.

For additional information regarding our income taxes, see note 15 to our consolidated financial statements.

Net loss

The following table sets forth selected summary financial information of our net loss:

	Year ended December 31,	
	2019	**2018**
	in millions	
Operating income (loss)	$ 353.8	$ (23.6)
Net non-operating expenses	$ (634.4)	$ (561.1)
Income tax benefit (expense)	$ 98.2	$ (51.1)
Net loss	$ (182.4)	$ (635.8)

Net loss attributable to noncontrolling interests

We reported net losses attributable to noncontrolling interests of $102 million and $291 million during 2019 and 2018, respectively. The change during 2019, as compared to 2018, is primarily attributable to (i) a decrease in losses of our less-than-wholly-owned subsidiaries at C&W, due in part to the net effect of (a) a decline in the goodwill impairment charge incurred during 2019, as compared with 2018 at CWP, and (b) losses at C&W Bahamas associated with Hurricane Dorian in 2019, and (ii) our acquisition of the remaining 40% partnership interests in Liberty Puerto Rico from Searchlight during October 2018.

For additional information on the goodwill impairment charge and noncontrolling interests acquisition activity, see notes 9 and 19, respectively, to our consolidated financial statements.

Liquidity and Capital Resources

Sources and Uses of Cash

As of December 31, 2020, we have four primary "borrowing groups," which include the respective restricted parent and subsidiary entities of C&W, VTR, Liberty Puerto Rico and Cabletica. Our borrowing groups, which typically generate cash from operating activities, held a significant portion of our consolidated cash and cash equivalents at December 31, 2020. Our ability to access the liquidity of these and other subsidiaries may be limited by tax and legal considerations, the presence of noncontrolling interests, foreign currency exchange restrictions with respect to certain C&W subsidiaries and other factors.

Cash and cash equivalents

The details of the U.S. dollar equivalent balances of our cash and cash equivalents at December 31, 2020 are set forth in the following table (in millions):

Cash and cash equivalents held by:		
Liberty Latin America and unrestricted subsidiaries:		
Liberty Latin America (a)	$	193.3
Unrestricted subsidiaries (b)		54.1
Total Liberty Latin America and unrestricted subsidiaries		247.4
Borrowing groups (c):		
C&W		485.5
VTR		74.3
Liberty Puerto Rico		79.4
Cabletica		7.6
Total borrowing groups		646.8
Total cash and cash equivalents	$	894.2

(a) Represents the amount held by Liberty Latin America on a standalone basis.

(b) Represents the aggregate amount held by subsidiaries of Liberty Latin America that are outside of our borrowing groups. All of these companies rely on funds provided by our borrowing groups to satisfy their liquidity needs.

(c) Represents the aggregate amounts held by the parent entity of the applicable borrowing group and their restricted subsidiaries.

Liquidity and capital resources of Liberty Latin America and its unrestricted subsidiaries

Our current sources of corporate liquidity include (i) cash and cash equivalents held by Liberty Latin America and, subject to certain tax and legal considerations, Liberty Latin America's unrestricted subsidiaries, and (ii) interest and dividend income received on our and, subject to certain tax and legal considerations, our unrestricted subsidiaries' cash and cash equivalents and investments. From time to time, Liberty Latin America and its unrestricted subsidiaries may also receive (i) proceeds in the form of distributions or loan repayments from Liberty Latin America's borrowing groups upon (a) the completion of recapitalizations, refinancings, asset sales or similar transactions by these entities or (b) the accumulation of excess cash from operations or other means, (ii) proceeds upon the disposition of investments and other assets of Liberty Latin America and its unrestricted subsidiaries and (iii) proceeds in connection with the incurrence of debt by Liberty Latin America or its unrestricted subsidiaries or the issuance of equity securities by Liberty Latin America. No assurance can be given that any external funding would be available to Liberty Latin America or its unrestricted subsidiaries on favorable terms, or at all. As noted above, various factors may limit our ability to access the cash of our borrowing groups. For limitations imposed by our subsidiaries' debt instruments at December 31, 2020, see note 10 to our consolidated financial statements.

Our corporate liquidity requirements include (i) corporate general and administrative expenses and (ii) other liquidity needs that may arise from time to time. In addition, Liberty Latin America and its unrestricted subsidiaries may require cash in connection with (i) the repayment of third-party and intercompany debt, (ii) the satisfaction of contingent liabilities, (iii) acquisitions and other investment opportunities, (iv) the repurchase of debt securities, (v) tax payments or (vi) any funding requirements of our consolidated subsidiaries.

In March 2020, our Directors approved a $100 million Share Repurchase Program. During 2020, the aggregate amount of our share repurchases was $9 million. For additional information regarding our Share Repurchase Program, see note 19 to our consolidated financial statements and above *Part II—Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities*.

Liquidity and capital resources of borrowing groups

The cash and cash equivalents of our borrowing groups are detailed in the table above. In addition to cash and cash equivalents, the primary sources of liquidity of our borrowing groups are cash provided by operations and borrowing availability under their respective debt instruments. For the details of the borrowing availability of our borrowing groups at December 31, 2020, see note 10 to our consolidated financial statements. The aforementioned sources of liquidity may be supplemented in certain cases by contributions and/or loans from Liberty Latin America and its unrestricted subsidiaries. The liquidity of our borrowing groups generally is used to fund property and equipment additions, debt service requirements and income tax payments. From time to time, our borrowing groups may also require liquidity in connection with (i) acquisitions and other investment opportunities, (ii) loans to Liberty Latin America, (iii) capital distributions to Liberty Latin America and other equity owners or (iv) the satisfaction of contingent liabilities. No assurance can be given that any external funding would be available to our borrowing groups on favorable terms, or at all. For information regarding our borrowing groups' commitments and contingencies, see note 20 to our consolidated financial statements.

For additional information regarding our cash flows, see the discussion under *Liquidity and Capital Resources—Consolidated Statements of Cash Flows* below.

Capitalization

We seek to maintain our debt at levels that provide for attractive equity returns without assuming undue risk. When it is cost effective, we generally seek to match the denomination of the borrowings of our subsidiaries with the functional currency of the operations that support the respective borrowings. As further discussed under Item 7A. *Qualitative and Quantitative Disclosures about Market Risk* and in note 5 to our consolidated financial statements, we also use derivative instruments to mitigate foreign currency and interest rate risks associated with our debt instruments.

Our ability to service or refinance our debt and to maintain compliance with the leverage covenants in the credit agreements of our borrowing groups is dependent primarily on our ability to maintain covenant EBITDA of our operating subsidiaries, as specified by our subsidiaries' debt agreements (**Covenant EBITDA**), and to achieve adequate returns on our property and equipment additions and acquisitions. In addition, our ability to obtain additional debt financing is limited by incurrence-based leverage covenants contained in the various debt instruments of our borrowing groups. For example, if the Covenant EBITDA of C&W were to decline, our ability to obtain additional debt could be limited. No assurance can be given that we would have sufficient sources of liquidity, or that any external funding would be available on favorable terms, or at all, to fund any such required repayment. At December 31, 2020, each of our borrowing groups was in compliance with its debt covenants. We do not anticipate any instances of non-compliance with respect to the debt covenants of our borrowing groups that would have a material adverse impact on our liquidity during the next 12 months.

At December 31, 2020, the outstanding principal amount of our debt, together with our finance lease obligations, aggregated $8,514 million, including $162 million that is classified as current in our consolidated balance sheet and $7,225 million that is not due until 2026 or thereafter. At December 31, 2020, $8,108 million of our debt and finance lease obligations have been borrowed or incurred by our subsidiaries. Included in the outstanding principal amount of our debt at December 31, 2020 is $168 million of vendor financing, which we use to finance certain of our operating expenses and property and equipment additions. These obligations are generally due within one year, other than for certain licensing arrangements that generally are due over the term of the related license. For additional information concerning our debt, including our debt maturities, see note 10 to our consolidated financial statements.

The weighted average interest rate in effect at December 31, 2020 for all borrowings outstanding pursuant to each debt instrument, including any applicable margin, was 5.2%. The interest rate is based on stated rates and does not include the impact of derivative instruments, deferred financing costs, original issue premiums or discounts and commitment fees, all of which affect our overall cost of borrowing. The weighted average impact of the derivative instruments, excluding forward-starting derivative instruments, on our borrowing costs at December 31, 2020 was as follows:

Borrowing group	**Increase to borrowing costs**
C&W	0.67 %
VTR	0.67 %
Liberty Puerto Rico	0.86 %
Cabletica	1.24 %
Liberty Latin America borrowing groups	0.69 %

Including the effects of derivative instruments, original issue premiums or discounts, including the discount on the Convertible Notes associated with the instrument's conversion option, and commitment fees, but excluding the impact of financing costs, the weighted average interest rate on our indebtedness was 6.3% at December 31, 2020.

We believe that we have sufficient resources to repay or refinance the current portion of our debt and finance lease obligations and to fund our foreseeable liquidity requirements during the next 12 months. However, as our debt maturities grow in later years, we anticipate that we will seek to refinance or otherwise extend our debt maturities. No assurance can be given that we will be able to complete refinancing transactions or otherwise extend our debt maturities. In this regard, it is difficult to predict how political, economic and social conditions, sovereign debt concerns or any adverse regulatory developments will impact the credit and equity markets we access and our future financial position. Our ability to access debt financing on favorable terms, or at all, could be adversely impacted by (i) the financial failure of any of our counterparties, which could (a) reduce amounts available under committed credit facilities and (b) adversely impact our ability to access cash deposited with any failed financial institution, and (ii) tightening of the credit markets. In addition, any weakness in the equity markets could make it less attractive to use our shares to satisfy contingent or other obligations, and sustained or increased competition, particularly in combination with adverse economic or regulatory developments, could have an unfavorable impact on our cash flows and liquidity.

Consolidated Statements of Cash Flows

General. Our cash flows are subject to variations due to FX. For further information, see related discussion under Item 7A. *Quantitative and Qualitative Disclosures about Market Risk—Foreign Currency Risk* below.

Consolidated Statements of Cash Flows—2020 compared to 2019

Summary. Our 2020 and 2019 consolidated statements of cash flows are summarized as follows:

	Year ended December 31, 2020	Year ended December 31, 2019	Change
	in millions		
Net cash provided by operating activities	$ 640.1	$ 918.2	$ (278.1)
Net cash used by investing activities	(2,450.8)	(635.3)	(1,815.5)
Net cash provided by financing activities	271.1	1,539.8	(1,268.7)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(4.9)	(7.7)	2.8
Net increase (decrease) in cash, cash equivalents and restricted cash	$ (1,544.5)	$ 1,815.0	$ (3,359.5)

Operating Activities. The decrease in net cash provided by our operating activities is primarily attributable to the net effect of (i) $73 million of cash used for the purchase of prepaid roaming services in conjunction with the AT&T Acquisition, (ii) a decrease of $61 million related to derivative activities, (iii) a decrease from our consolidated Adjusted OIBDA (a non-GAAP measure), (iv) lower tax payments of $49 million, and (v) the negative impact for the comparative period resulting from $33 million of the cash received during 2019 associated with the final insurance settlement for hurricanes Irma, Maria, and Matthew that was reflected as an operating cash inflow. Additionally, the working capital changes in our consolidated statement of cash flows for the 2020 and 2019 periods include the negative impacts of a $33 million and $185 million release of an uncertain tax position liability, respectively, that have been reflected as a tax benefit in our consolidated statements of operations, as further described in note 15 to our consolidated financial statements. For additional information relating to the purchase of prepaid roaming services, see note 4 to our consolidated financial statements. For additional information regarding our non-GAAP measure of consolidated Adjusted OIBDA, including a reconciliation to the nearest U.S. GAAP measure, see *Results of Operations—Year ended December 31, 2020 as Compared with Year Ended December 31, 2019—Adjusted OIBDA* above.

Investing Activities. Our cash used during 2020 primarily includes (i) $1,886 million primarily related the AT&T Acquisition, (ii) and $566 million related to capital expenditures. Our cash used during 2019 primarily includes (i) $589 million of cash used related to capital expenditures, (ii) $161 million of cash used for the UTS Acquisition in March 2019, (iii) $78 million of net cash received in connection with the Seychelles Disposition, and (iv) $34 million of cash we received during the first quarter of 2019 related to the recovery on damaged or destroyed property and equipment resulting from hurricanes Maria, Irma and Matthew. For additional information regarding the settlement of our insurance claims associated with these hurricanes, see note 8 to our consolidated financial statements. See below for additional information relating to cash used for capital expenditures.

The capital expenditures that we report in our consolidated statements of cash flows, which includes cash paid for property and equipment and intangible assets acquired not part of an acquisition, does not include amounts that are financed under capital-related vendor financing or finance lease arrangements. Instead, these amounts are reflected as non-cash additions to our property and equipment when the underlying assets are delivered and as repayments of debt when the principal is repaid. In this discussion, we refer to (i) our capital expenditures, as reported in our consolidated statements of cash flows, and (ii) our total property and equipment additions, which include our capital expenditures on an accrual basis and amounts financed under capital-related vendor financing or finance lease arrangements.

A reconciliation of our property and equipment additions to our capital expenditures, as reported in our consolidated statements of cash flows, is set forth below:

	Year ended December 31,	
	2020	2019
	in millions	
Property and equipment additions	$ 631.1	$ 721.5
Assets acquired under capital-related vendor financing arrangements	(99.1)	(96.1)
Acquisition of intangible assets	7.8	—
Assets acquired under finance leases	—	(0.2)
Changes in current liabilities related to capital expenditures	26.0	(36.1)
Capital expenditures	$ 565.8	$ 589.1

The decrease in our property and equipment additions during 2020, as compared to 2019, is primarily due to a decrease in (i) new build & upgrade equipment and (ii) customer premise equipment. During 2020 and 2019, our property and equipment additions represented 16.8% and 18.7% of revenue, respectively.

We expect the percentage of revenue represented by our aggregate 2021 property and equipment additions to be approximately 18%. The actual amount of the 2021 consolidated property and equipment additions may vary from expected amounts for a variety of reasons, including (i) potential impacts from COVID-19, (ii) changes in (a) the competitive or regulatory environment, (b) business plans, (c) our expected future operating results and (d) foreign currency exchange rates and, (iii) the availability of sufficient capital. Accordingly, no assurance can be given that our actual property and equipment additions will not vary materially from our expectations.

Financing Activities. During 2020, we generated $271 million of cash from financing activities primarily due to (i) $347 million related to the Rights Offering and (ii) $183 million of net cash related to derivative instruments. These items were slightly offset by (i) $120 million of net repayment of debt and (ii) $99 million related to payments of financing costs and debt premiums. The net cash received related to derivative instruments is primarily due to the unwinding of cross-currency swaps held at our VTR borrowing group as further described in note 5 to the consolidated financial statements**.** During 2019, we received $1,540 million in net cash from financing activities, primarily due to $1,691 million of net borrowings of debt, which was slightly offset by $55 million related to payments of financing costs and debt premiums, $46 million of cash used related to the purchase of Capped Calls, and $38 million for the distribution to noncontrolling interest owners, primarily related to Panama operations. The net borrowings of debt primarily relates to the $1.2 billion principal amount of 2027 LPR Senior Secured Notes issued related to the then pending AT&T Acquisition and the issuance of the Convertible Notes, each as further described in note 10 to our consolidated financial statements.

Consolidated Statements of Cash Flows—2019 compared to 2018

Summary. Our 2019 and 2018 consolidated statements of cash flows are summarized as follows:

	Year ended December 31,		
	2019	2018	Change
	in millions		
Net cash provided by operating activities	$ 918.2	$ 816.8	$ 101.4
Net cash used by investing activities	(635.3)	(980.5)	345.2
Net cash provided by financing activities	1,539.8	256.1	1,283.7
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(7.7)	(18.6)	10.9
Net increase in cash, cash equivalents and restricted cash	$ 1,815.0	$ 73.8	$ 1,741.2

Operating Activities. The increase in net cash provided by our operating activities is primarily attributable to the net effect of (i) an increase from our Adjusted OIBDA, (ii) a decrease from our working capital items, including (a) the release of an uncertain tax position liability of approximately $185 million that has been reflected as a tax benefit in our consolidated statement of operations, as further described in note 15 to our consolidated financial statements, and (b) changes resulting from insurance receipts as discussed below, (iii) increased interest payments, (iv) an increase in cash related to derivative instruments, as we received (paid) net amounts of $11 million and ($16 million) during 2019 and 2018, respectively, and (v) decrease in cash paid for taxes. During the first quarter of 2019, $33 million of the cash received associated with the final insurance settlement for the 2017 Hurricanes was reflected as an operating cash inflow. During 2018, we received $51 million of advanced payments, primarily related to the 2017 Hurricanes, $30 million of which was presented in operating cash flows in our consolidated statement of operations upon settlement during the fourth quarter of 2018. For additional information regarding our insurance receipts, see note 8 to our consolidated financial statements.

Investing Activities. The decrease in net cash used by our investing activities is primarily attributable to the net effect of (i) a decrease in cash used for capital expenditures, as further discussed below, (ii) $161 million of cash used for the UTS Acquisition in March 2019, (iii) $78 million of net cash received in connection with the Seychelles Disposition and (iv) an increase of $13 million of cash received related to the recovery on damaged or destroyed property and equipment resulting from the 2017 Hurricanes and Hurricane Matthew. During 2019, we received $34 million of cash, as compared with $21 million received during 2018. For additional information regarding the settlement of our insurance claims associated with these hurricanes, see note 8 to our consolidated financial statements.

A reconciliation of our property and equipment additions to our capital expenditures, as reported in our consolidated statements of cash flows, is set forth below:

	Year ended December 31,	
	2019	2018
	in millions	
Property and equipment additions	$ 721.5	$ 771.4
Assets acquired under capital-related vendor financing arrangements	(96.1)	(53.9)
Assets acquired under finance leases	(0.2)	(3.9)
Changes in current liabilities related to capital expenditures	(36.1)	62.8
Capital expenditures	$ 589.1	$ 776.4

The decrease in our property and equipment additions during 2019, as compared to 2018, is primarily due to the net effect of (i) lower additions relating to hurricane restoration activities, as 2018 included $92 million and $27 million of these additions by Liberty Puerto Rico and C&W Caribbean and Networks, respectively, and (ii) excluding the impact of hurricane restoration activities, an increase in additions for the expansion and upgrade of our networks and other capital initiatives. During 2019 and 2018, our property and equipment additions represented 18.7% and 20.8% of revenue, respectively. Our property and equipment additions as a percentage of revenue decreased primarily due to declines in property and equipment additions at Liberty Puerto Rico together with an increase in revenue at Liberty Puerto Rico following the recovery from the 2017 Hurricanes.

Financing Activities. During 2019, we received $1,540 million in net cash from financing activities, primarily due to $1,691 million of net borrowings of debt, which was slightly offset by $55 million related to payments of financing costs and debt premiums, $46 million of cash used related to the purchase of the Capped Calls, and $38 million for the distribution to noncontrolling interest owners, primarily related to Panama operations. The net borrowings of debt primarily relates to the $1.2 billion principal amount of 2027 LPR Senior Secured Notes issued related to the then pending AT&T Acquisition and the issuance of the Convertible Notes, each as further described in note 10 to our consolidated financial statements. During 2018, we received $256 million in net cash from financing activities, due in part to $310 million in net borrowings of debt, primarily at VTR, and $18 million in capital contributions from funds affiliated with Searchlight. These cash inflows were partially offset by $39 million for financing cost and debt premiums, $23 million in distributions to the noncontrolling interest owner and $21 million of cash used primarily in connection with the C&W Jamaica NCI Acquisition.

Adjusted Free Cash Flow

We define adjusted free cash flow, a non-GAAP measure, as net cash provided by our operating activities, plus (i) cash payments for third-party costs directly associated with successful and unsuccessful acquisitions and dispositions, (ii) expenses financed by an intermediary, (iii) insurance recoveries related to damaged and destroyed property and equipment and (iv) certain net interest payments (receipts) incurred or received, including associated derivative instrument payments and receipts, in advance of a significant acquisition, less (a) capital expenditures, (b) distributions to noncontrolling interest owners, (c) principal payments on amounts financed by vendors and intermediaries and (d) principal payments on finance leases. Additionally, as set forth in the reconciliation and further discussed below, we have excluded the portion of the stated purchase price for the AT&T Acquisition that has been bifurcated and accounted for separately as the acquisition of future services from AT&T. See footnote to the table below for additional information. We believe that our presentation of adjusted free cash flow provides useful information to our investors because this measure can be used to gauge our ability to service debt and fund new investment opportunities. Adjusted free cash flow should not be understood to represent our ability to fund discretionary amounts, as we have various mandatory and contractual obligations, including debt repayments, which are not deducted to arrive at this amount. Investors should view adjusted free cash flow as a supplement to, and not a substitute for, U.S. GAAP measures of liquidity included in our consolidated statements of cash flows.

The following table provides the details of our adjusted free cash flow:

	Year ended December 31,		
	2020	2019	2018
	in millions		
Net cash provided by operating activities	$ 640.1	$ 918.2	$ 816.8
Cash payments for direct acquisition and disposition costs	49.8	4.8	12.9
Expenses financed by an intermediary (a)	108.1	129.7	171.7
Capital expenditures	(565.8)	(589.1)	(776.4)
Recovery on damaged or destroyed property and equipment	—	33.9	20.7
Distributions to noncontrolling interest owners	(18.8)	(37.7)	(22.7)
Principal payments on amounts financed by vendors and intermediaries	(218.0)	(224.5)	(196.5)
Pre-acquisition net interest payments (receipts) (b)	81.5	(3.5)	—
Principal payments on finance leases	(2.2)	(8.7)	(7.7)
Credit for services in AT&T Acquisition (c)	73.3	—	—
Adjusted free cash flow	$ 148.0	$ 223.1	$ 18.8

(a) For purposes of our consolidated statements of cash flows, expenses, including VAT, financed by an intermediary are treated as hypothetical operating cash outflows and hypothetical financing cash inflows when the expenses are incurred. When we pay the financing intermediary, we record financing cash outflows in our consolidated statements of cash flows. For purposes of our adjusted free cash flow definition, we add back the hypothetical operating cash outflow when these financed expenses are incurred and deduct the financing cash outflows when we pay the financing intermediary.

(b) Amount during 2020 primarily represents interest paid on pre-acquisition debt related to the AT&T Acquisition, net of interest received on the AT&T Acquisition Restricted Cash. Amount during 2019 primarily relates to interest received on the AT&T Acquisition Restricted Cash.

(c) In connection with the Acquisition Agreement, AT&T agreed to give us a $75 million credit against certain roaming services that AT&T provides to the AT&T Acquired Entities for a seven-year period following the closing of the AT&T Acquisition. If the credits are not used for roaming services in that time period, any remaining credit may be used to acquire certain other services from AT&T thereafter. For accounting purposes, we have bifurcated the discounted value of these services from the stated purchase consideration for the AT&T Acquisition. The discounted value associated with this asset is reflected as an outflow in our net cash provided by operating activities in our consolidated statement of cash flows, and is therefore not accounted for as an investing activity related to the AT&T Acquisition. However, as this credit was negotiated as part of the overall Acquisition Agreement, we have added this item back to arrive at adjusted free cash flow.

Off Balance Sheet Arrangements

In the ordinary course of business, we may provide (i) indemnifications to our lenders, our vendors and certain other parties and (ii) performance and/or financial guarantees to local municipalities, our customers and vendors. Historically, these arrangements have not resulted in our company making any material payments and we do not believe that they will result in material payments in the future.

Contractual Commitments

The following table sets forth the U.S. dollar equivalents of our commitments as of December 31, 2020:

	Payments due during						
	2021	2022	2023	2024	2025	Thereafter	Total
	in millions						
Debt (excluding interest)	$ 160.0	$ 117.2	$ 270.6	$ 584.8	$ 146.0	$ 7,222.3	$ 8,500.9
Finance leases (excluding interest)	1.7	2.6	2.3	2.3	2.2	2.3	13.4
Operating leases	78.7	62.7	51.4	44.4	34.6	136.9	408.7
Programming commitments	139.9	89.7	52.8	43.2	0.5	—	326.1
Network and connectivity commitments	57.5	13.7	10.0	9.1	6.3	9.5	106.1
Purchase commitments	98.2	6.5	1.4	—	—	—	106.1
Other commitments	9.4	1.9	1.6	1.5	1.4	8.4	24.2
Total (a)	$ 545.4	$ 294.3	$ 390.1	$ 685.3	$ 191.0	$ 7,379.4	$ 9,485.5
Projected cash interest payments on debt and finance lease obligations (b)	$ 448.4	$ 447.5	$ 434.1	$ 424.4	$ 403.4	$ 766.5	$ 2,924.3

(a) The commitments included in this table do not reflect any liabilities that are included in our December 31, 2020 consolidated balance sheet other than (i) debt and (ii) finance and operating lease obligations. Our liability for uncertain tax positions, including accrued interest, in the various jurisdictions in which we operate ($45 million at December 31, 2020) has been excluded from the table as the amount and timing of any related payments are not subject to reasonable estimation. For additional information regarding our liability for uncertain tax positions, see note 15 to our consolidated financial statements.

(b) Amounts are based on interest rates, interest payment dates, commitment fees and contractual maturities in effect as of December 31, 2020. These amounts are presented for illustrative purposes only and will likely differ from the actual cash payments required in future periods. In addition, the amounts presented do not include the impact of our derivative contracts.

For information concerning our debt and finance lease obligations, operating leases and commitments, see notes 10, 11 and 20, respectively, to our consolidated financial statements.

In addition to the commitments set forth in the table above, we have commitments under (i) derivative instruments and (ii) defined benefit plans and similar agreements, pursuant to which we expect to make payments in future periods. For information regarding projected cash flows associated with our derivative instruments, see Item 7A. *Quantitative and Qualitative Disclosures About Market Risk—Projected Cash Flows Associated with Derivative Instruments* below. For information regarding our derivative instruments, including the net cash paid or received in connection with these instruments during 2020, 2019 and 2018, see note 5 to our consolidated financial statements. For information regarding our defined benefit plans, see note 16 to our consolidated financial statements.

Critical Accounting Policies, Judgments and Estimates

In connection with the preparation of our consolidated financial statements, we make estimates and assumptions that affect the reported amounts of assets and liabilities, revenue and expenses, and related disclosure of contingent assets and liabilities. Critical accounting policies are defined as those policies that are reflective of significant judgments, estimates and uncertainties, which would potentially result in materially different results under different assumptions and conditions. We believe the following accounting policies are critical in the preparation of our consolidated financial statements because of the judgment necessary to account for these matters and the significant estimates involved, which are susceptible to change:

- Impairment of property and equipment and intangible assets (including goodwill);
- Costs associated with construction and installation activities;
- Fair value measurements in acquisition accounting; and
- Income tax accounting.

For additional information concerning our significant accounting policies, see note 3 to our consolidated financial statements.

Impairment of Property and Equipment and Intangible Assets

The aggregate carrying value of our property and equipment and intangible assets (including goodwill) that was held for use comprised 80% of our total assets at December 31, 2020.

When circumstances warrant, we review the carrying amounts of our property and equipment and our intangible assets (other than goodwill and other indefinite-lived intangible assets) to determine whether such carrying amounts continue to be recoverable. Such changes in circumstance may include (i) the impact of natural disasters such as hurricanes, (ii) an expectation of a sale or disposal of a long-lived asset or asset group, (iii) adverse changes in market or competitive conditions, (iv) an adverse change in legal factors or business climate in the markets in which we operate and (v) operating or cash flow losses. For purposes of impairment testing, long-lived assets are grouped at the lowest level for which cash flows are largely independent of other assets and liabilities, generally at or below the reporting unit level (see below). If the carrying amount of the asset or asset group is greater than the expected undiscounted cash flows to be generated by such asset or asset group, an impairment adjustment is recognized. Such adjustment is measured by the amount that the carrying value of such asset or asset group exceeds its fair value. We generally measure fair value by considering (i) sale prices for similar assets, (ii) discounted estimated future cash flows using an appropriate discount rate and/or (iii) estimated replacement cost. Assets to be disposed of are recorded at the lower of their carrying amount or fair value less costs to sell.

We evaluate goodwill and other indefinite-lived intangible assets (primarily cable television franchise rights and spectrum licenses) for impairment at least annually on October 1 and whenever facts and circumstances indicate that the fair value of a reporting unit or an indefinite-lived intangible asset may be less than its carrying value. When evaluating impairment with respect to goodwill and other indefinite-lived intangibles, we first make a qualitative assessment to determine if the goodwill or other indefinite-lived intangible may be impaired. In the case of goodwill, if it is more-likely-than-not that a reporting unit's fair value is less than its carrying value, we then compare the fair value of the reporting unit to its respective carrying amount. A reporting unit is an operating segment or one level below an operating segment (referred to as a "component"). Goodwill impairment is recorded as the excess of a reporting unit's carrying value over its fair value and is charged to operations. With respect to other indefinite-lived intangible assets, if it is more-likely-than-not that the fair value of an indefinite-lived intangible asset is less than its carrying value, we then estimate its fair value and any excess of the carrying value over the fair value is also charged to operations as an impairment loss.

When required, considerable management judgment is necessary to estimate the fair value of reporting units and underlying long-lived and indefinite-lived assets. We typically determine fair value using a market-value approach or an income-based approach (discounted cash flows) based on assumptions in our long-range business plans, or a combination of an income-based and market-value approach. With respect to our discounted cash flow analysis used in the income-based approach, the timing and amount of future cash flows under these business plans require estimates of, among other items, subscriber growth and retention rates, rates charged per product, expected gross margins and Adjusted OIBDA margins and expected property and equipment additions. The development of these cash flows, and the discount rate applied to the cash flows, is subject to inherent uncertainties, and actual results could vary significantly from such estimates. Our determination of the discount rate is based on a weighted average cost of capital approach, which uses a market participant's cost of equity and after-tax cost of debt and reflects certain risks inherent in the future cash flows. With respect to a market-value approach, the fair value of a reporting unit is estimated based upon a market multiple typically applied to the reporting unit's Adjusted OIBDA. We determine the market multiple for each reporting unit taking the following into consideration: (i) public company trading multiples for entities with similar business characteristics as the respective reporting unit, adjusted to reflect an appropriate control premium or discount, a "trading multiple;" and (ii) multiples derived from the value of recent transactions for businesses with similar operations and in geographically similar locations, a "transaction multiple." Changes in the underlying assumptions used in both the income-based and market-value valuation methods can result in materially different determinations of fair value.

During 2020 we recorded goodwill impairments of $177 million and $99 million related to C&W Panama and C&W Caribbean and Networks, respectively. During 2019 and 2018, we recorded goodwill impairments of $182 million and $608 million, respectively, related to C&W Panama. A hypothetical increase/(decrease) of 0.1% in the discount rate used in the goodwill impairment assessment that resulted in our 2020 goodwill impairment charges would have resulted in an increase/(decrease) of approximately $33 million/($30 million) in aggregate to the goodwill impairment. For additional information regarding impairments recorded during 2020, 2019 and 2018, see notes 6 and 9 to our consolidated financial statements.

Costs Associated with Construction and Installation Activities

We capitalize costs associated with the construction of new cable and mobile transmission and distribution facilities, the installation of new cable services and the development of software supporting our operations. Installation activities that are capitalized include (i) the initial connection (or drop) from our cable system to a customer location, (ii) the replacement of a drop and (iii) the installation of equipment for additional services, such as digital cable, telephone or broadband internet service. The costs of other customer-facing activities, such as reconnecting customer locations where a drop already exists, disconnecting customer locations and repairing or maintaining drops, are expensed as incurred.

The nature and amount of labor and other costs to be capitalized with respect to construction and installation activities involves significant judgment. In addition to direct external and internal labor and materials, we also capitalize other costs directly attributable to our construction and installation activities, including dispatch costs, quality-control costs, vehicle-related costs and certain warehouse-related costs. The capitalization of these costs is based on time sheets, time studies, standard costs, call tracking systems and other verifiable means that directly link the costs incurred with the applicable capitalizable activity. We continuously monitor the appropriateness of our capitalization policies and update the policies when necessary to respond to changes in facts and circumstances, such as the development of new products and services and changes in the manner that installations or construction activities are performed.

Fair Value Measurements in Acquisition Accounting

The application of acquisition accounting requires that we make fair value determinations as of the applicable valuation date. In making these determinations, we are required to make estimates and assumptions that affect the recorded amounts, including, but not limited to, expected future cash flows, market comparables and discount rates, remaining useful lives of long-lived assets, replacement or reproduction costs of property and equipment and the amounts to be recovered in future periods from acquired net operating losses and other deferred tax assets. To assist us in making these fair value determinations, we may engage third-party valuation specialists. Our estimates in this area impact, among other items, the amount of depreciation and amortization and income tax expense or benefit that we report. Our estimates of fair value are based upon assumptions we believe to be reasonable, but which are inherently uncertain. A significant portion of our long-lived assets were initially recorded through the application of acquisition accounting. For additional information, including the specific weighted average discount rates we used to complete certain nonrecurring valuations, see note 6 to our consolidated financial statements. For information regarding our acquisitions and long-lived assets, see notes 4 and 9, respectively, to our consolidated financial statements.

Income Tax Accounting

We are required to estimate the amount of tax payable or refundable for the current year and the deferred tax assets and liabilities for the future tax consequences attributable to differences between the financial statement carrying amounts and income tax basis of assets and liabilities and the expected benefits of utilizing net operating loss and tax credit carryforwards, using enacted tax rates in effect for each taxing jurisdiction in which we operate for the year in which those temporary differences are expected to be recovered or settled. This process requires our management to make assessments regarding the timing and probability of the ultimate tax impact of such items.

Net deferred tax assets are reduced by a valuation allowance if we believe it is more-likely-than-not such net deferred tax assets will not be realized. Establishing or reducing a tax valuation allowance requires us to make assessments about the timing of future events, including the probability of expected future taxable income and available tax planning strategies. At

December 31, 2020, the aggregate valuation allowance provided against deferred tax assets was $1,631 million. The actual amount of deferred income tax benefits realized in future periods will likely differ from the net deferred tax assets reflected in our December 31, 2020 consolidated balance sheet due to, among other factors, possible future changes in income tax law or interpretations thereof in the jurisdictions in which we operate and differences between estimated and actual future taxable income. Any such factors could have a material effect on our current and deferred tax positions. A high degree of judgment is required to assess the impact of possible future outcomes on our current and deferred tax positions.

Tax laws in jurisdictions in which we have a presence are subject to varied interpretation, and tax positions we may take could be subject to significant uncertainty regarding whether the position will be ultimately sustained after review by the relevant tax authority. We recognize the financial statement effects of a tax position when it is more-likely-than-not, based on technical merits, that the position will be sustained upon examination. The determination of whether the tax position meets the more-likely-than-not threshold requires a facts-based judgment using all information available. In a number of cases, we have concluded that the more-likely-than-not threshold is not met and, accordingly, the amount of tax benefit recognized in our consolidated financial statements is different than the amount taken or expected to be taken in our tax returns. As of December 31, 2020, the amount of unrecognized tax benefits for financial reporting purposes, but taken or expected to be taken in our tax returns, was $32 million, all of which would have a favorable impact on our effective income tax rate if ultimately recognized, after considering amounts that we would expect to be offset by valuation allowances.

We are required to continually assess our tax positions, and the results of tax examinations or changes in judgment can result in substantial changes to our unrecognized tax benefits.

For additional information concerning our income taxes, see note 15 to our consolidated financial statements.

Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to market risk in the normal course of our business operations due to our investments in various countries and ongoing investing and financing activities. Market risk refers to the risk of loss arising from adverse changes in foreign currency exchange rates, interest rates and stock prices. The risk of loss can be assessed from the perspective of adverse changes in fair values, cash flows and future earnings. As further described below, we have established policies, procedures and processes governing our management of market risks and the use of derivative instruments to manage our exposure to such risks.

Cash and Investments

We invest our cash in highly liquid instruments that meet high credit quality standards. We are exposed to exchange rate risk to the extent that the denominations of our cash and cash equivalent balances, revolving lines of credit and other short-term sources of liquidity do not correspond to the denominations of Liberty Latin America's short-term liquidity requirements. In order to mitigate this risk, we actively manage the denominations of our cash balances in consideration of Liberty Latin America's forecasted liquidity requirements. At December 31, 2020, $74 million or 8.3% of our cash balance was denominated in Chilean pesos.

Foreign Currency Risk

We are exposed to foreign currency exchange rate risk with respect to our debt in situations where our debt is denominated in a currency other than the functional currency of the operations whose cash flows support our ability to service, repay or refinance such debt. Although we generally seek to match the denomination of our borrowings with the functional currency of the operations that are supporting the respective borrowings, market conditions or other factors may cause us to enter into borrowing arrangements that are not denominated in the functional currency of the underlying operations (unmatched debt). Our policy is generally to provide for an economic hedge against foreign currency exchange rate movements, whenever possible and when cost effective to do so, by using derivative instruments to synthetically convert unmatched debt into the applicable underlying currency. For additional information concerning the terms of our derivative instruments, see note 5 to our consolidated financial statements.

In addition to the exposure that results from unmatched debt, we are exposed to foreign currency risk to the extent that we enter into transactions denominated in currencies other than our operating subsidiaries' respective functional currencies (non-functional currency risk), such as equipment purchases and programming contracts. Changes in exchange rates with respect to amounts recorded in our consolidated balance sheet related to these items will result in unrealized (based upon period-end exchange rates) or realized foreign currency transaction gains and losses upon settlement of the transactions. Moreover, to the extent that our revenue, costs and expenses are denominated in currencies other than our respective functional currencies, we will experience fluctuations in our revenue, costs and expenses solely as a result of changes in foreign currency exchange rates. Generally, we will consider hedging non-functional currency risks when the risks arise from agreements with third parties that involve the future payment or receipt of cash or other monetary items to the extent that we can reasonably predict the timing and amount of such payments or receipts and the payments or receipts are not otherwise hedged. In this regard, we have entered into foreign currency forward contracts to hedge certain of these risks. Certain non-functional currency risks related to our programming and other direct costs of services and other operating costs and expenses and property and equipment additions were not hedged as of December 31, 2020. For additional information concerning our foreign currency forward contracts, see note 5 to our consolidated financial statements.

We also are exposed to unfavorable and potentially volatile fluctuations of the U.S. dollar (our reporting currency) against the currencies of our operating subsidiaries when their respective financial statements are translated into U.S. dollars for inclusion in our consolidated financial statements. Cumulative translation adjustments are recorded in accumulated other comprehensive earnings or loss as a separate component of equity. Any increase (decrease) in the value of the U.S. dollar against any foreign currency that is the functional currency of one of our operating subsidiaries will cause us to experience unrealized foreign currency translation losses (gains) with respect to amounts already invested in such foreign currencies. Accordingly, we may experience a negative impact on our comprehensive earnings or loss and equity with respect to our holdings solely as a result of FX. Our primary exposure to FX risk during 2020 was to the Chilean peso as 21.5% of our reported revenue during the period was derived from VTR, whose functional currency is the Chilean peso. In addition, our reported operating results are impacted by changes in the exchange rates for other local currencies in Latin America and the Caribbean. We generally do not hedge against the risk that we may incur non-cash losses upon the translation of the financial statements of our operating subsidiaries and affiliates into U.S. dollars.

The relationship between (i) the Chilean peso, the Jamaican dollar and the Costa Rican colón and (ii) the U.S. dollar, which is our reporting currency, is shown below, per one U.S. dollar:

	As of December 31,	
	2020	**2019**
Spot rates:		
Chilean peso	711.78	751.85
Jamaican dollar	142.41	132.28
Costa Rican colón	613.19	571.33

	Year ended December 31,		
	2020	**2019**	**2018**
Average rates:			
Chilean peso	791.70	703.92	642.17
Jamaican dollar	142.08	133.48	129.26
Costa Rican colón (a)	585.79	587.78	603.26

(a) The rate for 2018 is the average rate during the fourth quarter of 2018, as we acquired Cabletica on October 1, 2018.

Inflation and Foreign Investment Risk

We are subject to inflationary pressures with respect to labor, programming and other costs. While we attempt to increase our revenue to offset increases in costs, there is no assurance that we will be able to do so. Therefore, costs could rise faster than associated revenue, thereby resulting in a negative impact on our operating results, cash flows and liquidity. The economic environment in the respective countries in which we operate is a function of government, economic, fiscal and monetary policies and various other factors beyond our control that could lead to inflation. We are unable to predict, with any meaningful long term degree of certainty, the extent that price levels might be impacted in future periods by the current state of the economies in the countries in which we operate.

Interest Rate Risks

We are exposed to changes in interest rates primarily as a result of our borrowing activities, which include fixed-rate and variable-rate borrowings by our borrowing groups. Our primary exposure to variable-rate debt is through the LIBOR-indexed debt of C&W and Liberty Puerto Rico and, to a lesser extent, Cabletica. In July 2017, the U.K. Financial Conduct Authority (the authority that regulates LIBOR) announced that it intends to stop compelling banks to submit rates for the calculation of LIBOR after 2021. On November 30, 2020, the administrator of U.S. dollar LIBOR announced a delay in the phase out of a majority of the U.S. dollar LIBOR publications until June 30, 2023, with the remainder of LIBOR publications still being phased out at the end of 2021. Currently, it is not possible to predict the exact transitional arrangements, or associated timelines, for calculating applicable reference rates that may be made in the U.K., the U.S., or elsewhere given that a number of outcomes are possible, including the cessation of the publication of one or more reference rates. Our loan documents contain customary provisions that contemplate alternative calculations of the applicable base rate once LIBOR is no longer available. Currently, we do not expect that these alternative calculations will be materially different from what would have been calculated under LIBOR. Additionally, no mandatory prepayment or redemption provisions would be triggered under our loan agreements in the even that the LIBOR rate is not available.

Also, it is possible that a new reference rate that applies to our LIBOR-indexed debt could be different than a new reference rate that applies to our LIBOR-indexed derivative instruments. We anticipate managing any increased variable-rate exposure caused by this possible difference through modifications to our debt and/or derivative instrument agreements, however, future market conditions may not allow immediate implementation of desired modifications, and we may incur significant associated costs.

In general, we seek to enter into derivative instruments to protect against increases in the interest rates on our variable-rate debt. Accordingly, we have entered into various derivative transactions to reduce exposure to increases in interest rates. We use interest rate derivative contracts to exchange, at specified intervals, the difference between fixed and variable interest rates calculated by reference to an agreed-upon notional principal amount. At December 31, 2020, we paid a fixed rate of interest on 97% of our total debt, which includes the impact of interest rate derivative contracts. The final maturity dates of our various portfolios of interest rate derivative instruments generally fall short of the respective maturities of the underlying variable-rate debt. In this regard, we use judgment to determine the appropriate maturity dates of our portfolios of interest rate derivative instruments, taking into account the relative costs and benefits of different maturity profiles in light of current and expected future market conditions, liquidity issues and other factors. For additional information concerning the impacts of these interest rate derivative instruments, see note 5 to our consolidated financial statements.

Weighted Average Variable Interest Rate. At December 31, 2020, the outstanding principal amount of our variable-rate indebtedness aggregated $2,998 million, and the weighted average interest rate (including margin) on such variable-rate indebtedness was approximately 3.8%, excluding the effects of interest rate derivative contracts, deferred financing costs, original issue premiums or discounts and commitment fees, all of which affect our overall cost of borrowing. Assuming no change in the amount outstanding, and without giving effect to any interest rate derivative contracts, deferred financing costs, original issue premiums or discounts and commitment fees, a hypothetical 50 basis point (0.50%) increase (decrease) in our weighted average variable interest rate would increase (decrease) our annual interest expense and cash outflows by $15 million. As discussed above and in note 5 to our consolidated financial statements, we use interest rate derivative contracts to manage our exposure to increases in variable interest rates. In this regard, increases in the fair value of these contracts generally would be expected to offset most of the economic impact of increases in the variable interest rates applicable to our indebtedness to the extent and during the period that principal amounts are matched with interest rate derivative contracts.

Counterparty Credit Risk

We are exposed to the risk that the counterparties to the derivative instruments, undrawn debt facilities and cash investments of our borrowing groups will default on their obligations to us. We manage these credit risks through the evaluation and monitoring of the creditworthiness of, and concentration of risk with, the respective counterparties. In this regard, credit risk associated with our derivative instruments and undrawn debt facilities is spread across a relatively broad counterparty base of banks and financial institutions. Collateral has not been posted by either party under the derivative instruments of our borrowing groups. We generally invest our cash at Liberty Latin America and its unrestricted subsidiaries in AAA rated money market funds, including funds that invest in government obligations or repurchase agreements serviced by such obligations. Where local financial sector constraints restrict our ability to meet the above criteria for our cash holdings, cash may be deposited with one of the three highest rated financial institutions locally for operational purposes until such time as the above investments are made. To date, neither the access to nor the value of our cash and cash equivalent balances have been significantly adversely impacted by liquidity problems of financial institutions.

At December 31, 2020, our exposure to counterparty credit risk included (i) cash and cash equivalent balances of $894 million and (ii) aggregate undrawn credit facilities of $1,173 million.

Each of our borrowing groups has entered into derivative instruments under agreements with each counterparty that contain master netting arrangements that are applicable in the event of early termination by either party to such derivative instrument. The master netting arrangements under each of these master agreements are limited to the derivative instruments governed by the relevant master agreement within each individual borrowing group and are independent of similar arrangements of our other subsidiary borrowing groups.

While we currently have no specific concerns about the creditworthiness of any counterparty for which we have material credit risk exposures, the current economic conditions and uncertainties in global financial markets have increased the credit risk of our counterparties and we cannot rule out the possibility that one or more of our counterparties could fail or otherwise be unable to meet its obligations to us. Any such instance could have an adverse effect on our cash flows, results of operations, financial condition and/or liquidity.

Although we actively monitor the creditworthiness of our key vendors, the financial failure of a key vendor could disrupt our operations and have an adverse impact on our revenue and cash flows.

Sensitivity Information

Information concerning the sensitivity of the fair value of certain of our more significant derivative instruments to changes in market conditions is set forth below. The potential changes in fair value set forth below do not include any amounts associated with the remeasurement of the derivative asset or liability into the applicable functional currency. For additional information, see notes 5 and 6 to our consolidated financial statements.

VTR Cross-currency and Interest Rate Derivative Contracts

Holding all other factors constant, at December 31, 2020:

i. An instantaneous increase (decrease) of 10% in the value of the Chilean peso relative to the U.S. dollar would have decreased (increased) the aggregate fair value of the VTR cross-currency derivative contracts by approximately CLP 127 billion or $178 million.

ii. An instantaneous increase (decrease) in the relevant based rate of 100 basis points (1.0%) would have increased (decreased) the aggregate fair value of the VTR cross-currency and interest rate derivative contracts by approximately CLP 12 billion or $17 million.

C&W Cross-currency and Interest Rate Derivative Contracts

Holding all other factors constant, at December 31, 2020, an instantaneous increase (decrease) in the relevant base rate of 100 basis points (1.0%) would have increased (decreased) the aggregate fair value of the C&W cross-currency and interest rate derivative contracts by approximately $139 million**.**

Liberty Puerto Rico Interest Rate Derivative Contracts

Holding all other factors constant, at December 31, 2020, an instantaneous increase (decrease) in the relevant base rate of 100 basis points (1.0%) would have increased (decreased) the aggregate fair value of the Liberty Puerto Rico interest rate derivative contracts by approximately $60 million.

Projected Cash Flows Associated with Derivative Instruments

The following table provides information regarding the projected cash flows associated with our derivative instruments. The U.S. dollar equivalents presented below are based on interest rates and exchange rates that were in effect as of December 31, 2020. These amounts are presented for illustrative purposes only and will likely differ from the actual cash payments required in future periods. For additional information regarding our derivative instruments, including our counterparty credit risk, see note 5 to our consolidated financial statements.

	Payments (receipts) due during:						
	2021	**2022**	**2023**	**2024**	**2025**	**Thereafter**	**Total**
				in millions			
Projected derivative cash payments (receipts), net:							
Interest-related (a)	$ 69.8	$ 71.1	$ 63.2	$ 65.3	$ 65.3	$ 123.4	$ 458.1
Principal-related (b)	—	(1.5)	—	—	—	163.1	161.6
Other (c)	3.2	—	—	—	—	—	3.2
Total	$ 73.0	$ 69.6	$ 63.2	$ 65.3	$ 65.3	$ 286.5	$ 622.9

(a) Includes the interest-related cash flows of our cross-currency and interest rate derivative contracts.

(b) Includes the principal-related cash flows of our cross-currency derivative contracts.

(c) Includes amounts related to our foreign currency forward contracts.

Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The consolidated financial statements of Liberty Latin America are filed under this Item, beginning on page II-57. Financial statement schedules are filed under Item 15 of this Annual Report on Form 10-K.

Item 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

Item 9A. CONTROLS AND PROCEDURES

Evaluation of disclosure controls and procedures

We maintain disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the **Exchange Act**), that are designed to ensure that information required to be disclosed in the reports we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our Principle Executive Officer and our Principal Financial Officer (the **Executives**), as appropriate to allow timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, the Executives recognize that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and management is required to apply judgment in evaluating the cost-benefit relationship of possible controls and objectives.

Our management, with the participation of the Executives, evaluated the effectiveness of our disclosure controls and procedures as of December 31, 2020. Based on that evaluation, the Executives concluded that our disclosure controls and procedures are not effective as of December 31, 2020 due to material weaknesses in internal control over financial reporting, as described below. Notwithstanding such material weaknesses in internal control over financial reporting, our management concluded that our consolidated financial statements in this Annual Report on Form 10-K present fairly, in all material respects, the company's financial position, results of operations and cash flows as of the dates, and for the periods presented, in conformity with U.S. GAAP.

Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rule 13a-15(f) and 15d-15(f) under the Exchange Act. Our internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements for external purposes in accordance with generally accepted accounting principles. Our internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect transactions and dispositions of assets, (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of consolidated financial statements in accordance with generally accepted accounting principles, (iii) provide reasonable assurance that receipts and expenditures are being made only in accordance with authorizations of management and directors, and (iv) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of assets that could have a material effect on the consolidated financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. In addition, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the Company's annual or interim financial statements will not be prevented or detected on a timely basis.

Our management, with the participation of the Executives and Board of Directors, assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2020, using the criteria in *Internal Control-Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Our evaluation of internal control over financial reporting did not include the internal control over financial reporting of the AT&T Acquired Entities, which were acquired in 2020. The amount of total assets and revenue included in our consolidated financial statements as of and for the year ended December 31, 2020 that is attributable to the AT&T Acquired Entities was $2,707 million and $174 million, respectively.

In our Annual Report on Form 10-K for our fiscal year ended December 31, 2018, management identified the following material weaknesses in internal control over financial reporting, which continue to exist as of December 31, 2020:

- The Company did not have a sufficient number of trained resources with the appropriate skills and knowledge with assigned responsibilities and accountability for the design and operation of internal controls over financial reporting.
- The Company did not have an effective risk assessment process that successfully identified and assessed risks of misstatement to ensure controls were designed and implemented to respond to those risks. The Company did not adequately communicate the changes necessary in financial reporting and related internal controls throughout its organization and to affected third parties.
- The Company did not have an effective monitoring process to assess the consistent operation of internal control over financial reporting and to remediate known control deficiencies.
- The Company did not have an effective information and communication process to identify, capture and process relevant information necessary for financial accounting and reporting.
- The Company did not i) establish effective general information technology controls (**GITCs**), specifically program change controls and access controls, commensurate with financial and IT personnel job responsibilities that support the consistent operation of the Company's IT operating systems, databases and IT applications, and end user computing over all financial reporting, ii) have policies and procedures through which general information technology controls are deployed across the organization. Automated process-level controls and manual controls dependent upon the accuracy and completeness of information derived from information technology systems were also rendered ineffective because they are affected by the lack of GITCs.

As a consequence, the Company did not effectively design, implement and operate process-level control activities related to order-to-cash (including revenue, trade receivables, and deferred revenue), procure-to-pay (including operating expenses, prepaid expenses, accounts payable, and accrued liabilities), hire-to-pay (including compensation expense and accrued liabilities), long-lived assets, inventory and other financial reporting processes.

These control deficiencies resulted in immaterial misstatements, some of which were corrected, in our consolidated financial statements as of and for the year ended December 31, 2020. These control deficiencies create a reasonable possibility that a material misstatement to the consolidated financial statements will not be prevented or detected on a timely basis, and therefore we conclude that the deficiencies represent material weaknesses in internal control over financial reporting and our internal control over financial reporting is not effective as of December 31, 2020.

Our independent registered public accounting firm, KPMG, LLP, who audited the consolidated financial statements included in this Annual Report on Form 10-K, has expressed an adverse report on the operating effectiveness of the Company's internal control over financial reporting. KPMG LLP's report is included herein on page II-57.

Management's Remediation Plan

We, with the oversight from the Audit Committee of the Board of Directors continue to implement the remediation plans for the aforementioned material weaknesses in internal control over financial reporting as follows:

- Hire additional individuals and retain employees with appropriate skills and experience and provide further training related to internal control over financial reporting and the design and implementation of information technology solutions.
- Design and implement a comprehensive and continuous risk assessment process to identify and assess risks of material misstatement and ensure that the impacted financial reporting processes and related internal controls are properly designed and in place to respond to those risks in our financial reporting.
- Implement monitoring controls to oversee the remediation and the consistent operation of control activities, including those performed by our service providers.

- Enhance information and communication processes, including through information technology solutions of which include, but are not limited to, implementing new enterprise resource planning software, to ensure that information needed for financial reporting is accurate, complete, relevant, reliable, and communicated in a timely manner.
- Design and implement GITCs, including the system development lifecycle controls, and ensure they are operating effectively to support process-level automated and manual control activities that are dependent upon information derived from IT systems.
- Enhance the design of existing control activities and implement additional process-level control activities (including controls over the order-to-cash, procure-to-pay, hire-to-pay, long-lived assets, inventory, and other financial reporting processes) and ensure they are properly evidenced and operating effectively.

We believe that these actions and the improvements we expect to achieve, when fully implemented, will strengthen our internal control over financial reporting and remediate the remaining material weaknesses.

We are committed to making further progress in our remediation efforts during 2021; however, if our remedial measures are insufficient to address the material weaknesses, or if one or more additional material weaknesses in our internal controls over financial reporting are discovered, we may be required to take additional remedial measures from our plan as disclosed above.

Changes in Internal Control over Financial Reporting

Except as listed below, there have been no changes in our internal control over financial reporting identified in connection with the evaluation required by Rules 13a-15(d) and 15d-15(d) of the Exchange Act that occurred during our fourth quarter of 2020 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

During our fourth quarter, changes in our internal control over financial reporting include that we:

- implemented additional procedures and controls to enhance our internal control process through a combination of preventative and detective controls,
- developed specific roles and responsibilities for certain internal control activities of the Technology and Information group at two of our components,
- provided personal coaching regarding performance of business process controls and GITCs,
- designed and implemented certain manual controls to support the newly implemented enterprise resource planning software at two of our components; and,
- designed and implemented certain GITCs for the IT systems used at two of our components.

Item 9B. OTHER INFORMATION

Not applicable.

Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors
Liberty Latin America Ltd.:

Opinion on Internal Control Over Financial Reporting

We have audited Liberty Latin America Ltd. and subsidiaries' (the Company) internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, because of the effect of the material weaknesses, described below, on the achievement of the objectives of the control criteria, the Company has not maintained effective internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2020 and 2019, the related consolidated statements of operations, comprehensive loss, equity, and cash flows for each of the years in the three-year period ended December 31, 2020, and the related notes and financial statement schedule I (collectively, the consolidated financial statements), and our report dated March 1, 2021 expressed an unqualified opinion on those consolidated financial statements.

The Company acquired AT&T Mobility Puerto Rico Inc., AT&T Mobility Virgin Islands Inc. & Beach Holding Corporation (the AT&T Acquired Entities) during 2020, and management excluded from its assessment of the effectiveness of the Company's internal control over financial reporting as of December 31, 2020, the AT&T Acquired Entities' internal control over financial reporting associated with total assets of $2,707 million and total revenues of $174 million included in the consolidated financial statements of the Company as of and for the year ended December 31, 2020. Our audit of internal control over financial reporting of the Company also excluded an evaluation of the internal control over financial reporting of the AT&T Acquired Entities.

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the company's annual or interim financial statements will not be prevented or detected on a timely basis. The following material weaknesses have been identified and included in management's assessment:

- The Company did not have a sufficient number of trained resources with the appropriate skills and knowledge with assigned responsibilities and accountability for the design and operation of internal controls over financial reporting.
- The Company did not have an effective risk assessment process that successfully identified and assessed risks of misstatement to ensure controls were designed and implemented to respond to those risks. The Company did not adequately communicate the changes necessary in financial reporting and related internal controls throughout its organization and to affected third parties.
- The Company did not have an effective monitoring process to assess the consistent operation of internal control over financial reporting and to remediate known control deficiencies.
- The Company did not have an effective information and communication process to identify, capture and process relevant information necessary for financial accounting and reporting.
- The Company did not i) establish effective general information technology controls (GITCs), specifically program change controls and access controls, commensurate with financial and IT personnel job responsibilities that support the consistent operation of the Company's IT operating systems, databases and IT applications, and end user computing over all financial reporting, ii) have policies and procedures through which general information technology controls are deployed across the organization. Automated process-level controls and manual controls dependent upon the accuracy and completeness of information derived from information technology systems were also rendered ineffective because they are affected by the lack of GITCs.
- The Company did not effectively design, implement and operate process-level control activities related to order-to-cash (including revenue, trade receivables, and deferred revenue), procure-to-pay (including operating expenses,

prepaid expenses, accounts payable, and accrued liabilities), hire-to-pay (including compensation expense and accrued liabilities), long-lived assets, inventory, and other financial reporting processes.

The material weaknesses were considered in determining the nature, timing, and extent of audit tests applied in our audit of the 2020 consolidated financial statements, and this report does not affect our report on those consolidated financial statements.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Annual Report on Internal Control over Financial Reporting in Item 9A. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ KPMG LLP

Denver, Colorado
March 1, 2021

Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors
Liberty Latin America Ltd.:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Liberty Latin America Ltd. and subsidiaries (the Company) as of December 31, 2020 and 2019, the related consolidated statements of operations, comprehensive loss, equity, and cash flows for each of the years in the three-year period ended December 31, 2020, and the related notes and financial statement schedule I (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2020, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated March 1, 2021 expressed an adverse opinion on the effectiveness of the Company's internal control over financial reporting.

Change in Accounting Principle

As discussed in Note 2 to the consolidated financial statements, the Company has changed its method of accounting for leases as of January 1, 2019 due to the adoption of Accounting Standards Update No. 2016-02, *Leases*.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Capitalization of costs into property and equipment

As discussed in Note 3 to the consolidated financial statements, the Company capitalizes costs associated with the construction of new cable and mobile transmission and distribution facilities, the installation of new cable services and the development of software supporting its operations. Capitalization, rather than expensing of costs, may result in a more favorable operating income (loss) in a given year. As of December 31, 2020, the property and equipment, net balance was $4,911 million.

We identified the assessment of external costs capitalized into property and equipment as a critical audit matter. A high degree of auditor judgment was required to assess the nature of the supporting documentation. Third party technology related invoices can lack specificity of the item acquired or activity performed to support that the costs qualified for capitalization.

The following are the primary procedures we performed to address this critical audit matter. We selected a sample of costs capitalized and inspected the related invoices. For those invoices selected lacking specificity, we inspected additional underlying documentation, such as the related statement of work or contract.

Valuation of goodwill for certain reporting units

As discussed in Note 3 to the consolidated financial statements, the Company tests for impairment of goodwill at least annually and whenever facts and circumstances indicate that the carrying value of a reporting unit might exceed its fair value. Fair value of each reporting unit was measured using an income approach, utilizing a discounted cash flow model valuation technique. As of December 31, 2020, the goodwill balance was $4,886 million and the Company recorded impairments totaling $276 million.

We identified the assessment of the fair value of certain reporting units as a critical audit matter. There was a high degree of subjective auditor judgment required in assessing the Company’s key assumptions in measuring the fair value. Depending on the reporting unit, the key assumptions were projected revenues, projected direct costs, projected operating expenses, projected capital expenditures, discount rates and terminal growth rates. For these reporting units, certain valuations were sensitive to minor changes in these inputs which could have a significant impact on the estimated fair value.

The following are the primary procedures we performed to address this critical audit matter. We performed procedures to test the projected revenues, direct costs, operating expenses, and capital expenditures by comparing them with the historical results of the respective reporting unit and assessing the impacts of internal and/or external economic factors considering the available information. We involved valuation professionals with specialized skills and knowledge, who assisted in: evaluating the discount rates used in the valuations by comparing them against independently developed discount rates using publicly available market data; evaluating the terminal growth rates used in the valuations by comparing them to publicly available market data, and comparing the implied market multiples from the Company’s fair value estimates using the income approach to the observed range of market multiples derived from comparable companies.

Preliminary valuation of property and equipment and intangible assets associated with the acquisition of the AT&T Acquired Entities

As discussed in Note 4 to the consolidated financial statements, the Company acquired the wireless and wireline operations of AT&T, Inc. located in Puerto Rico and the U.S. Virgin Islands on October 31, 2020, for consideration of $1,931 million. Based on the preliminary allocation of the purchase price, the Company recorded $711 million of acquired property and equipment, $1,329 million of acquired intangible assets, including $894 million of spectrum, and $83 million of customer relationships. The information that was available to the Company to allocate consideration to the acquired property and equipment and intangible assets was affected by the proximity of the acquisition date to the Company’s fiscal year-end date of December 31, 2020. As a result, the Company determined the preliminary fair value of property and equipment based on the historical cost basis of AT&T, Inc., the acquired spectrum intangible asset based on a range of prices indicated by an initial analysis of available market data, and the customer relationships based on a multi-period excess earnings method. Key assumptions used to value the customer relationships included the discount rate and required rates of return on property and equipment (including return of and on) and spectrum intangible assets.

We identified the preliminary valuation of the acquired intangible assets of spectrum and customer relationships along with property and equipment associated with the acquisition of the AT&T Acquired Entities as a critical audit matter. Due to the extent of the information available as of the end of the reporting period, evaluating the preliminary valuation of these intangible assets and property and equipment involved a high degree of auditor judgment. Testing the key assumptions used to estimate the fair value of the customer relationship intangible assets, also involved a high degree of auditor judgment due to its sensitivity to changes in the key assumptions.

The following are the primary procedures we performed to address this critical audit matter. We evaluated the design and tested the operating effectiveness of certain internal controls related to the critical audit matter. This included controls related to the determination of the preliminary fair value of the acquired intangible assets and property and equipment and the development of the key assumptions noted above. Based on the consideration and extent of the information available as of the end of the reporting period, we evaluated the reasonableness of the preliminary fair value of the acquired intangible assets and property and equipment. We involved a valuation professional with specialized skills and knowledge who assisted in:

- evaluating the discount rate used to determine the preliminary fair value of the customer relationships acquired by comparing the Company's inputs to the discount rate to publicly available data for comparable entities and assessing the resulting discount rate, and

- evaluating the required rates of return on property and equipment (including return of and on) and spectrum intangible assets used to estimate the preliminary fair value of the customer relationships acquired by assessing the required rates of return considering the weighted-average cost of capital and the implied rate of return of the transaction.

/s/ KPMG LLP

We have served as the Company's auditor since 2016.

Denver, Colorado
March 1, 2021

LIBERTY LATIN AMERICA LTD.
CONSOLIDATED BALANCE SHEETS

	December 31,	
	2020	2019
	in millions	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 894.2	$ 1,183.8
Trade receivables, net of allowances of $100.0 million and $87.3 million, respectively	560.7	585.2
Prepaid expenses	62.6	58.9
Other current assets, net	434.4	227.3
Total current assets	1,951.9	2,055.2
Goodwill	4,885.5	4,906.4
Property and equipment, net	4,911.4	4,301.1
Restricted cash	17.3	1,272.2
Intangible assets subject to amortization, net	858.9	969.2
Intangible assets not subject to amortization	1,465.6	560.8
Other assets, net	1,139.4	872.6
Total assets	$ 15,230.0	$ 14,937.5

The accompanying notes are an integral part of these consolidated financial statements.

LIBERTY LATIN AMERICA LTD.

CONSOLIDATED BALANCE SHEETS – (Continued)

	December 31, 2020	December 31, 2019
	in millions	
LIABILITIES AND EQUITY		
Current liabilities:		
Accounts payable	$ 351.7	$ 346.6
Current portion of deferred revenue	184.9	160.9
Current portion of debt and finance lease obligations	161.9	180.2
Accrued capital expenditures	73.6	72.1
Accrued interest	132.3	132.6
Accrued payroll and employee benefits	97.8	88.9
Derivative instruments	90.2	35.4
Other accrued and current liabilities	612.6	559.3
Total current liabilities	1,705.0	1,576.0
Long-term debt and finance lease obligations	8,195.3	8,189.8
Deferred tax liabilities	619.9	401.8
Deferred revenue	185.3	210.9
Other long-term liabilities	1,080.8	579.1
Total liabilities	11,786.3	10,957.6
Commitments and contingencies		
Equity:		
Liberty Latin America shareholders:		
Class A, $0.01 par value; 500,000,000 shares authorized; 49,303,401 and 49,009,585 shares issued and outstanding, respectively, at December 31, 2020 and 48,795,552 shares issued and outstanding at December 31, 2019	0.5	0.5
Class B, $0.01 par value; 50,000,000 shares authorized; 1,932,386 shares issued and outstanding at December 31, 2020 and 1,934,686 shares issued and outstanding at December 31, 2019	—	—
Class C, $0.01 par value; 500,000,000 shares authorized; 181,786,924 and 181,113,766 shares issued and outstanding, respectively, at December 31, 2020 and 131,181,371 shares issued and outstanding at December 31, 2019	1.8	1.3
Undesignated preference shares, $0.01 par value; 50,000,000 shares authorized; nil shares issued and outstanding at each period	—	—
Treasury shares, at cost; 966,974 and nil shares, respectively	(9.5)	—
Additional paid-in capital	4,982.0	4,569.9
Accumulated deficit	(2,134.5)	(1,447.1)
Accumulated other comprehensive loss, net of taxes	(125.6)	(14.8)
Total Liberty Latin America shareholders	2,714.7	3,109.8
Noncontrolling interests	729.0	870.1
Total equity	3,443.7	3,979.9
Total liabilities and equity	$ 15,230.0	$ 14,937.5

The accompanying notes are an integral part of these consolidated financial statements.

LIBERTY LATIN AMERICA LTD.

CONSOLIDATED STATEMENTS OF OPERATIONS

	Year ended December 31,		
	2020	2019	2018
	in millions, except per share amounts		
Revenue	$ 3,764.6	$ 3,867.0	$ 3,705.7
Operating costs and expenses (exclusive of depreciation and amortization, shown separately below):			
Programming and other direct costs of services	846.0	877.8	877.2
Other operating costs and expenses	1,531.4	1,505.3	1,441.3
Business interruption loss recovery	—	—	(59.5)
Depreciation and amortization	914.6	871.0	829.8
Impairment, restructuring and other operating items, net	380.9	259.1	640.5
	3,672.9	3,513.2	3,729.3
Operating income (loss)	91.7	353.8	(23.6)
Non-operating income (expense):			
Interest expense	(533.4)	(499.2)	(443.7)
Realized and unrealized gains (losses) on derivative instruments, net	(352.7)	(17.2)	94.8
Foreign currency transaction gains (losses), net	1.2	(112.5)	(180.0)
Losses on debt modification and extinguishment, net	(45.1)	(19.8)	(32.1)
Other income (expense), net	0.1	14.3	(0.1)
	(929.9)	(634.4)	(561.1)
Loss before income taxes	(838.2)	(280.6)	(584.7)
Income tax benefit (expense)	29.3	98.2	(51.1)
Net loss	(808.9)	(182.4)	(635.8)
Net loss attributable to noncontrolling interests	121.7	102.3	290.6
Net loss attributable to Liberty Latin America shareholders	$ (687.2)	$ (80.1)	$ (345.2)
Basic and diluted net loss per share attributable to Liberty Latin America shareholders	$ (3.51)	$ (0.43)	$ (1.96)

The accompanying notes are an integral part of these consolidated financial statements.

LIBERTY LATIN AMERICA LTD.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS

	Year ended December 31,		
	2020	2019	2018
	in millions		
Net loss	$ (808.9)	$ (182.4)	$ (635.8)
Other comprehensive earnings (loss), net of taxes:			
Foreign currency translation adjustments	(119.0)	1.8	2.7
Reclassification adjustments included in net loss	0.6	(3.0)	2.2
Pension-related adjustments and other, net	6.8	2.4	34.5
Other comprehensive earnings (loss)	(111.6)	1.2	39.4
Comprehensive loss	(920.5)	(181.2)	(596.4)
Comprehensive loss attributable to noncontrolling interests	122.5	102.6	291.9
Comprehensive loss attributable to Liberty Latin America shareholders	$ (798.0)	$ (78.6)	$ (304.5)

The accompanying notes are an integral part of these consolidated financial statements.

LIBERTY LATIN AMERICA LTD.

CONSOLIDATED STATEMENTS OF EQUITY

	Liberty Latin America shareholders								
	Common shares			Additional paid-in capital	Accumulated deficit	Accumulated other comprehensive loss, net of taxes	Total Liberty Latin America shareholders	Non-controlling interests	Total equity
	Class A	Class B	Class C						
	in millions								
Balance at January 1, 2018	$ 0.5	$ —	$ 1.2	$ 4,402.8	$ (1,010.7)	$ (64.2)	$ 3,329.6	$ 1,361.0	$ 4,690.6
Accounting change (note 2)	—	—	—	—	(11.1)	—	(11.1)	3.6	(7.5)
Balance at January 1, 2018, as adjusted for accounting change	0.5	—	1.2	4,402.8	(1,021.8)	(64.2)	3,318.5	1,364.6	4,683.1
Net loss	—	—	—	—	(345.2)	—	(345.2)	(290.6)	(635.8)
Other comprehensive earnings	—	—	—	—	—	40.7	40.7	(1.3)	39.4
C&W Jamaica NCI Acquisition	—	—	—	(13.7)	—	7.2	(6.5)	(15.1)	(21.6)
Impact of the Cabletica Acquisition	—	—	—	—	—	—	—	25.1	25.1
Capital contributions from noncontrolling interest owner	—	—	—	—	—	—	—	18.0	18.0
LPR NCI Acquisition	—	—	0.1	68.2	—	—	68.3	(68.3)	—
Distributions to noncontrolling interest owners	—	—	—	—	—	—	—	(22.7)	(22.7)
Shared-based compensation	—	—	—	35.2	—	—	35.2	1.1	36.3
Other	—	—	—	1.6	—	—	1.6	—	1.6
Balance at December 31, 2018	$ 0.5	$ —	$ 1.3	$ 4,494.1	$ (1,367.0)	$ (16.3)	$ 3,112.6	$ 1,010.8	$ 4,123.4

The accompanying notes are an integral part of these consolidated financial statements.

LIBERTY LATIN AMERICA LTD.

CONSOLIDATED STATEMENTS OF EQUITY – (Continued)

	Liberty Latin America shareholders								
	Common shares			Additional paid-in capital	Accumulated deficit	Accumulated other comprehensive loss, net of taxes	Total Liberty Latin America shareholders	Non-controlling interests	Total equity
	Class A	Class B	Class C						
	in millions								
Balance at January 1, 2019	$ 0.5	$ —	$ 1.3	$ 4,494.1	$ (1,367.0)	$ (16.3)	$ 3,112.6	$ 1,010.8	$ 4,123.4
Net loss	—	—	—	—	(80.1)	—	(80.1)	(102.3)	(182.4)
Other comprehensive earnings	—	—	—	—	—	1.5	1.5	(0.3)	1.2
Impact of the UTS Acquisition	—	—	—	—	—	—	—	11.6	11.6
Distributions to noncontrolling interest owners	—	—	—	—	—	—	—	(37.7)	(37.7)
Conversion Option, net	—	—	—	77.3	—	—	77.3	—	77.3
Capped Calls	—	—	—	(45.6)	—	—	(45.6)	—	(45.6)
UTS NCI Acquisition	—	—	—	0.1	—	—	0.1	(11.7)	(11.6)
Share-based compensation	—	—	—	44.0	—	—	44.0	—	44.0
Other	—	—	—	—	—	—	—	(0.3)	(0.3)
Balance at December 31, 2019	$ 0.5	$ —	$ 1.3	$ 4,569.9	$ (1,447.1)	$ (14.8)	$ 3,109.8	$ 870.1	$ 3,979.9

The accompanying notes are an integral part of these consolidated financial statements.

LIBERTY LATIN AMERICA LTD.

CONSOLIDATED STATEMENTS OF EQUITY – (Continued)

	Liberty Latin America shareholders									
	Common shares									
	Class A	Class B	Class C	Treasury Stock	Additional paid-in capital	Accumulated deficit	Accumulated other comprehensive loss, net of taxes	Total Liberty Latin America shareholders	Non-controlling interests	Total equity
	in millions									
Balance at January 1, 2020	$ 0.5	$ —	$ 1.3	$ —	$ 4,569.9	$ (1,447.1)	$ (14.8)	$ 3,109.8	$ 870.1	$3,979.9
Accounting change (note 2)	—	—	—	—	—	(0.2)	—	(0.2)	0.2	—
Balance at January 1, 2020, as adjusted for accounting change	0.5	—	1.3	—	4,569.9	(1,447.3)	(14.8)	3,109.6	870.3	3,979.9
Net loss	—	—	—	—	—	(687.2)	—	(687.2)	(121.7)	(808.9)
Other comprehensive loss	—	—	—	—	—	—	(110.8)	(110.8)	(0.8)	(111.6)
Repurchase of Liberty Latin America common shares	—	—	—	(9.5)	—	—	—	(9.5)	—	(9.5)
Issuance of Liberty Latin America common shares, net	—	—	0.5	—	344.6	—	—	345.1	—	345.1
Distributions to noncontrolling interest owners	—	—	—	—	—	—	—	—	(18.8)	(18.8)
Share-based compensation	—	—	—	—	66.6	—	—	66.6	—	66.6
Other	—	—	—	—	0.9	—	—	0.9	—	0.9
Balance at December 31, 2020	$ 0.5	$ —	$ 1.8	$ (9.5)	$ 4,982.0	$ (2,134.5)	$ (125.6)	$ 2,714.7	$ 729.0	$3,443.7

The accompanying notes are an integral part of these consolidated financial statements.

LIBERTY LATIN AMERICA LTD.

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year ended December 31,		
	2020	2019	2018
	in millions		
Cash flows from operating activities:			
Net loss	$ (808.9)	$ (182.4)	$ (635.8)
Adjustments to reconcile net loss to net cash provided by operating activities:			
Share-based compensation expense	97.5	57.5	39.8
Depreciation and amortization	914.6	871.0	829.8
Impairment	283.1	199.4	615.7
Amortization of debt financing costs, premiums and discounts, net	30.4	16.8	(0.3)
Realized and unrealized losses (gains) on derivative instruments, net	352.7	17.2	(94.8)
Foreign currency transaction losses (gains), net	(1.2)	112.5	180.0
Losses on debt modification and extinguishment, net	45.1	19.8	32.1
Loss on the Seychelles Disposition	—	2.8	—
Unrealized loss due to change in fair value of investment	—	—	16.4
Deferred income tax benefit	(65.1)	(32.7)	(32.9)
Changes in operating assets and liabilities, net of the effect of acquisitions and a disposition:			
Receivables and other operating assets	(122.9)	(11.9)	(66.2)
Payables and accruals	(85.2)	(151.8)	(67.0)
Net cash provided by operating activities	640.1	918.2	816.8
Cash flows from investing activities:			
Capital expenditures	(565.8)	(589.1)	(776.4)
Cash paid in connection with acquisitions, net of cash acquired	(1,886.1)	(161.2)	(226.4)
Recovery on damaged or destroyed property and equipment	—	33.9	20.7
Proceeds from the Seychelles Disposition, net	—	77.5	—
Other investing activities, net	1.1	3.6	1.6
Net cash used by investing activities	$ (2,450.8)	$ (635.3)	$ (980.5)

The accompanying notes are an integral part of these consolidated financial statements.

LIBERTY LATIN AMERICA LTD.

CONSOLIDATED STATEMENTS OF CASH FLOWS – (Continued)

	Year ended December 31,		
	2020	2019	2018
	in millions		
Cash flows from financing activities:			
Borrowings of debt	$ 1,319.0	$ 2,966.9	$ 1,235.3
Payments of principal amounts of debt and finance lease obligations	(1,439.4)	(1,275.9)	(925.2)
Issuance of Liberty Latin America common shares, net	347.0	—	—
Net cash received (paid) related to derivative instruments	182.5	(0.3)	10.0
Capped Calls	—	(45.6)	—
Distributions to noncontrolling interest owners	(18.8)	(37.7)	(22.7)
Payment of financing costs and debt premiums	(99.0)	(55.1)	(39.3)
Repurchase of Liberty Latin America common shares	(9.5)	—	—
Cash payments for the acquisition of noncontrolling interest	(5.6)	(5.1)	(20.9)
Capital contributions from noncontrolling interest owner	—	—	18.0
Other financing activities, net	(5.1)	(7.4)	0.9
Net cash provided by financing activities	271.1	1,539.8	256.1
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(4.9)	(7.7)	(18.6)
Net increase (decrease) in cash, cash equivalents and restricted cash	(1,544.5)	1,815.0	73.8
Cash, cash equivalents and restricted cash:			
Beginning of year	2,457.0	642.0	568.2
End of year	$ 912.5	$ 2,457.0	$ 642.0
Cash paid for interest	$ 484.3	$ 444.9	$ 418.2
Net cash paid for taxes	$ 81.6	$ 130.1	$ 145.6

The accompanying notes are an integral part of these consolidated financial statements.

(1) Basis of Presentation

General

Liberty Latin America Ltd. (**Liberty Latin America**) is a registered company in Bermuda that primarily includes:

(i) Cable & Wireless Communications Limited and its subsidiaries (collectively **C&W**), which includes Cable & Wireless Panama, S.A. (**CWP**);

(ii) VTR Finance N.V. and its subsidiaries (collectively **VTR**);

(iii) Liberty Communications PR Holding LP (**Liberty Communications**) and its subsidiaries (collectively **Liberty Puerto Rico**), which include Liberty Communications of Puerto Rico LLC (**LCPR**) and, as of October 31, 2020 and as further described in note 4, Liberty Mobile Inc. (**Liberty Mobile**) and its subsidiaries; and

(iv) LBT CT Communications, S.A. (a less than wholly-owned entity) and its subsidiary, Cabletica S.A. (**Cabletica**).

VTR, Liberty Communications and LCPR were formerly known as VTR Finance B.V., Leo Cable LP and Liberty Cablevision of Puerto Rico LLC, respectively. C&W owns less than 100% of certain of its consolidated subsidiaries, including The Bahamas Telecommunications Company Limited (**C&W Bahamas**), Cable & Wireless Jamaica Limited (**C&W Jamaica**), and CWP.

We are an international provider of fixed, mobile and subsea telecommunications services. We provide residential and business-to-business (**B2B**) services in (i) over 20 countries across Latin America and the Caribbean through two of our reportable segments, "**C&W Caribbean and Networks**" and "**C&W Panama**", (ii) Chile and Costa Rica, through our reportable segment, "**VTR/Cabletica**", and (iii) Puerto Rico, through our reportable segment, Liberty Puerto Rico. Through our "**Networks & LatAm**" business, C&W Caribbean and Networks also provides (i) B2B services in certain other countries in Latin America and the Caribbean and (ii) wholesale communication services over its subsea and terrestrial fiber optic cable networks that connect over 40 markets in that region.

The accompanying consolidated financial statements have been prepared in accordance with generally accepted accounting principles in the United States (**U.S. GAAP**). In these notes, the terms "**we**," "**our**," "**our company**" and "**us**" may refer, as the context requires, to Liberty Latin America or collectively to Liberty Latin America and its subsidiaries. Unless otherwise indicated, ownership percentages and convenience translations into United States (**U.S.**) dollars are calculated as of December 31, 2020.

(2) Accounting Changes and Recent Accounting Pronouncements

Accounting Changes

ASU 2019-12

In December 2019, the Financial Accounting Standards Board (**FASB**) issued Accounting Standards Update (**ASU**) No. 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes* (**ASU 2019-12**), which (i) simplifies the accounting for income taxes by removing certain exceptions for recognizing deferred taxes for investments, performing intraperiod allocations and calculating income taxes in interim periods, and (ii) reduces the complexity in certain areas of existing tax guidance, including the recognition of deferred taxes for tax goodwill and allocating taxes to members of a consolidated group. We early adopted ASU 2019-12 effective December 31, 2020 and it did not have a material impact on our consolidated financial statements.

ASU 2018-15

In August 2018, the FASB issued ASU No. 2018-15, *Intangibles—Goodwill and Other—Internal-Use Software—Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract*

*(***ASU 2018-15***)*. ASU 2018-15 provides additional guidance on ASU No. 2015-05, *Intangibles—Goodwill and Other—Internal-Use Software—Customer's Accounting for Fees Paid in a Cloud Computing Arrangement,* which was issued to help entities evaluate the accounting for fees paid by a customer in a cloud computing arrangement (hosting arrangement) by providing guidance for determining when the arrangement includes a software license. ASU 2018-15 aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software (and hosting arrangements that include an internal-use software license). The guidance (i) provides criteria for determining which implementation costs to capitalize as an asset related to the service contract and which costs to expense, (ii) requires an entity (customer) to expense the capitalized implementation costs of a hosting arrangement that is a service contract over the term of the hosting arrangement and (iii) clarifies the presentation requirements for reporting such costs in the entity's financial statements. We adopted ASU 2018-15 effective January 1, 2020 on a prospective basis for all implementation costs incurred after the date of adoption and it did not have a material impact on our consolidated financial statements.

ASU 2016-13

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments—Credit Losses—Measurement of Credit Losses on Financial Instruments (***ASU 2016-13**), as amended by (i) ASU No. 2019-10, *Financial Instruments—Credit Losses (Topic 326), Derivatives and Hedging (Topic 815), and Leases (Topic 842): Effective Dates*, which amended certain effective dates, and (ii) ASU No. 2019-11, *Codification Improvements to Topic 326, Financial Instruments—Credit Losses*, which clarifies guidance around how to report expected recoveries. ASU 2016-13 replaces the incurred loss impairment methodology for recognizing credit losses with a methodology that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. We are required to use a forward-looking expected credit loss model for accounts receivables, loans and other financial instruments. We adopted ASU 2016-13 effective January 1, 2020 using a modified retrospective approach through a cumulative-effect adjustment to retained earnings to align our credit loss methodology with the new standard. The comparative information has not been restated and continues to be reported under the accounting standards in effect for that period.

Under the new model, we segment our receivables, unbilled revenue and contract assets based on days past due and record an allowance for current expected credit losses using average rates applied against each account's applicable aggregate balance for each aging bucket. We establish the average rates based on consideration of the actual credit loss experience over the prior 12-month period, recent collection trends, current economic conditions and reasonable expectations of future payment delinquency.

The cumulative effect of the changes to our consolidated balance sheet as of January 1, 2020 was not material.

ASU 2016-02

In February 2016, the FASB issued ASU No. 2016-02, *Leases* (**ASU 2016-02**), as amended by ASU No. 2018-11, *Targeted Improvements*, which provides an option to use one of two modified retrospective approaches in the adoption of ASU 2016-02. ASU 2016-02, for most leases, results in lessees recognizing right-of-use assets and lease liabilities on the balance sheet and additional disclosures. We adopted ASU 2016-02 effective January 1, 2019 using the effective date transition method. A number of optional practical expedients were applied in transition, as further described below.

The main impact of the adoption of this standard was the recognition of right-of-use assets and lease liabilities in our consolidated balance sheet as of January 1, 2019 for those leases classified as operating leases under ASU 2016-02. We did not recognize right-of-use assets or lease liabilities for leases with a term of 12 months or less, as permitted by the short-term lease practical expedient in the standard. In transition, we applied the practical expedients that permit us not to reassess (i) whether expired or existing contracts are or contain a lease under the new standard, (ii) the lease classification for expired or existing leases, (iii) whether previously-capitalized initial direct costs would qualify for capitalization under the new standard and (iv) whether existing or expired land easements that were not previously accounted for as leases are or contain a lease. We also applied the practical expedient that permits us to account for customer service revenue contracts that include both non-lease and lease components as a single component in all instances where the non-lease component is the predominant component of the arrangement and the other applicable criteria are met. In addition, we did not use hindsight during the transition.

We implemented internal controls to ensure we adequately evaluate our contracts and properly assessed the impact of ASU 2016-02 on our consolidated financial statements. We do not believe such controls represent significant changes to our internal control over financial reporting.

For information regarding our accounting policies for leases following the adoption of ASU 2016-02, see note 3.

ASU 2014-09

In May 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers* (ASU 2014-09), which requires an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers. We adopted ASU 2014-09 effective January 1, 2018 by recording the cumulative effect to the opening balance of our accumulated deficit. We applied the new standard to contracts that were not complete as of January 1, 2018.

The most significant impacts of ASU 2014-09 on our revenue recognition policies relate to our accounting for (i) long-term capacity contracts, (ii) subsidized handset plans and (iii) certain installation and other upfront fees, each as set forth below:

- We enter into certain long-term capacity contracts with customers where the customer pays the transaction consideration at inception of the contract. Under previous accounting standards, we did not impute interest for advance payments from customers related to services that are provided over time. Under ASU 2014-09, payment received from a customer significantly in advance of the provision of services is indicative of a financing component within the contract. If the financing component is significant, interest expense is accreted over the life of the contract with a corresponding increase to revenue.

- ASU 2014-09 requires the identification of deliverables in contracts with customers that qualify as performance obligations. The transaction price consideration from customers is allocated to each performance obligation under the contract on the basis of relative standalone selling price. Under previous accounting standards, when we offered discounted equipment, such as handsets under a subsidized contract, upfront revenue recognition was limited to the upfront cash collected from the customer as the remaining monthly fees to be received from the customer, including fees associated with the equipment, were contingent upon delivering future airtime. This limitation is not applied under ASU 2014-09. The primary impact on revenue reporting is that when we sell discounted equipment together with airtime services to customers, revenue allocated to equipment and recognized when control of the device passes to the customer will increase and revenue recognized as services are delivered will decrease.

- When we enter into contracts to provide services to our customers, we often charge installation or other upfront fees. Under previous accounting standards, installation fees related to services provided over our fixed networks were recognized as revenue during the period in which the installation occurred to the extent those fees were equal to or less than direct selling costs. Under ASU 2014-09, these fees are generally deferred and recognized as revenue over the contractual period for those contracts with substantive termination penalties, or for the period of time the upfront fees convey a material right for month-to-month contracts and contracts that do not include substantive termination penalties.

ASU 2014-09 also impacted our accounting for certain upfront costs directly associated with obtaining and fulfilling customer contracts. Under our previous policy, these costs were expensed as incurred unless the costs were in the scope of other accounting standards that allowed for capitalization. Under ASU 2014-09, the upfront costs associated with contracts that have substantive termination penalties and a term of longer than one year are recognized as assets and amortized to other operating expenses over the applicable period benefited.

We implemented internal controls to ensure we adequately evaluated our contracts and properly assessed the impact of ASU 2014-09 on our consolidated financial statements. We do not believe such new controls represent significant changes to our internal control over financial reporting.

For information regarding our accounting policies for revenue following the adoption of ASU 2014-09 and our contract assets and deferred revenue balances, see note 3. For our disaggregated revenue by product, see note 21.

The impact of our adoption of ASU 2014-09 to our consolidated statement of operations for the year ended December 31, 2018 is as follows:

	Before adoption of ASU 2014-09	Impact of ASU 2014-09 Increase (decrease)	As reported
		in millions	
Revenue	$ 3,697.3	$ 8.4	$ 3,705.7
Other operating costs and expenses	$ 1,442.0	$ (0.7)	$ 1,441.3
Non-operating expenses – interest expense	$ 424.6	$ 19.1	$ 443.7
Income tax expense	$ 52.6	$ (1.5)	$ 51.1
Net loss	$ 627.3	$ 8.5	$ 635.8

Recent Accounting Pronouncements

ASU 2018-14

In August 2018, the FASB issued ASU No. 2018-14, *Disclosure Framework-Changes to the Disclosure Requirements for Defined Benefit Plans* (**ASU 2018-14**), which removes and modifies certain existing disclosure requirements and adds new disclosure requirements related to employer sponsored defined benefit pension or other postretirement plans. ASU 2018-14 is effective for annual reporting periods after December 15, 2020, including interim periods within those fiscal years, with early adoption permitted. ASU 2018-14 will not have a material impact on our consolidated financial statements.

ASU 2020-04 and ASU 2021-01

In March 2020, the FASB issued ASU No. 2020-04, *Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting* (**ASU 2020-04**), which provides optional guidance for a limited time to ease the potential accounting burden associated with transitioning away from reference rates, such as the London Inter-Bank Offered Rate (**LIBOR**), which regulators in the United Kingdom (**U.K.**) have announced will be phased out by the end of 2021. In January 2021, the FASB issued ASU No. 2021-01, *Reference Rate Reform (Topic 848)* (**ASU 2021-01**), which clarifies certain optional expedients and exceptions in ASC 848. The expedients and exceptions provided by ASU 2020-04 and ASU 2021-01 are for the application of U.S. GAAP to contracts, hedging relationships and other transactions affected by the rate reform, and will not be available after December 31, 2022, other than for certain hedging relationships entered into before December 31, 2022. We do not currently expect that the phase out of LIBOR will have a material impact on our consolidated financial statements.

ASU 2020-06

In August 2020, the FASB issued ASU No. 2020-06, *Debt—Debt with Conversion and Other Options and Derivatives and Hedging—Contracts in Entity's Own Equity: Accounting for Convertible Instruments and Contracts in an Entity's Own Equity* (**ASU 2020-06**), which (i) reduces the number of accounting models for convertible instruments and allows more contracts to qualify for equity classification and (ii) makes targeted improvements to convertible instruments and earnings-per-share disclosure requirements. ASU 2020-06 is effective for annual reporting periods after December 15, 2021, including interim periods within those fiscal years, with early adoption permitted, but no earlier than annual and interim periods in fiscal years beginning after December 15, 2020. While we are still evaluating the impact of ASU 2020-06, we do not currently expect it will have a material impact on our consolidated financial statements.

(3) Summary of Significant Accounting Policies

Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Estimates and assumptions are used in accounting for, among other things, the valuation of acquisition-related assets and liabilities, allowances for credit losses, programming and copyright expenses, deferred income taxes and related valuation allowances, loss contingencies, fair value measurements, impairment assessments, capitalization of internal costs associated with construction and installation activities, useful lives of long-lived assets and actuarial liabilities associated with certain benefit plans. Actual results could differ from those estimates.

Reclassifications

Certain prior year amounts have been reclassified to conform to the current year presentation. During 2020, we changed the presentation of certain operating costs and expenses in our consolidated statements of operations in order to better align with management's approach to monitoring and evaluating such costs. Specifically, we have combined the costs previously reported in the consolidated statement of operations' captions "other operating" and "selling, general and administrative" into one line, which is now referred to as "other operating costs and expenses." In conjunction with this change, we have provided additional disclosure of the nature of other operating costs and expenses by function, as set forth in note 14. This change in presentation did not have any impact on operating income or loss, net loss or any of our key performance metrics. In addition, we have provided additional disclosure of the nature of our programming and other direct costs of services, as set forth in note 13.

Principles of Consolidation

The accompanying consolidated financial statements include our accounts and the accounts of all voting interest entities where we exercise a controlling financial interest through the ownership of a direct or indirect controlling voting interest and variable interest entities for which our company is the primary beneficiary. Intercompany accounts have been eliminated in consolidation.

Cash, Cash Equivalents and Restricted Cash

Cash equivalents consist of money market funds and other investments that are readily convertible into cash and have maturities of three months or less at the time of acquisition. We record money market funds at the net asset value as there are no restrictions on our ability, contractual or otherwise, to redeem our investments.

Restricted cash consists of cash held in restricted accounts, including cash held as collateral for acquisitions, debt and other compensating balances, as applicable. Cash that is restricted to a specific use is classified as current or long-term based on, among other things, the expected use and timing of disbursement of the restricted cash. At December 31, 2020 and 2019, our current and long-term restricted cash balances aggregated $18 million and $1,273 million, respectively. For additional information regarding restricted cash that was used during 2020 to partially fund the AT&T Acquisition, see note 10. Our current restricted cash balances are included in other current assets, net, in our consolidated balance sheets.

Receivables

We have trade and note receivables that are each reported net of an allowance for credit losses.

Our notes receivable, which we maintain following the closing of the AT&T Acquisition, consist of equipment installment-plan (**EIP**) receivables due from customers under contracts over a period of up to 30 months. The short and long-term portions of our notes receivable, net of allowance, are incurred in other current assets, net and other assets, net, respectively, in our consolidated balance sheets.

The allowances on each of our trade and notes receivable are established using our best estimates of current expected credit losses based upon, among other things, actual credit loss experience over the prior 12-month period, recent collection trends, prevailing and anticipated economic conditions and specific customer credit risk. Receivables outstanding greater than 30 days are considered past due and we generally write-off receivables after they become past due for 365 days, with the exception of amounts due from certain governments.

The changes in our trade receivables allowance for credit losses are set forth below:

	Year ended December 31,		
	2020	2019	2018
	in millions		
Beginning balance	$ 87.3	$ 144.4	$ 142.2
Provision for expected losses	62.6	61.8	52.6
Write-offs	(60.3)	(113.9)	(48.5)
Foreign currency translation adjustments and other	10.4	(5.0)	(1.9)
Ending balance	$ 100.0	$ 87.3	$ 144.4

The change in our notes receivable allowance for credit losses for the year ended December 31, 2020 are set forth below (in millions):

Beginning balance	$ —
Additions upon acquisition	14.9
Provision for expected losses	1.3
Ending balance	$ 16.2

Concentration of credit risk with respect to trade receivables is limited due to the large number of customers and their dispersion across many different countries, with the exception of $72 million and $89 million at December 31, 2020 and 2019, respectively, due from a single government.

Investments

We hold an equity security in Telecommunications Services of Trinidad and Tobago Limited (**TSTT**) for which the fair value is not readily determinable. Accordingly, we measure this investment at cost minus impairment, plus or minus changes resulting from observable price changes. When indicators of impairment exist, we estimate the fair value and record an impairment charge if the carrying value of the investment exceeds its estimated fair value. Any impairment charges are recorded in other income (expense), net, in our consolidated statements of operations.

We account for our investment in United Kingdom (**U.K.**) Government Gilts using the available-for-sale method. Available-for-sale securities are measured at fair value. Changes in the fair value of available-for-sale securities are reflected in other comprehensive income or loss until sold or other-than-temporarily impaired, at which time the amounts are reclassified from accumulated other comprehensive income or loss into non-operating income or expense in our consolidated statements of operations.

For additional information regarding our fair value measurements, see note 6. For additional information regarding our investment in TSTT and the U.K. Government Gilts, see notes 7 and 16, respectively.

Financial Instruments

Due to the short maturities of cash and cash equivalents, trade and other receivables, other current assets, accounts payable, accrued liabilities and other accrued and current liabilities, their respective carrying values approximate their respective fair values. For information concerning the fair values of our derivative and debt instruments, see notes 5 and 10, respectively. For information regarding how we arrive at certain of our fair value measurements, see note 6.

Derivative Instruments

Derivative Instruments Recorded at Fair Value

Our derivative instruments, excluding our weather derivative contracts (**Weather Derivatives**), as discussed below, are recorded on our consolidated balance sheets at fair value, whether designated as a hedge or not. If the derivative instrument is not designated as a hedge, changes in the fair value of the derivative instrument are recognized in earnings. If the derivative instrument is designated as a cash flow hedge, the effective portions of changes in the fair value of the derivative instrument are recorded in other comprehensive earnings or loss and subsequently reclassified into our consolidated statements of operations when the hedged forecasted transaction affects earnings. Ineffective portions of changes in the fair value of cash flow hedges are recognized in realized and unrealized gains or losses on derivative instruments in our consolidated statements of operations. With the exception of certain foreign currency forward contracts, we do not apply hedge accounting to our derivative instruments.

The net cash received or paid related to our derivative instruments is classified as an operating, investing or financing activity in our consolidated statements of cash flows based on the objective of the derivative instrument and the classification of the applicable underlying cash flows, as follows:

- **Cross-currency and interest rate derivative contracts:** The net cash paid or received related to principal and current interest is classified as a financing or operating activity, respectively.

- **Foreign currency forward contracts that are used to hedge capital expenditures:** The net cash paid or received is reflected in capital expenditures, which are classified as an investing activity.

- **Foreign currency forward contracts that are used to hedge principal exposure on foreign currencies:** The net cash paid or received is classified as a financing activity.

- **Derivative contracts that are terminated prior to maturity:** The cash paid or received upon termination that relates to future periods is classified as a financing activity.

Weather Derivatives

Our Weather Derivatives provide us with insurance coverage for certain weather-related events and are not accounted for at fair value. The premiums paid associated with the Weather Derivatives are recorded in other current assets, net, in our consolidated balance sheets, and the amortization of the premiums is included in realized and unrealized gains or losses on derivative instruments, net, in our consolidated statements of operations. The cash paid associated with the premiums is classified as an operating activity in our consolidated statements of cash flows. In the event of a payout under our Weather Derivatives, the cash received would be classified as an operating activity in our consolidated statements of cash flows.

For information regarding our derivative instruments, see note 5.

Property and Equipment

Property and equipment are stated at cost less accumulated depreciation. We capitalize costs associated with the construction of new cable and mobile transmission and distribution facilities and the installation of new cable services. The nature and amount of labor and other costs to be capitalized with respect to construction and installation activities involves significant judgment. In addition to direct external and internal labor and materials, we also capitalize other costs directly attributable to our construction and installation activities, including dispatch costs, quality-control costs, vehicle-related costs and certain warehouse-related costs. The capitalization of these costs is based on time sheets, time studies, standard costs, call tracking systems and other verifiable means that directly link the costs incurred with the applicable capitalizable activity. We continuously monitor the appropriateness of our capitalization policies and update the policies when necessary to respond to changes in facts and circumstances, such as the development of new products and services and changes in the manner that installations or construction activities are performed. Installation activities that are capitalized include (i) the initial connection (or drop) from our cable system to a customer location, (ii) the replacement of a drop and (iii) the installation of equipment for additional services, such as digital cable, telephone or broadband internet service. The costs of other customer-facing activities, such as reconnecting and disconnecting customer locations and repairing or maintaining drops, are expensed as incurred.

We capitalize internal and external costs directly associated with the development of internal-use software. Capitalized internal-use software is included as a component of property and equipment. We also capitalize costs associated with the purchase of software licenses. Costs associated with software obtained in a hosting arrangement are expensed over the life of the service contract, unless we have the right to take possession of the software at any time without significant penalty and it is feasible to run the software on our own hardware or contract with another party unrelated to the vendor to host the software. Maintenance and training costs, as well as costs incurred during the preliminary stage of an internal-use software development project, are expensed as incurred.

Depreciation is computed using the straight-line method over the estimated useful life of the underlying asset. Equipment under finance leases is amortized on a straight-line basis over the shorter of the lease term or estimated useful life of the asset and is included in depreciation and amortization in our consolidated statements of operations. Useful lives used to depreciate our property and equipment are assessed periodically and are adjusted when warranted. The useful lives of cable and mobile distribution systems that are undergoing a rebuild are adjusted such that property and equipment to be retired will be fully depreciated by the time the rebuild is completed. For additional information regarding the useful lives of our property and equipment, see note 9.

Additions, replacements and improvements that extend the asset life are capitalized. Repairs and maintenance are expensed as incurred.

We recognize a liability for asset retirement obligations in the period in which it is incurred if sufficient information is available to make a reasonable estimate of fair values. Asset retirement obligations primarily relate to assets placed on leased wireless towers and other premises. Asset retirement obligations of $41 million and $38 million at December 31, 2020 and 2019, respectively, are included in other long-term liabilities in our consolidated balance sheets.

Intangible Assets

Our primary intangible assets relate to goodwill, customer relationships, cable television franchise rights and spectrum licenses. Goodwill represents the excess purchase price over the fair value of the identifiable net assets acquired in a business combination. Customer relationships, cable television franchise rights and spectrum licenses that are acquired in connection with a business combination are initially recorded at their fair values.

Goodwill and other intangible assets with indefinite useful lives are not amortized, but instead are tested for impairment at least annually. Intangible assets with finite lives are amortized on a straight-line basis over their respective estimated useful lives to their estimated residual values, and reviewed for impairment.

We do not amortize our cable television franchise rights or spectrum licenses as these assets have indefinite lives.

The spectrum licenses provide us with the exclusive right to utilize a certain radio frequency spectrum to provide wireless communications services. While spectrum licenses are issued for only a fixed time (generally, ten years), renewals of spectrum licenses occur routinely and at nominal cost. Moreover, we believe there are currently no significant legal, regulatory, contractual, competitive, economic or other factors limiting the useful lives of our spectrum licenses, and therefore we treat the spectrum licenses as indefinite-lived intangible assets. We believe we will be able to meet all requirements necessary to secure renewal of our spectrum licenses.

For additional information regarding the useful lives of our intangible assets, see note 9.

Impairment of Property and Equipment and Intangible Assets

When circumstances warrant, we review the carrying amounts of our property and equipment and our intangible assets (other than goodwill and other indefinite-lived intangible assets) to determine whether such carrying amounts continue to be recoverable. Such changes in circumstance may include (i) the impact of natural disasters, such as hurricanes, (ii) an expectation of a sale or disposal of a long-lived asset or asset group, (iii) adverse changes in market or competitive conditions, (iv) an adverse change in legal factors or business climate in the markets in which we operate and (v) operating or cash flow losses. For purposes of impairment testing, long-lived assets are grouped at the lowest level for which cash flows are largely independent of other assets and liabilities, generally at or below the reporting unit level (see below). If the carrying amount of the asset or asset group is greater than the expected undiscounted cash flows to be generated by such asset or asset group, an impairment adjustment is recognized. Such adjustment is measured by the amount that the carrying value of such asset or asset group exceeds its fair value. We generally measure fair value by considering (i) sale prices for similar assets, (ii) discounted estimated future cash flows using an appropriate discount rate and/or (iii) estimated replacement cost. Assets to be disposed of are recorded at the lower of their carrying amount or fair value less costs to sell.

We evaluate goodwill and other indefinite-lived intangible assets (primarily cable television franchise rights and spectrum licenses) for impairment at least annually on October 1 and whenever facts and circumstances indicate that the fair value of a reporting unit or an indefinite-lived intangible asset may be less than its carrying value. For impairment evaluations with respect to both goodwill and other indefinite-lived intangibles, we first make a qualitative assessment to determine if the goodwill or other indefinite-lived intangible may be impaired. In the case of goodwill, if it is more-likely-than-not that a reporting unit's fair value is less than its carrying value, we then compare the fair value of the reporting unit to its respective carrying amount. A reporting unit is an operating segment or one level below an operating segment. Goodwill impairment is recorded as the excess of a reporting unit's carrying value over its fair value and is charged to operations as an impairment loss. With respect to other indefinite-lived intangible assets, if it is more-likely-than-not that the fair value of an indefinite-lived intangible asset is less than its carrying value, we then estimate its fair value and any excess of the carrying value over the fair value is also charged to operations as an impairment loss. For additional information regarding the fair value measurements of our property and equipment and intangible assets, see note 6. For additional information regarding impairments, see note 9.

Contract Assets

When we transfer goods or services to a customer but do not have an unconditional right to payment, we record a contract asset. Contract assets are reclassified to trade receivables, net, in our consolidated balance sheet at the point in time we have the unconditional right to payment. Our contract assets were $82 million and $22 million as of December 31, 2020 and 2019, respectively. The current and long-term portion of contract assets are included in other current assets, net and other assets, net, respectively, in our consolidated balance sheets.

Deferred Contract Costs

Incremental costs to obtain a contract with a customer, such as incremental sales commissions, are recognized as an asset and amortized to other operating costs and expenses over the applicable period benefited, which is the longer of the contract life or the economic life of the commission. If, however, the amortization period is one year or less, we expense such costs in the period incurred. Costs to obtain a contract that would have been incurred regardless of whether the contract was obtained are recognized as an expense when incurred. Our deferred contract costs were $15 million and $8 million as of December 31, 2020 and 2019, respectively. The current and long-term portion of deferred contract costs are included in other current assets, net and other assets, net, respectively, in our consolidated balance sheets.

Deferred Revenue

We record deferred revenue when we have received payment prior to transferring goods or services to a customer. Deferred revenue primarily relates to (i) advanced payments on fixed subscription services, mobile airtime services and long-term capacity contracts and (ii) deferred installation and other upfront fees. Our aggregate current and long-term deferred revenue as of December 31, 2020 and 2019 was $370 million and $372 million, respectively. Long-term deferred revenue is included in other long-term liabilities in our consolidated balance sheets.

Operating Leases

Our operating leases primarily consist of (i) property leases for mobile tower locations that generally have initial terms of five to ten years with one or more renewal options and (ii) lease commitments for (a) retail stores, offices and facilities, (b) other network assets and (c) other equipment. It is expected that in the normal course of business, operating leases that expire generally will be renewed or replaced by similar leases. For additional information regarding our leases, see note 11.

We classify leases with a term of greater than 12 months where substantially all risks and rewards incidental to ownership are retained by the third-party lessors as operating leases. We record a right-of-use asset and an operating lease liability at inception of the lease at the present value of the lease payments plus certain other payments, including variable lease payments and amounts probable of being owed by us under residual value guarantees. Payments made under operating leases, net of any incentives received from the lessors, are recognized to expense on a straight-line basis over the term of the lease. Initial direct costs incurred in negotiating and arranging operating leases are recognized to expense when incurred. Contingent rental payments are recognized to expense when incurred. Our right-of-use assets are included in other assets, net, in our consolidated balance sheets. Our current and non-current operating lease liabilities are included in other accrued and current liabilities and other long-term liabilities, respectively, in our consolidated balance sheets.

We use a credit-adjusted discount rate to measure our operating lease liabilities. We derive the discount rates associated with each of our borrowing groups starting with a risk free rate, generally the U.S. Treasury Bill rate. To determine credit risk, we create an industry benchmark credit default swap (**CDS**) curve from an observable high-yield debt index using comparable telecommunication companies as a proxy. We then determine the maximum curve shift against this CDS curve derived from our own tradable debt within each borrowing group, and make adjustments to correct for the collateralized interest rate spread by comparing unsecured debt to asset-backed securities (secured debt) trades, which is based on the spread between the BB- and B+ industrial curves. We determine the discount factor from this adjusted curve for each borrowing group.

Income Taxes

The income taxes of Liberty Latin America are presented on a standalone basis, and each tax paying entity or group within Liberty Latin America is presented on a separate return basis. Income taxes are accounted for under the asset and liability method. We recognize deferred tax assets and liabilities for the future tax consequences attributable to differences between the financial statement carrying amounts and income tax basis of assets and liabilities and the expected benefits of utilizing net operating loss and tax credit carryforwards, using enacted tax rates in effect for each taxing jurisdiction in which we operate for the year in which those temporary differences are expected to be recovered or settled. We recognize the financial statement effects of a tax position when it is more-likely-than-not, based on technical merits, that the position will be sustained upon examination. Net deferred tax assets are then reduced by a valuation allowance if we believe it is more-likely-than-not that such net deferred tax assets will not be realized. Certain of our valuation allowances and tax uncertainties are associated with entities that we acquired in business combinations. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in earnings in the period that includes the enactment date. Deferred tax liabilities related to investments in foreign entities and foreign corporate joint ventures that are essentially permanent in duration are not recognized until it becomes apparent that such amounts will reverse in the foreseeable future. In order to be considered essentially permanent in duration, sufficient evidence must indicate that the foreign entity has invested or will invest its undistributed earnings indefinitely, or that earnings will be remitted in a tax-free liquidation. Interest and penalties related to income tax liabilities are included in income tax benefit or expense in our consolidated statements of operations.

For additional information regarding our income taxes, see note 15.

Employee Benefit Plans

Certain of our subsidiaries maintain various employee defined benefit plans. Defined benefit pension plan costs are determined using actuarial methods and are accounted for using the projected unit credit method, which incorporates management's best estimates of future salary levels, other cost escalations, retirement ages of employees, and other actuarial factors. Our net asset or liability in respect of defined benefit pension plans represents the fair value of the plan assets, less the present value of the defined benefit obligations. The fair value of plan assets and the projected benefit obligation for each plan is calculated annually by independent qualified actuaries. Defined benefit assets are only recognized to the extent they are deemed recoverable. For additional information regarding our defined benefit plans, see note 16.

Certain of our subsidiaries participate in externally managed defined contribution pension plans. A defined contribution plan is a pension plan under which we have no further obligation once the fixed defined contribution has been paid to the third-party administrator of the plan. Contributions under our defined contribution pension plans are recognized as incurred in other operating costs and expenses in our consolidated statements of operations.

Foreign Currency Translation and Transactions

The reporting currency of Liberty Latin America is the U.S. dollar. The functional currency of our foreign operations is the applicable local currency for each foreign entity. Assets and liabilities of our foreign subsidiaries (including intercompany balances for which settlement is not anticipated in the foreseeable future) are translated at the spot rate in effect at the applicable reporting date. With the exception of certain material transactions, the amounts reported in our consolidated statements of operations are translated at the average exchange rates in effect during the applicable period. The resulting unrealized cumulative translation adjustment, net of applicable income taxes, is recorded as a component of accumulated other comprehensive earnings or loss in our consolidated statements of equity. With the exception of certain material transactions, the cash flows from our operations in foreign countries are translated at the average rate for the applicable period in our consolidated statements of cash flows. The impacts of material transactions generally are recorded at the applicable spot rates in our consolidated statements of operations and cash flows. The effect of exchange rates on cash balances held in foreign currencies are separately reported in our consolidated statements of cash flows.

Transactions denominated in currencies other than our or our subsidiaries' functional currencies are recorded based on exchange rates at the time such transactions arise. Changes in exchange rates with respect to amounts recorded in our consolidated balance sheets related to these non-functional currency transactions result in transaction gains and losses that are reflected in our consolidated statements of operations as unrealized (based on the applicable period end exchange rates) or realized upon settlement of the transactions.

Revenue Recognition

We categorize revenue into two major categories: (i) residential revenue, which includes revenue from fixed and mobile services provided to residential customers, and (ii) B2B revenue, which includes B2B service and subsea network revenue. For additional information regarding our revenue by major category, see note 21. Our revenue recognition policies are as follows.

General. Most of our fixed and mobile residential contracts are not enforceable or do not contain substantive early termination penalties. Accordingly, revenue relating to these customers is recognized on a basis consistent with customers that are not subject to contracts. We account for customer service revenue contracts that include both non-lease and lease components as a single component in all instances where the non-lease component is the predominant component of the arrangement and the other applicable criteria are met.

Residential Fixed and B2B Service Revenue – Fixed Networks. We recognize revenue from video, broadband internet and fixed-line telephony services over our fixed networks to customers in the period the related residential fixed or B2B services are provided. Installation or other upfront fees related to services provided over our fixed networks are generally deferred and recognized as subscription revenue over the contractual period, or longer if the upfront fee results in a material renewal right. We defer upfront installation and certain nonrecurring fees received on B2B contracts where we maintain ownership of the installed equipment. The deferred fees are amortized into revenue on a straight-line basis over the term of the arrangement or the expected period of performance.

We may also sell video, broadband internet and fixed-line telephony services to our customers in bundled packages at a rate lower than if the customer purchased each product on a standalone basis. Arrangement consideration from bundled packages generally is allocated proportionally to the individual service based on the relative standalone price for each respective product or service.

Mobile Revenue – General. Consideration from mobile contracts is allocated to airtime services and handset sales based on the relative standalone prices of each performance obligation.

Mobile Revenue – Airtime Services. We recognize revenue from mobile services in the period the related services are provided. Payments received from prepay customers are recorded as deferred revenue prior to the commencement of services and are recognized as revenue as the services are rendered or usage rights expire.

Mobile Revenue – Handset Revenue. Arrangement consideration allocated to handsets is recognized as revenue when the goods have been transferred to the customer.

Mobile Revenue – Handset Insurance Revenue. We recognize revenue associated with handset insurance on a straight-line basis over the coverage period.

B2B Subsea Network Revenue – Long-term Capacity Contracts. We enter into certain long-term capacity contracts with customers where the customer either pays a fixed fee over time or prepays for the capacity upfront and pays a portion related to operating and maintenance of the network over time. We assess whether prepaid capacity contracts contain a significant financing component. If the financing component is significant, interest expense is accreted over the life of the contract using the effective interest method. The revenue associated with prepaid capacity contracts is deferred and generally recognized on a straight-line basis over the life of the contract. As of December 31, 2020, we have approximately $410 million of unfulfilled performance obligations relating to our long-term capacity contracts, primarily subsea contracts, that generally will be recognized as revenue over an average remaining life of six years.

Government Funding Revenue. From time to time, we received funds from the Federal Communications Commission (**FCC**), primarily in Puerto Rico, related to hurricane restoration efforts. The FCC does not meet the definition of a "customer," accordingly, we recognized the funds granted from the FCC as other revenue in the period in which we are entitled to receive the funds.

Sales, Use and Other Value-Added Taxes (**VAT**). Revenue is recorded net of applicable sales, use and other value-added taxes.

Share-based Compensation

We recognize compensation expense associated with share-based incentive awards based on their grant-date fair values. The grant-date fair values for stock appreciation rights (**SARs**) are estimated using the Black-Scholes-Merton valuation model and the grant-date fair values for restricted stock units (**RSUs**) and performance-based restricted stock units (**PSUs**) are based upon the closing market price of our stock on the date of grant. We may also settle annual bonus-related obligations in the form of equity. We use the liability-based method of accounting in such situation, as the equity to be issued is variable. We use the legal life of the award for the expected life of SARs granted to executives. For SARs granted to non-executives, the expected life is calculated using the "simplified method." We believe the simplified method is appropriate for these awards as we do not have historical exercise data for periods prior to our December 2017 split-off from our former parent company (the **Split-Off**), Liberty Global, Plc (**Liberty Global**). The expected volatility of SARs is based on a weighted average calculation that may include (i) data from a comparable group of peer companies, (ii) Liberty Latin America's share trading history and/or (iii) the implied volatility from traded LILA and LILAK options. We recognize the grant-date fair value of outstanding awards as a charge to operations over the requisite service period, which is generally the vesting period, and account for forfeitures as they occur. We use the straight-line method to recognize share-based compensation expense for share-based incentive awards that do not contain a performance condition and the accelerated expense attribution method for our share-based incentive awards that contain a performance condition and vest on a graded basis.

For additional information regarding our share-based compensation, see note 17.

Earnings (Loss) per Share

Basic earnings (loss) per share (**EPS**) is computed by dividing net earnings (loss) attributable to Liberty Latin America shareholders by the weighted average number of Liberty Latin America common shares (**Liberty Latin America Shares**) during the years presented, as further described below. Diluted EPS presents the dilutive effect, if any, on a per share basis of potential shares as if they had been exercised, vested or converted at the beginning of the periods presented.

The details of our weighted average shares outstanding are set forth below:

	Year ended December 31,		
	2020	**2019**	**2018**
Weighted average shares outstanding - basic and dilutive	195,535,301	184,369,078	176,001,049

We reported losses attributable to Liberty Latin America shareholders during 2020, 2019 and 2018. As a result, the potentially dilutive effect at December 31, 2020, 2019 and 2018 of the following items was not included in the computation of diluted loss per share for such periods because their inclusion would have been anti-dilutive to the computation or, in the case of certain PSUs, because such awards had not yet met the applicable performance criteria: (i) using the if-converted method, the aggregate number of shares potentially issuable under our Convertible Notes of approximately 19.5 million, 18.1 million and nil, respectively, (ii) the aggregate number of shares issuable pursuant to outstanding options, SARs and RSUs of approximately 19.1 million, 15.2 million and 13.1 million, respectively, and (iii) the aggregate number of shares issuable pursuant to outstanding PSUs of approximately 1.1 million, 2.0 million and 2.1 million, respectively. A portion of these amounts relate to Liberty Latin America Shares held by employees of Liberty Global.

Litigation Costs

Legal fees and related litigation costs are expensed as incurred.

(4) Acquisitions and Disposition

Pending Acquisition

Telefónica. On July 30, 2020, we entered into a definitive agreement to acquire Telefónica S.A.'s wireless operations in Costa Rica in an all-cash transaction based upon an enterprise value of $500 million on a cash- and debt-free basis (the **Telefónica-Costa Rica Acquisition**). The transaction is subject to certain customary closing conditions, including regulatory approvals, and is expected to close in the first half of 2021.

2020 Acquisition

AT&T. On October 9, 2019, Liberty Communications and Liberty Latin America entered into a stock purchase agreement (the **Acquisition Agreement**) with certain subsidiaries of AT&T Inc. (**AT&T**) to acquire AT&T's wireless and wireline operations in Puerto Rico and the U.S. Virgin Islands (the **AT&T Acquisition**) in an all-cash transaction. Pursuant to the Acquisition Agreement, we agreed to acquire directly or indirectly, all of the outstanding shares of AT&T Mobility Puerto Rico Inc., AT&T Mobility Virgin Islands Inc. and Beach Holding Corporation, collectively the "**AT&T Acquired Entities**," which are also referred to as Liberty Mobile and its subsidiaries in note 1. The AT&T Acquisition closed on October 31, 2020. The operations acquired in the AT&T Acquisition provide consumer mobile and B2B services in Puerto Rico and the U.S. Virgin Islands. The AT&T Acquisition was valued at an enterprise value of $1,950 million on a cash- and debt-free basis, subject to certain adjustments. We financed this acquisition, including related fees and expenses, through a combination of net proceeds from the 2027 LPR Senior Secured Notes, the 2027 LPR Senior Secured Notes Add-on, the 2026 SPV Credit Facility and available liquidity. For further information about our debt and available liquidity, see note 10.

As a regulatory condition to close the AT&T Acquisition, we were required by the Department of Justice (the **DOJ**) to divest certain B2B operations that are a part of our existing operations in Puerto Rico. To meet the conditions of the DOJ, we entered into an agreement during the fourth quarter of 2020 to divest those B2B operations in Puerto Rico for a stated purchase price of $22 million. The disposal of this B2B business closed in early January 2021.

AT&T will provide ongoing support to the AT&T Acquired Entities under a transition services agreement (the **TSA**) for a period up to 36 months following the closing of the AT&T Acquisition. Services under the TSA include, but are not limited to, (i) network operations, (ii) customer service, (iii) finance and accounting, (iv) information technology, (v) sales and marketing and (vi) content-related services. We may terminate any services under the TSA upon sixty business days' notice to AT&T in accordance with the terms and conditions of the TSA.

The following table sets forth a reconciliation of the stated purchase price included in the Acquisition Agreement to the "**Accounting Purchase Price**" (in millions):

Stated Acquisition Agreement purchase price	$ 1,950.0
Less: Purchase price allocated to purchase of prepaid roaming services (a)	(73.3)
Working capital and other purchase price adjustments:	
Preliminary closing adjustments (b)	(51.7)
Additional working capital consideration (c)	61.0
Net cash paid for the AT&T Acquisition (d)	1,886.0
Contingent purchase price consideration (e)	44.8
Accounting Purchase Price	$ 1,930.8

(a) Represents the portion of the stated Acquisition Agreement purchase price that has been allocated to the purchase of prepaid roaming services. In connection with the Acquisition Agreement, AT&T agreed to give us a $75 million credit against certain roaming services that AT&T provides to the AT&T Acquired Entities for a seven-year period following the closing of the AT&T Acquisition. If the credits are not used for roaming services in that time period, any remaining credit may be used to acquire certain other services from AT&T thereafter. For accounting purposes, we have bifurcated the discounted value of these services from the stated purchase consideration, of which $11 million and $62 million are included in prepaid expenses and other assets, net, respectively, in our December 31, 2020 consolidated balance sheet. The total amount allocated to the purchase of prepaid roaming, $73 million, has been included in net cash provided by operating activities in our consolidated statement of cash flows.

(b) Represents preliminary closing adjustments to the purchase price pursuant to the terms of the Acquisition Agreement for (i) closing working capital balances, (ii) outstanding indebtedness and (iii) shortfalls in equipment subsidies made by AT&T prior to the closing of the AT&T Acquisition.

(c) Represents cash paid subsequent to the closing of the AT&T Acquisition related to certain liabilities of the AT&T Acquired Entities that were not assumed by us under the terms of the Acquisition Agreement.

(d) The net cash paid for the AT&T Acquisition is comprised of (i) the AT&T Acquisition Restricted Cash, as defined and described in note 10, which comprised $1,353 million and was released upon consummation of the AT&T Acquisition, and (ii) $533 million of cash and cash equivalents from available liquidity.

(e) Prior to the closing of the AT&T Acquisition, AT&T made prepayments to the tax authorities of Puerto Rico and the U.S. Virgin Islands. We expect that we will utilize these prepayments, which are reflected in income tax receivable on the consolidated balance sheet, against our future income tax liabilities. Pursuant to the Acquisition Agreement, if we utilize such prepayments to reduce our future income tax liabilities, we are required to pay AT&T additional purchase consideration. The fair value of this contingent purchase consideration has been included in other accrued and current liabilities in our consolidated balance sheet.

We have accounted for the AT&T Acquisition as a business combination using the acquisition method of accounting, whereby the Accounting Purchase Price was allocated to the acquired identifiable net assets of the AT&T Acquired Entities based on assessments of their respective fair values, and the excess of the Accounting Purchase Price over the fair values of these identifiable net assets was allocated to goodwill. The purchase price allocation to the assets acquired and liabilities assumed, including the residual amount allocated to goodwill, is based on preliminary information. This preliminary information is subject to change as we obtain additional facts, primarily related to the acquired property and equipment, intangible assets, leases and income taxes. The information available to us to allocate consideration to acquired property and equipment and intangible assets is impacted as follows:

- **Property and equipment:** the proximity of the acquisition date to our fiscal year-end date of December 31, 2020 and contractual restrictions set forth in the terms of the Acquisition Agreement that limit our ability to access certain historical cost information.

- **Spectrum intangible assets:** the proximity of the acquisition date to our fiscal year-end date of December 31, 2020, which has limited our ability to obtain all necessary information regarding the assets acquired, resulting in the on-going analysis of market data to establish an estimate.

As a result of these factors, we expect the valuation of property and equipment and the spectrum intangible assets, which are each currently based upon the historical values of the AT&T Acquired Entities, will require the following:

- **Property and equipment:** the use of an indirect cost approach, which utilizes trends based on historical cost information, supplemented with a market and direct replacement cost method for certain assets.

- **Spectrum intangible assets:** the anticipated use of either an adjusted "market" approach, which requires the calibration of observable market inputs to reflect the fair value of the assets acquired, or a combination of an adjusted market-based approach with an income-based approach, which requires a wide range of assumptions and inputs, including forecasting costs associated with building a complementary asset base.

Additionally, the valuation of the customer relationship intangible assets, which is currently based upon a preliminary multi-period excess earnings valuation method, will require updates to assumptions and inputs used, including the determination of contributory asset charges dependent on the valuation of the property and equipment and spectrum intangible assets. For additional information regarding fair value methods used in acquisition accounting, see note 6.

During the measurement period, we will adjust the values attributed to our preliminary opening balance sheet, most notably acquired property and equipment, intangible assets, leases and income taxes, as additional information is obtained about facts and circumstances that existed as of the closing date of the AT&T Acquisition. A summary of the preliminary opening balance sheet of the AT&T Acquired Entities at the October 31, 2020 acquisition date is presented in the following table (in millions):

Trade receivables	$	51.0
Prepaid expenses		0.1
Other current assets (a)		102.7
Goodwill (b)		352.2
Property and equipment		711.4
Intangible assets subject to amortization, net (c)		82.7
Intangible assets not subject to amortization (d)		894.4
Other assets (a) (e)		286.6
Accounts payable		(3.0)
Current portion of debt and finance lease obligations		(0.2)
Other accrued and current liabilities (e)		(64.3)
Long-term debt and finance lease obligations		(10.6)
Non-current deferred tax liabilities		(304.9)
Other long-term liabilities (e)		(167.3)
Total purchase price (f)	$	1,930.8

(a) Other current assets and other assets include $67 million and $39 million, respectively, in EIP receivables, as further described in note 3.

(b) The goodwill recognized in connection with the AT&T Acquisition is primarily attributable to (i) the ability to take advantage of the AT&T Acquired Entities' existing mobile network to gain immediate access to potential customers and (ii) synergies that are expected to be achieved through the integration of the AT&T Acquired Entities with Liberty Latin America. Due to the nature of the AT&T Acquisition, no tax deductions related to goodwill are expected.

(c) Amount includes intangible assets related to customer relationships. At October 31, 2020 the weighted average useful life of the acquired customer relationship intangible assets was approximately 10 years.

(d) Amount represents spectrum licenses.

(e) Other assets, other accrued and current liabilities and other long-term liabilities include $196 million, $33 million and $163 million related to operating lease right-of-use assets, current operating lease obligations and non-current operating lease obligations, respectively.

(f) Amount excludes $56 million of direct acquisition costs, including $5 million incurred during 2019. Direct acquisition costs are included in impairment, restructuring and other operating items, net, in our consolidated statements of operations.

Our consolidated statement of operations for the year ended December 31, 2020 includes revenue of $174 million and net loss of $83 million attributable to the AT&T Acquired Entities.

Supplemental Pro Forma Information

The following unaudited pro forma financial information is based on the historical carve-out financial statements of the AT&T Acquired Entities and is intended to provide information about how the AT&T Acquisition may have affected Liberty Latin America's historical consolidated financial statements if it had closed as of January 1, 2019. The pro forma financial information below is based on available information and assumptions that we believe are reasonable. The pro forma financial information is for illustrative and informational purposes only and is not intended to represent or be indicative of what our results of operations would have been had the AT&T Acquisition occurred on the date indicated nor should it be considered representative of our future financial condition or results of operations.

	Year ended December 31,	
	2020	2019
	in millions	
Revenue	$ 4,501.8	$ 4,753.5
Net loss attributable to Liberty Latin America shareholders	$ (554.8)	$ (8.1)

The pro forma information set forth in the table above includes tax-effected pro forma adjustments primarily related to:

i. the impact of estimated costs associated with the TSA that replaced parent-company allocations included in the historical financial statements of the AT&T Acquired Entities;

ii. the impact of new rate agreements associated with roaming, subsea and ethernet services;

iii. the alignment of accounting policies;

iv. interest expense related to additional borrowings in conjunction with the AT&T Acquisition; and

v. the elimination of direct acquisition costs.

2019 Acquisition

UTS. Effective March 31, 2019, we completed the acquisition of an 87.5% interest in United Telecommunication Services N.V. (**UTS**) for an initial cash purchase price of $162 million, which was subject to certain potential post-closing adjustments, based on an enterprise value of $189 million (the **UTS Acquisition**). As noted below, during the first quarter of 2020, the purchase price was reduced by $6 million due to certain post-closing working capital adjustments. During the third quarter of 2019, we increased our ownership interest in UTS from 87.5% to 100%. UTS provides fixed and mobile services to the island nations of Curaçao, St. Maarten, St. Martin, Bonaire, St. Barths, St. Eustatius and Saba. The UTS Acquisition was funded through a $170 million draw on the C&W Revolving Credit Facility, as defined in note 10.

We have accounted for the UTS Acquisition as a business combination using the acquisition method of accounting, whereby the total purchase price was allocated to the acquired identifiable net assets of UTS based on assessments of their respective fair values, and the excess of the purchase price over the fair values of these identifiable net assets was allocated to goodwill. A summary of the purchase price and opening balance sheet of UTS at the effective March 31, 2019 acquisition date is presented in the following table. The opening balance sheet presented below reflects our final purchase price allocation (in millions):

Cash	$ 2.7
Trade receivables	19.0
Other current assets	6.7
Property and equipment	158.4
Goodwill (a)	17.1
Intangible assets subject to amortization	24.0
Other assets	18.2
Accounts payable	(27.9)
Other accrued and current liabilities	(31.9)
Other long-term liabilities	(18.8)
Noncontrolling interest (b)	(11.6)
Total purchase price (c)	$ 155.9

(a) The goodwill recognized in connection with the UTS Acquisition is primarily attributable to (i) the ability to take advantage of UTS's existing broadband communications and mobile networks to gain immediate access to potential customers, and (ii) synergies that are expected to be achieved through the integration of UTS with C&W's existing business in Curacao.

(b) Amount represents the estimated aggregate fair value of the noncontrolling interest in UTS as of March 31, 2019.

(c) Excludes $3 million of direct acquisition costs, including $1 million incurred during 2018. Direct acquisition costs are included in impairment, restructuring and other operating items, net, in our consolidated statements of operations.

Our consolidated statement of operations for the year ended December 31, 2019 includes revenue of $96 million and net earnings of $4 million attributable to UTS. Supplemental pro forma information related to the UTS Acquisition has not been included as it would not have had a significant impact on our results of operations during 2019.

2019 Disposition

During the fourth quarter of 2019, we disposed of our operations in the Seychelles (the **Seychelles Disposition**) at an enterprise value of $104 million. As a result of the Seychelles Disposition, we received $78 million of net cash inflows and recorded a loss on disposition of $3 million.

2018 Acquisition

Cabletica. On February 12, 2018, we entered into a definitive agreement to acquire certain assets and liabilities related to Televisora de Costa Rica S.A.'s (**Televisora**) cable operations in Costa Rica based on an enterprise value of $252 million, subject to certain customary adjustments. As part of the agreement, the owners of Televisora retained a 20% ownership interest in Cabletica. On October 1, 2018, we completed the acquisition of our 80% interest (the **Cabletica Acquisition**) for an effective purchase price of $226 million, after working capital adjustments and deducting the value of Televisora's retained equity interest. The Cabletica Acquisition was financed through a combination of debt and existing cash.

We have accounted for the Cabletica Acquisition as a business combination using the acquisition method of accounting, whereby the total purchase price was allocated to the acquired identifiable net assets of Cabletica based on assessments of their respective fair values, and the excess of the purchase price over the fair values of these identifiable net assets was allocated to goodwill. A summary of the purchase price and opening balance sheet of Cabletica at the October 1, 2018 acquisition date is presented in the following table. The opening balance sheet presented below reflects our final purchase price allocation (in millions):

Other current assets	$ 6.3
Property and equipment	65.8
Goodwill (a)	159.6
Intangible assets subject to amortization (b)	52.7
Other assets	0.1
Other accrued and current liabilities	(17.7)
Non-current deferred tax liabilities	(14.6)
Other long-term liabilities	(0.7)
Noncontrolling interest (c)	(25.1)
Total purchase price (d)	$ 226.4

(a) The goodwill recognized in connection with the Cabletica Acquisition is primarily attributable to the ability to take advantage of Cabletica's existing advanced broadband communications network as a base on which to expand our footprint in the region, and to gain immediate access to potential customers.

(b) Amount primarily includes intangible assets related to customer relationships. As of October 1, 2018, the weighted average useful life of Cabletica's intangible assets was approximately eleven years.

(c) Amount represents the fair value of Televisora's interest in Cabletica as of the October 1, 2018 acquisition date.

(d) Excludes $5 million of direct acquisition costs, including $3 million incurred during 2018.

(5) Derivative Instruments

In general, we seek to enter into derivative instruments to protect against (i) increases in the interest rates on our variable-rate debt and (ii) foreign currency movements, particularly with respect to borrowings that are denominated in a currency other than the functional currency of the borrowing entity. In this regard, through our subsidiaries, we have entered into various derivative instruments to manage interest rate exposure and foreign currency exposure with respect to the U.S. dollar (**$**), the Chilean peso (**CLP**), the Colombian peso (**COP**) and the Jamaican dollar (**JMD**). With the exception of certain foreign currency forward contracts, we do not apply hedge accounting to our derivative instruments. Accordingly, changes in the fair values of most of our derivative instruments are recorded in realized and unrealized gains or losses on derivative instruments in our consolidated statements of operations.

The following table provides details of the fair values of our derivative instrument assets and liabilities:

	December 31, 2020			December 31, 2019		
	Current (a)	Long-term (a)	Total	Current (a)	Long-term (a)	Total
	in millions					
Assets:						
Cross-currency and interest rate derivative contracts (b)	$ 0.7	$ 4.4	$ 5.1	$ 23.4	$ 126.9	$ 150.3
Foreign currency forward contracts	—	—	—	9.8	—	9.8
Total	$ 0.7	$ 4.4	$ 5.1	$ 33.2	$ 126.9	$ 160.1
Liabilities:						
Cross-currency and interest rate derivative contracts (b)	$ 71.4	$ 403.0	$ 474.4	$ 34.9	$ 99.6	$ 134.5
Foreign currency forward contracts	18.8	—	18.8	0.5	—	0.5
Total	$ 90.2	$ 403.0	$ 493.2	$ 35.4	$ 99.6	$ 135.0

(a) Our current derivative assets, long-term derivative assets and long-term derivative liabilities are included in other current assets, net, other assets, net, and other long-term liabilities, respectively, in our consolidated balance sheets.

(b) We consider credit risk relating to our and our counterparties' nonperformance in the fair value assessment of our derivative instruments. In all cases, the adjustments take into account offsetting liability or asset positions within each of our primary borrowing groups (see note 10). The changes in the credit risk valuation adjustments associated with our cross-currency and interest rate derivative contracts resulted in net gains (losses) of $47 million, $4 million and ($23 million) during 2020, 2019 and 2018, respectively. The gain during the 2020 period is primarily due to increased credit risk stemming from market reaction to the COVID-19 outbreak, as further described and defined in note 9. These amounts are included in realized and unrealized gains (losses) on derivative instruments, net, in our consolidated statements of operations. For further information regarding our fair value measurements, see note 6.

The derivative assets set forth in the table above exclude our Weather Derivatives, as they are not accounted for at fair value.

The details of our realized and unrealized gains (losses) on derivative instruments, net, are as follows:

	Year ended December 31,		
	2020	2019	2018
	in millions		
Cross-currency and interest rate derivative contracts (a)	$ (328.6)	$ (21.0)	$ 69.6
Foreign currency forward contracts	(7.8)	9.4	25.2
Weather Derivatives	(16.3)	(5.6)	—
Total	$ (352.7)	$ (17.2)	$ 94.8

(a) The losses for 2020 include a realized gain of $71 million associated with the settlement of certain cross-currency interest rate swaps at VTR in June 2020 that were unwound in connection with the July 2020 refinancing of certain VTR debt. For additional information regarding the refinancing, see note 10.

The following table sets forth the classification of the net cash inflows (outflows) of our derivative instruments:

	Year ended December 31,		
	2020	2019	2018
		in millions	
Operating activities	$ (50.1)	$ 11.2	$ (15.9)
Investing activities	7.4	6.5	(2.3)
Financing activities (a)	182.5	(0.3)	10.0
Total	$ 139.8	$ 17.4	$ (8.2)

(a) The 2020 amount is primarily related to the settlement of certain cross-currency interest rate swaps at VTR. The settlement proceeds were used in part to redeem certain VTR debt in July 2020, as further described in note 10.

Counterparty Credit Risk

We are exposed to the risk that the counterparties to the derivative instruments of our borrowing groups will default on their obligations to us. We manage these credit risks through the evaluation and monitoring of the creditworthiness of, and concentration of risk with, the respective counterparties. In this regard, credit risk associated with our derivative instruments is spread across a relatively broad counterparty base of banks and financial institutions. Collateral has not been posted by either party under the derivative instruments of our borrowing groups. At December 31, 2020, our exposure to counterparty credit risk resulting from our net derivative position was not material.

Each of our borrowing groups has entered into derivative instruments under agreements with each counterparty that contain master netting arrangements that are applicable in the event of early termination by either party to such derivative instrument. The master netting arrangements under each of these master agreements are limited to the derivative instruments governed by the relevant master agreement within each individual borrowing group and are independent of similar arrangements of our other subsidiary borrowing groups.

Details of our Derivative Instruments

Cross-currency Derivative Contracts

As noted above, we are exposed to foreign currency exchange rate risk in situations where our debt is denominated in a currency other than the functional currency of the operations whose cash flows support our ability to service, repay or refinance such debt. Although we generally seek to match the denomination of our borrowings with the functional currency of the operations that are supporting the respective borrowings, market conditions or other factors may cause us to enter into borrowing arrangements that are not denominated in the functional currency of the underlying operations (unmatched debt). Our policy is generally to provide for an economic hedge against foreign currency exchange rate movements, whenever possible and when cost effective to do so, by using derivative instruments to synthetically convert unmatched debt into the applicable underlying currency. The following table sets forth the total notional amounts and the related weighted average remaining contractual lives of our cross-currency swap contracts at December 31, 2020:

Borrowing group	Notional amount due from counterparty	Notional amount due to counterparty	Weighted average remaining life
	in millions		in years
C&W	$ 14.3	JMD 1,817.5	2.0
	$ 56.3	COP 197,014.1	5.6
VTR	$ 1,150.0	CLP 933,800.0	5.5

Interest Rate Derivative Contracts

Interest Rate Swaps

As noted above, we enter into interest rate swaps to protect against increases in the interest rates on our variable-rate debt. Pursuant to these derivative instruments, we typically pay fixed interest rates and receive variable interest rates on specified notional amounts. The following table sets forth the total U.S. dollar equivalents of the notional amounts and the related weighted average remaining contractual lives of our interest rate swap contracts at December 31, 2020:

Borrowing group	Notional amount due from counterparty	Weighted average remaining life
	in millions	in years
C&W (a)	$ 2,250.0	6.7
VTR	$ 198.0	2.1
Liberty Puerto Rico	$ 1,000.0	5.6
Cabletica	$ 53.5	2.5

(a) Includes forward-starting derivative instruments.

Basis Swaps

Basis swaps involve the exchange of attributes used to calculate our floating interest rates, including (i) the benchmark rate, (ii) the underlying currency and/or (iii) the borrowing period. We typically enter into these swaps to optimize our interest rate profile based on our current evaluations of yield curves, our risk management policies and other factors. The following table sets forth the total U.S. dollar equivalents of the notional amounts and the related weighted average remaining contractual lives of our basis swap contracts at December 31, 2020:

Borrowing group	Notional amount due from counterparty	Weighted average remaining life
	in millions	in years
C&W	$ 1,510.0	0.7
Liberty Puerto Rico	$ 1,000.0	0.1

Foreign Currency Forwards Contracts

We enter into foreign currency forward contracts with respect to non-functional currency exposure. At December 31, 2020, our foreign currency forward contracts had total notional amounts due from and to counterparties of $205 million and CLP 159 billion, respectively, with a weighted average remaining contractual life of 0.5 years. All of our foreign currency forward contracts are held by our VTR borrowing group.

(6) Fair Value Measurements

General

We use the fair value method to account for most of our derivative instruments and the available-for-sale method to account for our investment in U.K. Government Gilts. The reported fair values of our derivative instruments as of December 31, 2020 likely will not represent the value that will be paid or received upon the ultimate settlement or disposition of these assets and liabilities, as we expect that the values realized generally will be based on market conditions at the time of settlement, which may occur at the maturity of the derivative instrument or at the time of the repayment or refinancing of the underlying debt instrument.

U.S. GAAP provides for a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value into three broad levels. Level 1 inputs are quoted market prices in active markets for identical assets or liabilities that the reporting entity has the ability to access at the measurement date. Level 2 inputs are inputs other than quoted market prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. Level 3 inputs are unobservable inputs for the asset or liability.

All of our Level 2 inputs (interest rate futures, swap rates and certain of the inputs for our weighted average cost of capital calculations) and certain of our Level 3 inputs (non-interest rate curves and credit spreads) are obtained from pricing services. These inputs, or interpolations or extrapolations thereof, are used in our internal models to calculate, among other items, yield curves, forward interest and currency rates and weighted average cost of capital rates. In the normal course of business, we receive market value assessments from the counterparties to our derivative contracts. Although we compare these assessments to our internal valuations and investigate unexpected differences, we do not otherwise rely on counterparty quotes to determine the fair values of our derivative instruments. The midpoints of applicable bid and ask ranges generally are used as inputs for our internal valuations.

Recurring Fair Value Measurements

Derivatives

In order to manage our interest rate and foreign currency exchange risk, we have entered into various derivative instruments, as further described in note 5. The recurring fair value measurements of these derivative instruments are determined using discounted cash flow models. Most of the inputs to these discounted cash flow models consist of, or are derived from, observable Level 2 data for substantially the full term of these derivative instruments. This observable data mostly includes interest rate futures and swap rates, which are retrieved or derived from available market data. Although we may extrapolate or interpolate this data, we do not otherwise alter this data in performing our valuations. We incorporate a credit risk valuation adjustment in our fair value measurements to estimate the impact of both our own nonperformance risk and the nonperformance risk of our counterparties. Our and our counterparties' credit spreads represent our most significant Level 3 inputs, and these inputs are used to derive the credit risk valuation adjustments with respect to these instruments. Notwithstanding the impact of COVID-19 on our credit risk, we generally would not expect changes in our or our counterparties' credit spreads to have a significant impact on the valuations of these instruments. As a result, we have determined that these valuations continue to fall under Level 2 of the fair value hierarchy. Our credit risk valuation adjustments with respect to our interest rate and cross-currency derivative contracts are quantified and further explained in note 5. Due to the lack of Level 2 inputs for the valuation of the U.S. dollar to the Jamaican dollar cross-currency swaps (the **Sable Currency Swaps**) held periodically by Sable International Finance Limited (**Sable**), a wholly-owned subsidiary of C&W, we believe this valuation falls under Level 3 of the fair value hierarchy. The Sable Currency Swaps are our only Level 3 financial instruments. The fair values of the Sable Currency Swaps at December 31, 2020 and 2019 were $1 million and ($30 million), respectively, which are included in other assets, net, and long-term liabilities, respectively, in our consolidated balance sheets. The change in the fair values of the Sable Currency Swaps resulted in net gains (losses) of $31 million, $6 million and ($14 million) during 2020, 2019 and 2018, respectively, which are reflected in realized and unrealized gains (losses) on derivative instruments, net, in our consolidated statements of operations.

Available-for-sale Investments

Our investment in U.K. Government Gilts falls under Level 1 of the fair value hierarchy. At December 31, 2020 and 2019, the carrying values of our investment in U.K. Government Gilts, which are included in other assets, net, in our consolidated balance sheets, were $38 million and $37 million, respectively.

Nonrecurring Fair Value Measurements

Fair value measurements are also used for purposes of nonrecurring valuations performed in connection with our Convertible Notes, acquisition accounting and impairment assessments.

Conversion Option – Convertible Notes

As further described and defined in note 10, our Convertible Notes include a Conversion Option that we bifurcated from the Convertible Notes and recorded at fair value upon issuance as an equity component in our 2019 consolidated statement of equity. The fair value of the liability component was calculated by measuring the fair value of a similar liability that does not have an associated convertible feature, which was established using the present value of cash flows associated with such instrument based on a 5-year tenor and an estimated yield rate of 6.7%, which is a Level 2 input. The fair value of the equity component was determined by deducting the fair value of the liability component from the proceeds received on issuance of the Convertible Notes.

Acquisition Accounting

The nonrecurring valuations associated with acquisition accounting, which use significant unobservable inputs and therefore fall under Level 3 of the fair value hierarchy, primarily include the valuation of property and equipment, customer relationships and spectrum licenses, as further described below:

- *Property and equipment*. The valuation of property and equipment may use an indirect cost approach, which utilizes trends based on historical cost information, or a combination of indirect cost approach, market approach and direct replacement cost method, which considers factors such as current prices of the same or similar equipment, the age of the equipment and economic obsolescence.

- *Customer relationships.* The valuation of customer relationships is primarily based on an excess earnings methodology, which is a form of a discounted cash flow analysis. The excess earnings methodology for customer relationship intangible assets requires us to estimate the specific cash flows expected from the acquired customer relationships, considering such factors as estimated customer life, the revenue expected to be generated over the life of the customer relationships, contributory asset charges and other factors.

- *Spectrum intangible assets.* The valuation of spectrum intangible assets may use either an adjusted market-based approach, which requires the calibration of observable market inputs to reflect the fair value of the assets acquired, or a combination of an adjusted market-based approach with other methods, such as an income-based approach (e.g. the “greenfield” valuation method), which requires a wide range of assumptions and inputs, including forecasting costs associated with building a complementary asset base.

During the fourth quarter of 2020, we performed a nonrecurring valuation related to the preliminary acquisition accounting for the AT&T Acquisition. For additional information related to the status of valuation work associated with property and equipment and intangible assets acquired in connection with the AT&T Acquisition, see note 4.

In connection with the AT&T Acquisition, we performed a nonrecurring valuation related to the preliminary acquisition accounting for the assets and liabilities acquired. The weighted average discount rate used in the valuation of the customer relationships acquired was approximately 10.5%.

In March 2020, we performed a nonrecurring valuation related to the final acquisition accounting for the UTS Acquisition. The weighted average discount rate used in the valuation of the customer relationships acquired was approximately 13.5%.

During September 2019, we performed a nonrecurring valuation related to the final acquisition accounting for the Cabletica Acquisition. The weighted average discount rate used in the valuation of the customer relationships acquired was approximately 14%.

Impairment Assessments

The nonrecurring valuations associated with impairment assessments, which use significant unobservable inputs and therefore fall under Level 3 of the fair value hierarchy, primarily include the valuation of reporting units for the purpose of testing for goodwill impairment. Unless a reporting unit has a readily determinable fair value, we estimate the fair value of the reporting unit using either a market-based or income-based approach.

As part of our annual goodwill impairment assessment in the fourth quarter of 2020, we first made a qualitative assessment to determine potential impairment and concluded that no events or circumstances indicated that the fair value of any of our reporting units is less than its carrying amount.

During the second quarter of 2020, primarily due to the ongoing economic impacts associated with COVID-19 and organizational restructuring of certain markets within our C&W Caribbean and Networks segment, we performed goodwill impairment analyses of several reporting units within the C&W Caribbean and Networks segment and the C&W Panama segment. We used an income approach to determine the estimated fair values of these reporting units. Under this approach, we utilized a discounted cash flow model as the valuation technique to estimate the fair values of the reporting units from a market participant's perspective. This approach uses certain inputs and assumptions that require estimates and judgments, including forecasted cash flows and appropriate discount rates. Forecasts of future cash flows are largely based on our assumptions using Level 3 inputs, which we consider to be consistent with a market participant's approach. We used the weighted-average cost of capital for each reporting unit as the basis for the discount rate to establish the present value of the expected cash flows for the respective reporting unit. The inputs for our weighted average cost of capital calculations include Level 2 and Level 3 inputs, generally derived from third-party pricing services. We used discount rates ranging from 8.9% to 10.3% in the valuation of the various reporting units within our C&W Caribbean and Networks segment and 9.8% in the valuation of our C&W Panama segment.

During the third quarter of 2019, based on declines in the operating results of our C&W Panama segment, we conducted a goodwill impairment assessment of that reporting unit. We used a market-based valuation approach to determine the fair value of this reporting unit. The fair value of a reporting unit using a market-based approach is estimated based upon a market multiple typically applied to the reporting unit's Adjusted OIBDA, as defined in note 21. We determined the market multiple for each reporting unit taking the following into consideration: (i) public company trading multiples for entities with similar business characteristics as the respective reporting unit, adjusted to reflect an appropriate control premium or discount, a "trading multiple," and (ii) multiples derived from the value of recent transactions for businesses with similar operations and in geographically similar locations, a "transaction multiple."

As part of our annual goodwill impairment assessment in the fourth quarter of 2018, we used a market-based valuation approach, as described above, to determine the fair value of certain reporting units within C&W Caribbean and Networks and our C&W Panama segment.

For additional information regarding goodwill impairment charges resulting from these impairment analyses, see note 9.

(7) Investments

We hold a 49% interest in TSTT. Our investment in TSTT is included in other assets, net, in our consolidated balance sheets. Pursuant to certain conditions to the regulatory approval of the acquisition of Columbus International, Inc. by C&W in 2015, we are required to dispose of our investment in TSTT, subject to certain terms and conditions. During the third quarter of 2018, we recorded an impairment charge of $16 million due to a decline in the estimated fair value of this investment. As of December 31, 2020 and 2019, the carrying value of our investment in TSTT was $77 million. We cannot predict when, or if, we will be able to dispose of this investment at an acceptable price. As such, no assurance can be given that we will be able to recover the carrying value of our investment in TSTT.

(8) Insurance Recoveries

The 2017 Hurricanes impacted a number of our markets in the Caribbean, resulting in varying degrees of damage to homes, businesses and infrastructure in these markets. In October 2016, our operations in the Bahamas, which is part of our C&W Caribbean and Networks segment, were significantly impacted by Hurricane Matthew.

In December 2018, we settled our insurance claims for the 2017 Hurricanes and Hurricane Matthew as follows: (i) $109 million for the 2017 Hurricanes, after deducting $30 million of self-insurance, and (ii) $12 million for Hurricane Matthew, after deducting $15 million of self-insurance.

The following table summarizes the impact of the insurance settlements to our consolidated statement of operations for the year ended December 31, 2018 (in millions):

Other operating costs and expenses	$	4.6
Business interruption loss recovery (a)		59.5
Impairment, restructuring and other operating items, net (a)		35.7
Total	$	99.8

(a) Each amount includes $3 million attributable to Hurricane Matthew.

During 2018, we received net advance payments related to the 2017 Hurricanes and Hurricane Matthew from our third-party insurance provider totaling $51 million, of which $21 million is presented as a cash inflow from investing activities on our consolidated statement of cash flows. With respect to the net advance payments, $45 million was provided to Liberty Puerto Rico and $6 million was provided to C&W Caribbean and Networks.

During the first quarter of 2019, we received the then outstanding insurance settlement amount of $67 million, of which $33 million and $34 million have been presented as operating and investing activities, respectively, in our consolidated statement of cash flows. With respect to the cash received, $37 million, $27 million and $3 million was provided to C&W Caribbean and Networks, Liberty Puerto Rico and our Corporate operations, respectively.

(9) Long-lived Assets

Impairment Charges

The following table sets forth the details of our impairment charges:

	C&W Caribbean and Networks	C&W Panama	VTR/Cabletica	Liberty Puerto Rico	Total
			in millions		
Year ended December 31, 2020:					
Goodwill	$ 99.0	$ 177.0	$ —	$ —	$ 276.0
Property and equipment and other	3.9	—	1.7	1.5	7.1
Total impairment charges	$ 102.9	$ 177.0	$ 1.7	$ 1.5	$ 283.1
Year ended December 31, 2019:					
Goodwill	$ —	$ 181.9	$ —	$ —	$ 181.9
Property and equipment and other	17.2	—	0.3	—	17.5
Total impairment charges	$ 17.2	$ 181.9	$ 0.3	$ —	$ 199.4
Year ended December 31, 2018:					
Goodwill	$ 2.5	$ 607.5	$ —	$ —	$ 610.0
Property and equipment and other	5.0	—	0.3	0.4	5.7
Total impairment charges	$ 7.5	$ 607.5	$ 0.3	$ 0.4	$ 615.7

We evaluate goodwill and other indefinite-lived intangible assets (primarily spectrum licenses and cable television franchise rights) for impairment at least annually on October 1 and whenever facts and circumstances indicate that their carrying amounts may not be recoverable as further outlined in note 3. Based upon our October 1, 2020 evaluation, we did not identify any impairments of such assets. However, declines in the estimated fair value of certain reporting units within our C&W Caribbean and Networks segment or our C&W Panama segment could result in the need to record goodwill impairment charges. If, among other factors, (i) our equity values were to decline significantly or (ii) the adverse impacts stemming from COVID-19 (as defined below), competition, economic, regulatory or other factors, including macro-economic and demographic trends, were to cause our results of operations or cash flows to be worse than anticipated, we could conclude in future periods that impairment charges are required in order to reduce the carrying values of the goodwill and, to a lesser extent, other long-lived assets of our C&W Caribbean and Networks segment or our C&W Panama segment. Any such impairment charges could be significant.

COVID-19. During the first quarter of 2020, the World Health Organization declared the outbreak of a novel strain of Coronavirus (**COVID-19**) a "pandemic," pointing to the sustained risk of further global spread. COVID-19 has negatively impacted our results of operations and resulted in systemic disruption of the worldwide equity markets, and the market values of our publicly-traded equity declined significantly beginning in late February 2020. As a result of the impact of COVID-19 on our results of operations, we evaluated whether the facts and circumstances and available information resulted in the need for an impairment assessment for any of our long-lived assets, including goodwill, and during the second quarter of 2020 concluded assessments were required with respect to our goodwill, which resulted in goodwill impairments in our C&W Caribbean and Networks segment and our C&W Panama segment.

C&W Panama. During our 2018 annual goodwill impairment test, we concluded a $608 million impairment was necessary for our C&W Panama segment and during the third quarter of 2019 we concluded that an additional $182 million goodwill impairment charge was necessary based on further deterioration in the C&W Panama segment's operating results. These impairments primarily resulted from the impact of a significant increase in competition, particularly with respect to our prepaid mobile business. The accumulation of prepaid mobile subscriber losses, together with associated adverse impacts to average monthly subscription revenue per mobile subscriber, negatively impacted the actual results during these periods and the then expected future financial performance of the Panamanian reporting unit, resulting in the impairments during 2018 and 2019.

Hurricane Dorian. In September 2019, our operations in the Bahamas, which is part of our C&W Caribbean and Networks segment, were impacted by Hurricane Dorian resulting in significant damage to homes, businesses and infrastructure. Based on our initial estimates of the impacts of the hurricane to our operations, during the third quarter of 2019, we recorded an impairment charge of $16 million to write-off the net carrying amount of property and equipment that was damaged beyond repair.

For additional information regarding the fair value methods and related assumptions used in our impairment assessments, see note 6.

Goodwill

Changes in the carrying amount of our goodwill during 2020 are set forth below:

	January 1, 2020	Acquisitions and related adjustments	Foreign currency translation adjustments and other	Impairments (a)	December 31, 2020
			in millions		
C&W Caribbean and Networks	$ 3,316.7	$ (12.0)	$ (93.7)	$ (99.0)	$ 3,112.0
C&W Panama	794.1	—	—	(177.0)	617.1
VTR/Cabletica	517.9	—	8.6	—	526.5
Liberty Puerto Rico	277.7	352.2	—	—	629.9
Total	$ 4,906.4	$ 340.2	$ (85.1)	$ (276.0)	$ 4,885.5

(a) Amounts represent impairment charges associated with various reporting units based primarily on the economic impacts associated with COVID-19, as further described above.

Changes in the carrying amount of our goodwill during 2019 are set forth below:

	January 1, 2019	Acquisitions and related adjustments	Disposition	Foreign currency translation adjustments and other	Impairments (a)	December 31, 2019
			in millions			
C&W Caribbean and Networks	$ 3,349.6	$ 37.1	$ (33.6)	$ (36.4)	$ —	$ 3,316.7
C&W Panama	976.0	—	—	—	(181.9)	794.1
VTR/Cabletica	530.0	8.3	—	(20.4)	—	517.9
Liberty Puerto Rico	277.7	—	—	—	—	277.7
Total	$ 5,133.3	$ 45.4	$ (33.6)	$ (56.8)	$ (181.9)	$ 4,906.4

(a) Amount primarily relates to an impairment charge associated with the deterioration of the C&W Panama segment's operating results, as further described above.

At December 31, 2020 and 2019, our accumulated goodwill impairments were $1,624 million and $1,348 million, respectively.

Property and Equipment, Net

The details of our property and equipment and the related accumulated depreciation are set forth below:

	Estimated useful life at December 31, 2020	December 31, 2020	December 31, 2019
		in millions	
Distribution systems	3 to 25 years	$ 5,082.9	$ 4,299.6
Customer premises equipment	3 to 5 years	1,935.5	1,763.8
Support equipment, buildings and land	3 to 40 years	1,721.3	1,530.9
		8,739.7	7,594.3
Accumulated depreciation		(3,828.3)	(3,293.2)
Net carrying amount		$ 4,911.4	$ 4,301.1

Depreciation expense related to our property and equipment was $731 million, $697 million and $641 million during 2020, 2019 and 2018, respectively.

We recorded non-cash increases to our property and equipment related to vendor financing arrangements of $99 million, $96 million and $54 million during 2020, 2019 and 2018, respectively.

Intangible Assets Subject to Amortization, Net

The details of our intangible assets subject to amortization, which had estimated useful lives ranging from four to 15 years at December 31, 2020, are set forth below:

	December 31,	
	2020	2019
	in millions	
Gross carrying amount:		
Customer relationships	$ 1,554.8	$ 1,482.9
Licenses and other	159.4	170.1
Total gross carrying amount	1,714.2	1,653.0
Accumulated amortization:		
Customer relationships	(813.0)	(645.5)
Licenses and other	(42.3)	(38.3)
Total accumulated amortization	(855.3)	(683.8)
Net carrying amount	$ 858.9	$ 969.2

Amortization expense related to intangible assets with finite useful lives was $184 million, $174 million and $189 million during 2020, 2019 and 2018, respectively.

Based on our amortizable intangible asset balance at December 31, 2020, we expect that amortization expense will be as follows for the next five years and thereafter (in millions):

2021	$ 184.6
2022	164.3
2023	143.9
2024	108.9
2025	65.2
Thereafter	192.0
Total	$ 858.9

Intangible Assets Not Subject to Amortization

The details of our intangible assets not subject to amortization are set forth below:

	December 31,	
	2020	2019
	in millions	
Spectrum licenses (a)	$ 909.7	$ 8.4
Cable television franchise rights (b)	540.0	540.0
Other	15.9	12.4
Total intangible assets not subject to amortization	$ 1,465.6	$ 560.8

(a) The 2020 amount includes an estimated $894 million attributable to the AT&T Acquisition. For additional information regarding the assets acquired as part of the AT&T Acquisition, see note 4.

(b) Cable television franchise rights are held by Liberty Puerto Rico.

(10) Debt and Finance Lease Obligations

The U.S. dollar equivalents of the components of our debt are as follows:

	December 31, 2020			Estimated fair value (c)		Principal amount	
	Weighted average interest rate (a)	Unused borrowing capacity (b)		December 31,		December 31,	
		Borrowing currency	US $ equivalent	2020	2019	2020	2019
				in millions			
Convertible Notes (d)	2.00 %	$ —	$ —	$ 381.8	$ 430.1	$ 402.5	$ 402.5
C&W Notes	6.74 %	—	—	2,435.8	2,270.9	2,270.0	2,120.0
C&W Credit Facilities	2.81 %	(e)	769.7	1,834.7	2,017.1	1,856.2	2,006.1
VTR Notes	5.72 %	—	—	1,239.7	1,290.9	1,150.0	1,260.0
VTR Credit Facilities	4.78 %	(f)	263.2	243.8	229.7	244.5	231.4
LPR Senior Secured Notes	6.75 %	—	—	1,389.4	1,278.3	1,290.0	1,200.0
LPR Credit Facilities	5.14 %	$ 125.0	125.0	1,002.5	1,012.1	1,000.0	1,000.0
Cabletica Credit Facilities (g)	8.39 %	$ 15.0	15.0	119.3	123.8	119.6	124.8
Vendor financing (h)	2.50 %	—	—	168.1	167.7	168.1	167.7
Total debt before premiums, discounts and deferred financing costs	5.22 %		$ 1,172.9	$ 8,815.1	$ 8,820.6	$ 8,500.9	$ 8,512.5

The following table provides a reconciliation of total debt before premiums, discounts and deferred financing costs to total debt and finance lease obligations:

	December 31,	
	2020	2019
	in millions	
Total debt before premiums, discounts and deferred financing costs	$ 8,500.9	$ 8,512.5
Premiums, discounts and deferred financing costs, net (d)	(157.1)	(146.1)
Total carrying amount of debt	8,343.8	8,366.4
Finance lease obligations	13.4	3.6
Total debt and finance lease obligations	8,357.2	8,370.0
Less: Current maturities of debt and finance lease obligations	(161.9)	(180.2)
Long-term debt and finance lease obligations	$ 8,195.3	$ 8,189.8

(a) Represents the weighted average interest rate in effect at December 31, 2020 for all borrowings outstanding pursuant to each debt instrument, including any applicable margin. The interest rates presented represent stated rates and do not include the impact of derivative instruments, deferred financing costs, original issue premiums or discounts and commitment fees, all of which affect our overall cost of borrowing.

(b) Unused borrowing capacity represents the maximum availability under the applicable facility at December 31, 2020 without regard to covenant compliance calculations or other conditions precedent to borrowing. At December 31, 2020, the full amount of unused borrowing capacity was available to be borrowed under each of the respective subsidiary facilities, both before and after completion of the December 31, 2020 compliance reporting requirements, except for available capacity under the VTR Revolving Credit Facilities that is currently limited to $185 million. At December 31, 2020, and except as may be limited by tax and legal considerations, the presence of noncontrolling interests, foreign currency exchange restrictions with respect to certain C&W subsidiaries and other factors, there were no restrictions on the respective subsidiary's ability to upstream cash from this availability to Liberty Latin America or its subsidiaries or other equity holders.

(c) The estimated fair values of our debt instruments are determined using the average of applicable bid and ask prices (mostly Level 1 of the fair value hierarchy) or, when quoted market prices are unavailable or not considered indicative of fair value, discounted cash flow models (mostly Level 2 of the fair value hierarchy). The discount rates used in the cash flow models are based on the market interest rates and estimated credit spreads of the applicable entity, to the extent available, and other relevant factors. For additional information regarding fair value hierarchies, see note 6.

(d) The interest rate reflects the stated rate of the Convertible Notes. The effective interest rate of the Convertible Notes is 6.7%, which considers the impact of the discount recorded in connection with the Conversion Option, as further described below.

(e) The C&W Credit Facilities unused borrowing capacity comprise certain U.S. dollar and Trinidad & Tobago dollar revolving credit facilities. For further information, see *C&W Credit Facilities* below.

(f) The VTR Credit Facilities comprise certain CLP term loans and U.S. dollar and CLP revolving credit facilities, including unused borrowing capacity. For further information, see *VTR Credit Facilities* below.

(g) The Cabletica Credit Facilities comprise certain Costa Rican colón (**CRC**) and U.S. dollar term loans and a U.S. dollar revolving credit facility. For further information, see *Cabletica Credit Facilities* below.

(h) Represents amounts owed pursuant to interest-bearing vendor financing arrangements that are used to finance certain of our operating expenses and property and equipment additions. These obligations are generally due within one year and include VAT that was paid on our behalf by the vendor. Our operating expenses include $108 million, $130 million and $172 million for the years ended December 31, 2020, 2019 and 2018, respectively, that were financed by an intermediary and are reflected on the borrowing date as a hypothetical cash outflow within net cash provided by operating activities and a hypothetical cash inflow within net cash provided by financing activities in our consolidated statements of cash flows. Repayments of vendor financing obligations are included in payments of principal amounts of debt and finance lease obligations in our consolidated statements of cash flows.

General Information

At December 31, 2020, except for our Convertible Notes (as defined and described below), all of our outstanding debt had been incurred by one of our four primary "borrowing groups": C&W, VTR, Liberty Puerto Rico and Cabletica.

Credit Facilities. Each of our borrowing groups has entered into one or more credit facility agreements with certain financial institutions. Each of these credit facilities contain certain covenants, the more notable of which are as follows:

- Our credit facilities contain certain net leverage ratios, as specified in the relevant credit facility, which are required to be complied with on an incurrence and/or maintenance basis;
- Our credit facilities contain certain restrictions which, among other things, restrict the ability of the entities of the relevant borrowing group to (i) incur or guarantee certain financial indebtedness, (ii) make certain disposals and acquisitions, (iii) create certain security interests over their assets, in each case, subject to certain customary and agreed exceptions, and (iv) make certain restricted payments to their direct and/or indirect parent companies through dividends, loans or other distributions, subject to compliance with applicable covenants;
- Our credit facilities require that certain entities of the relevant borrowing group guarantee the payment of all sums payable under the relevant credit facility and such entities are required to have first-ranking security granted over their shares and, in certain borrowing groups, over substantially all of their assets to secure the payment of all sums payable thereunder;
- In addition to certain mandatory prepayment events, the instructing group of lenders under the relevant credit facility may cancel the commitments thereunder and declare the loans thereunder due and payable after the applicable notice period following the occurrence of a change of control (as specified in the relevant credit facility);

- Our credit facilities contain certain customary events of default, the occurrence of which, subject to certain exceptions and materiality qualifications, would allow the instructing group of lenders to (i) cancel the total commitments, (ii) accelerate all outstanding loans and terminate their commitments thereunder and/or (iii) declare that all or part of the loans be payable on demand;
- Our credit facilities require entities of the relevant borrowing group to observe certain affirmative and negative undertakings and covenants, which are subject to certain materiality qualifications and other customary and agreed exceptions; and
- In addition to customary default provisions, our credit facilities generally include certain cross-default and cross-acceleration provisions with respect to other indebtedness of entities of the relevant borrowing group, subject to agreed minimum thresholds and other customary and agreed exceptions.

Senior and Senior Secured Notes. Our C&W, VTR and Liberty Puerto Rico borrowing groups have issued senior and/or senior secured notes. In general, our senior and senior secured notes (i) are senior obligations of each respective issuer within the relevant borrowing group that rank equally with all of the existing and future debt of such issuer and, in the case of our senior secured notes, are senior to all existing and future subordinated debt of each respective issuer within the relevant borrowing group, (ii) contain, in most instances, guarantees from other entities of the relevant borrowing group (as specified in the applicable indenture) and (iii) are secured by pledges over the shares of certain entities of the relevant borrowing group and, in certain instances, over substantially all of the assets of those entities. In addition, the indentures governing our senior and senior secured notes contain certain covenants, the more notable of which are as follows:

- Our notes contain certain customary incurrence-based covenants. In addition, our notes provide that any failure to pay principal prior to expiration of any applicable grace period, or any acceleration with respect to other indebtedness of the issuer or certain other members of the relevant borrowing group, over agreed minimum thresholds (as specified under the applicable indenture), is an event of default under the respective notes;
- Our notes contain certain restrictions that, among other things, restrict the ability of the entities of the relevant borrowing group to (i) incur or guarantee certain financial indebtedness, (ii) make certain disposals and acquisitions, (iii) create certain security interests over their assets, in each case, subject to certain customary and agreed exceptions and (iv) make certain restricted payments to its direct and/or indirect parent companies through dividends, loans or other distributions, subject to compliance with applicable covenants; and
- If the relevant issuer or certain of its subsidiaries (as specified in the applicable indenture) sell certain assets, such issuer must offer to repurchase the applicable notes at par, or if a change of control (as specified in the applicable indenture) occurs, such issuer must offer to repurchase all of the relevant notes at a redemption price of 101%.

Liberty Latin America – Convertible Notes

In June 2019, Liberty Latin America issued $403 million principal amount of 2.0% convertible senior notes (the **Convertible Notes**) due July 15, 2024. Interest on the Convertible Notes is payable semi-annually on January 15 and July 15. The Convertible Notes are general unsecured obligations of the Company and are structurally subordinated to all the debt and other liabilities of our subsidiaries.

Conversion Rights. Subject to certain conditions, and adjustments if certain events occur (as specified in the indenture governing the Convertible Notes), including the Rights Offering (as discussed further below), as of December 31, 2020, the Convertible Notes may be converted at a conversion rate equal to 48.4315 Class C common shares per $1,000 principal amount of the Convertible Notes (equivalent to a conversion price of approximately $20.65 per Class C common share), the "**Conversion Option**". Any conversions of the Convertible Notes may be settled, at the election of the Company, in cash, Class C common shares or a combination thereof.

In September 2020, we completed a Rights Offering, as defined and further described in note 19, whereby we issued 49,049,073 of our Class C common shares. In connection with the Rights Offering, subject to certain anti-dilution provisions in the indenture governing the Convertible Notes, the conversion rate for the Convertible Notes was adjusted from 44.9767 to 48.4315 Class C common shares per $1,000 principal amount of the Convertible Notes.

The Convertible Notes may be converted at the option of the holders at any time prior to the close of business on January 12, 2024, only under the following circumstances:

- during any calendar quarter (and only during such calendar quarter), if the last reported sale price of our Class C common shares for at least 20 trading days (whether or not consecutive) during the period of 30 consecutive trading days ending on and including the last trading day of the immediately preceding calendar quarter is greater than or equal to 130% of the applicable conversion price of the Convertible Notes on each applicable trading day;

- during the five consecutive business day period immediately after any five consecutive trading day period (the "measurement period"), in which the trading price per $1,000 principal amount of the Convertible Notes for each trading day of that measurement period was less than 98% of the product of the last reported sale price of our Class C common shares and the conversion rate on each such trading day;

- if we give notice of redemption, as described below; or

- upon the occurrence of specified corporate transactions.

On and after January 15, 2024 until the close of business on the second scheduled trading day immediately preceding the maturity date, holders of the Convertible Notes may convert their notes at any time, regardless of the foregoing circumstances.

We determined the Conversion Option should be bifurcated from the debt host instrument (the Convertible Notes) and accounted for as a separate financial instrument that qualifies for equity classification. Accordingly, we bifurcated the Conversion Option from the Convertible Notes and initially recorded the estimated fair value of $78 million as additional paid-in capital and debt discount. The debt discount will be accreted through interest expense, using the effective interest method, through maturity of the Convertible Notes or when the Conversion Option no longer qualifies for equity classification, if ever. At December 31, 2020, the carrying value of the Convertible Notes was $342 million and the unamortized debt discount on the Convertible Notes was $58 million.

Redemption Rights. Other than a redemption for a change in certain tax laws, we may not redeem the Convertible Notes prior to July 19, 2022. On or after July 19, 2022 but prior to the 85th scheduled trading day immediately preceding July 15, 2024, we may redeem all or a portion of the notes for cash, if the last reported sale price of our Class C common shares has been at least 130% of the conversion price then in effect on (i) each of at least 20 trading days (whether or not consecutive) during the 30 consecutive trading day period ending on, and including, the trading day immediately preceding the date on which we provide notice of redemption and (ii) the trading day immediately preceding the date we provide such notice.

Other. If a fundamental change (as defined in the indenture) occurs, holders of the Convertible Notes may require the Company to repurchase all or a portion of their notes for cash at a price equal to 100% of the principal amount of the notes to be repurchased, plus any accrued and unpaid interest to, but excluding, the fundamental change repurchase date. In addition, following certain corporate transactions that occur prior to the maturity date of the Convertible Notes or the delivery of a notice of redemption, we will increase the applicable conversion rate for a holder who elects to convert in connection with such corporate transactions or notice of redemption in certain circumstances by a number of additional Class C common shares, as described in the related indenture.

We used the net proceeds from the issuance of the Convertible Notes to (i) fund the cost of the Capped Calls, as defined and further described in note 19, and (ii) for other general corporate purposes, including funding a portion of the AT&T Acquisition.

C&W Notes

The details of the outstanding C&W Notes as of December 31, 2020 are summarized in the following table:

C&W Notes	Maturity	Interest rate	Outstanding principal amount: Borrowing currency	Outstanding principal amount: U.S. $ equivalent	Carrying value (a)
				in millions	
Senior Secured Notes:					
2027 C&W Senior Secured Notes	September 7, 2027	5.750 %	$ 550.0	$ 550.0	$ 548.8
Senior Notes:					
2026 C&W Senior Notes	October 15, 2026	7.500 %	$ 500.0	500.0	494.8
2027 C&W Senior Notes	September 15, 2027	6.875 %	$ 1,220.0	1,220.0	1,217.1
Total				$ 2,270.0	$ 2,260.7

(a) Amounts are inclusive or net of original issue premiums, discounts and deferred financing costs, as applicable.

Financing and Refinancing Transactions

C&W Borrowing Group Refinancing Transactions. In January 2020, C&W completed a series of transactions contemplated by and permitted under its existing debt agreements (the **C&W Borrowing Group Refinancing Transactions**) that ultimately resulted in the 2026 C&W Senior Notes and the 2027 C&W Senior Notes (previously issued by C&W Senior Financing Designated Activity Company) instead being directly issued by a wholly-owned subsidiary of C&W, C&W Senior Finance Limited (**C&W Senior Finance**). In connection with the C&W Borrowing Group Refinancing Transactions, the loans previously made by C&W Senior Financing Designated Activity Company are no longer outstanding. The terms and conditions applicable to the 2026 C&W Senior Notes and the 2027 C&W Senior Notes otherwise remain substantively unchanged.

2027 C&W Senior Secured Notes. In April 2019, Sable issued $400 million principal amount of 5.750% senior secured notes, at 99.195% of par, due September 7, 2027 (the **2027 C&W Senior Secured Notes**). Interest on the 2027 C&W Senior Secured Notes is payable semi-annually on January 7 and July 7.

The net proceeds from the 2027 C&W Senior Secured Notes were primarily used to (i) redeem $150 million of aggregate principal amount under the 2022 C&W Senior Notes, as further described below, according to the redemption terms of the indenture, comprising (a) the 105.156% redemption price and (b) accrued and unpaid interest on the redeemed notes, and (ii) repay $235 million of aggregate principal amount under the C&W Term Loan B-4 Facility. In connection with this transaction, we recognized a net loss on debt modification and extinguishment of $6 million, which primarily includes the net effect of redemption premiums paid and the write-off of unamortized premiums and discounts.

2027 C&W Senior Secured Notes Add-on. In January 2020, Sable issued an additional $150 million aggregate principal amount, at 106.0% of par, under the existing 2027 C&W Senior Secured Notes indenture (the **2027 C&W Senior Secured Notes Add-on**). The terms and conditions of the 2027 C&W Senior Secured Notes Add-on are consistent with the original indenture.

The net proceeds from the C&W Term Loan B-5 Facility (as defined and described below) and the 2027 C&W Senior Secured Notes Add-on were primarily used to repay in full the $1,640 million outstanding principal amount under the C&W Term Loan B-4 Facility (as defined and described below), including accrued and unpaid interest. In connection with these transactions, we recognized a loss on debt modification and extinguishment of $3 million, which primarily includes the write-off of unamortized discounts and deferred financing costs.

2026 C&W Senior Notes. In October 2018, the 2026 C&W Senior Notes were issued. Interest on the 2026 C&W Senior Notes is payable semi-annually on April 15 and October 15.

The net proceeds from the 2026 C&W Senior Notes were partially used to (i) repurchase £63 million ($80 million, at the applicable rate) of outstanding principal under the 2019 C&W Senior Notes, as further described below, and (ii) redeem $275 million of outstanding principal under the 2022 C&W Senior Notes. In connection with these transactions, we recognized a net loss on debt modification and extinguishment of $13 million, which primarily includes the net effect of redemption premiums paid, the write-off of unamortized premiums, discounts and deferred financing costs and the payment of third-party costs.

2027 C&W Senior Notes Add-on A. In April 2019, an additional $300 million aggregate principal amount was issued, at 99.205% of par, under the existing 2027 C&W Senior Notes indenture (the **2027 C&W Senior Notes Add-on A**).

The net proceeds from the 2027 C&W Senior Notes Add-on A were primarily used to (i) repay in full the $170 million outstanding principal amount under the C&W Revolving Credit Facility and (ii) redeem $115 million of aggregate principal amount of the 2022 C&W Senior Notes according to the redemption terms of the related indenture, comprising (a) a 105.156% redemption price and (b) accrued and unpaid interest on the redeemed notes. In connection with this transaction, we recognized a net loss on debt modification and extinguishment of $4 million, which includes the net effect of redemption premiums paid and the write-off of unamortized premiums.

2027 C&W Senior Notes Add-on B. In July 2019, an additional $220 million aggregate principal amount was issued, at 103.625% of par, under the existing 2027 C&W Senior Notes indenture (the **2027 C&W Senior Notes Add-on B**).

The net proceeds from the 2027 C&W Senior Notes Add-on B were primarily used to redeem the remaining aggregate principal amount of the 2022 C&W Senior Notes of $210 million according to the redemption terms of the related indenture, comprising (a) a 103.438% redemption price and (b) accrued and unpaid interest on the redeemed notes. In connection with this transaction, we recognized a net loss on debt modification and extinguishment of $4 million, which primarily includes the net effect of redemption premiums paid and the write-off of unamortized premiums.

Redemption Rights. Subject to the circumstances described below:

- The 2026 C&W Senior Notes, 2027 C&W Senior Notes and 2027 C&W Senior Secured Notes are non-callable until October 15, 2021, September 15, 2022 and September 7, 2022, respectively.

- At any time prior to (i) October 15, 2021 in the case of the 2026 C&W Senior Notes, (ii) September 15, 2022 in the case of the 2027 C&W Senior Notes and (iii) September 7, 2022 in the case of the 2027 C&W Senior Secured Notes, Sable and C&W Senior Finance (as applicable) may redeem some or all of the applicable notes by paying a price equal to 100% of the principal amount of the applicable notes redeemed plus accrued and unpaid interest and a "make-whole" premium, which is generally the present value of all remaining scheduled interest payments to October 15, 2021, September 15, 2022 or September 7, 2022 (as applicable) using the discount rate (as specified in the indenture) as of the redemption date plus 50 basis points.

- At any time prior to (i) October 15, 2021 in the case of the 2026 C&W Senior Notes, (ii) September 15, 2022 in the case of the 2027 C&W Senior Notes and (iii) September 7, 2022 in the case of the 2027 C&W Senior Secured Notes, subject to certain restrictions (as specified in the applicable indenture), up to 40% of each of the 2026 C&W Senior Notes, 2027 C&W Senior Notes and 2027 C&W Senior Secured Notes may be redeemed with the net proceeds of one or more specified equity offerings at a redemption price equal to 107.500%, 106.875% and 105.750%, respectively, of the principal amount redeemed, plus accrued and unpaid interest and additional amounts (as specified in the applicable indenture), if any, to the applicable redemption date.

- Prior to September 7, 2022, during each 12-month period commencing on April 5, 2019, up to 10% of the principal amount of the 2027 C&W Senior Secured Notes may be redeemed at a redemption price equal to 103% of the principal amount redeemed plus accrued and unpaid interest to the redemption date.

Sable and C&W Senior Finance (as applicable) may redeem some or all of the 2026 C&W Senior Notes, 2027 C&W Senior Notes and 2027 C&W Senior Secured Notes, respectively, at the following redemption prices (expressed as a percentage of the principal amount) plus accrued and unpaid interest and additional amounts (as specified in the indenture), if any, to the applicable redemption date, as set forth below:

	Redemption Price		
	2026 C&W Senior Notes	2027 C&W Senior Notes	2027 C&W Senior Secured Notes
12-month period commencing:	October 15	September 15	September 7
2021	103.750%	N.A.	N.A.
2022	101.875%	103.438%	102.875%
2023	100.000%	101.719%	101.438%
2024	100.000%	100.859%	100.000%
2025 and thereafter	100.000%	100.000%	100.000%

2022 C&W Senior Notes. In November 2018, C&W completed the redemption of $275 million of aggregate principal amount of the 6.875% secured notes due August 1, 2022 (the **2022 C&W Senior Notes**) for total consideration of $294 million, including (i) the 105.156% redemption price and (ii) accrued and unpaid interest on the redeemed notes. In connection with this transaction, we recognized a net loss on debt modification and extinguishment of $11 million, which primarily includes the net effect of redemption premiums paid and the write-off of unamortized premiums.

2019 C&W Senior Notes. In October 2018, C&W launched a tender offer to repurchase, for cash, any and all of its outstanding 2019 C&W Senior Notes (the **Tender Offer**). The price of the Tender Offer was 103% of the principal amount of the bonds tendered, plus accrued and unpaid interest up to, but not including, the payment date. Pursuant to the Tender Offer, which was completed on October 31, 2018, we paid total consideration of £68 million ($87 million at the transaction date), including accrued interest of £3 million ($4 million at the transaction date), for 43.0% of the outstanding 2019 C&W Senior Notes and cancelled the 2019 C&W Senior Notes that were tendered.

In March 2019, C&W repaid in full the outstanding principal amount under the 2019 C&W Senior Notes for total consideration of £91 million ($120 million at the transaction date), including accrued interest of £7 million ($9 million at the transaction date).

C&W Credit Facilities

The C&W Credit Facilities are the senior secured credit facilities of certain subsidiaries of C&W. The details of our borrowings under the C&W Credit Facilities as of December 31, 2020 are summarized in the following table:

			Unused borrowing capacity		Outstanding principal amount		
C&W Credit Facilities	Maturity	Interest rate	Borrowing currency	US $ equivalent	Borrowing currency	US $ equivalent	Carrying value (a)
					in millions		
C&W Revolving Credit Facility (b)	January 30, 2026	LIBOR (c) + 3.25%	$ 625.0	$ 625.0	$ —	$ —	$ —
C&W Term Loan B-5 Facility	January 31, 2028	LIBOR + 2.25%	$ —	—	$ 1,510.0	1,510.0	1,492.2
C&W Regional Facilities (d)	various dates ranging from 2021 to 2038	4.60% (e)	(f)	144.7	(g)	346.2	345.1
Total				$ 769.7		$ 1,856.2	$ 1,837.3

(a) Amounts are net of discounts and deferred financing costs, as applicable.

(b) Includes $50 million that matures on June 30, 2023. The C&W Revolving Credit Facility has a fee on unused commitments of 0.5% per year.

(c) London Interbank Offered Rate.

(d) Primarily represents credit facilities at CWP, C&W Jamaica and Columbus Communications Trinidad Limited (collectively, the **C&W Regional Facilities**).

(e) Represents a weighted average rate for all C&W Regional Facilities.

(f) The unused borrowing capacity on the C&W Regional Facilities comprise certain U.S. dollar and Trinidad & Tobago dollar denominated revolving credit facilities.

(g) The outstanding principal amount on the C&W Regional Facilities comprise certain U.S. dollar, JMD and East Caribbean dollar denominated credit facilities.

Financing and Refinancing Transactions

C&W Term Loan B-5 Facility. In January 2020, Coral-US Co-Borrower LLC, a wholly-owned subsidiary of C&W, entered into a LIBOR plus 2.25% $1,510 million principal amount term loan facility (the **C&W Term Loan B-5 Facility**), issued at par, due January 31, 2028. Interest is payable monthly beginning on February 28, 2020. As further described above, the net proceeds from the C&W Term Loan B-5 Facility and the 2027 C&W Senior Secured Notes Add-on were primarily used to repay in full the $1,640 million outstanding principal amount under the C&W Term Loan B-4 Facility, including accrued and unpaid interest.

C&W Term Loan B-4 Facility. In February 2018, C&W entered into a $1,875 million principal amount term loan facility (the **C&W Term Loan B-4 Facility**). The net proceeds of the C&W Term Loan B-4 Facility were used to repay in full the $1,825 million then outstanding principal amount of the C&W Term Loan B-3 Facility and repay $40 million drawn under the C&W Revolving Credit Facility. The exchange in principal amounts of $1,825 million was treated as a non-cash transaction in our consolidated statement of cash flows. In connection with this transaction, we recognized a loss on debt modification and extinguishment of $13 million, which includes the write-off of unamortized discounts and deferred financing costs.

C&W Revolving Credit Facility. In January 2020, the maturity date associated with $575 million of the existing $625 million C&W Revolving Credit Facility was extended to January 30, 2026. All other terms and conditions of the revolving credit facility remain unchanged.

In March 2020, we borrowed $313 million under the C&W Revolving Credit Facility. This drawdown was fully repaid in 2020.

In connection with the UTS Acquisition during the first quarter of 2019, C&W borrowed $170 million under the C&W Revolving Credit Facility. The outstanding principal amount of the C&W Revolving Credit Facility, including accrued interest, was repaid in full in 2019.

In March 2018, we amended and restated the credit agreement originally dated May 16, 2016, as amended and restated as of May 26, 2017, providing for the additional C&W Term Loan B-4 Facility and a $625 million revolving credit facility.

C&W Regional Facilities. In January 2018, CWP entered into a $100 million principal amount term loan facility that bears interest at 4.35% per annum, payable on a quarterly basis, and matures in January 2023. The proceeds from the term loan were primarily used to repay existing CWP debt. In June 2020, CWP refinanced this term loan facility to extend the maturity to March 17, 2025. All other terms and conditions of this facility remain unchanged.

VTR Notes

The details of our outstanding VTR Notes as of December 31, 2020 are summarized in the following table:

	Maturity	Interest Rate	Outstanding principal amount	Carrying value (a)
			in millions	
2028 VTR Senior Secured Notes	January 15, 2028	5.125 %	$ 600.0	$ 596.6
2028 VTR Senior Notes	July 15, 2028	6.375 %	550.0	533.7
			$ 1,150.0	$ 1,130.3

(a) Amounts are net of deferred financing costs.

Financing and Refinancing Transactions

2028 VTR Senior Secured Notes. In July 2020, VTR Comunicaciones SpA, a wholly-owned subsidiary of VTR, issued $600 million aggregate principal amount, at par, of 5.125% senior secured notes (the **2028 VTR Senior Secured Notes**) due January 15, 2028. Interest on the 2028 VTR Senior Secured Notes is payable semi-annually on January 15 and July 15, commencing on January 15, 2021.

The net proceeds of $1,133 million from the 2028 VTR Senior Secured Notes and the 2028 VTR Senior Notes (as defined and described further below), together with $187 million of proceeds from the unwinding of certain derivative instruments, were used to redeem $1,260 million of outstanding principal amount under the then outstanding VTR Finance Senior Notes (as defined and discussed further below), including accrued and unpaid interest and a $29 million redemption premium. In connection with these transactions, (i) $550 million was treated as a non-cash transaction in our consolidated statement of cash flows and (ii) we recognized a loss on debt modification and extinguishment of $42 million, which primarily includes the payment of the aforementioned redemption premium and the write-off of unamortized deferred financing costs.

Redemption Rights. The 2028 VTR Senior Secured Notes may be redeemed, in whole or in part, at any time prior to July 15, 2023 at a price equal to 100% of the principal amount of the notes redeemed, plus accrued and unpaid interest to (but excluding) the redemption date, and a "make whole" premium, as described in the 2028 VTR Senior Secured Notes indenture. The 2028 VTR Senior Secured Notes may be redeemed, in whole or in part, at any time on or after July 15, 2023 at the following redemption prices (expressed as a percentage of the principal amount), plus accrued and unpaid interest and additional amounts, if any, to the applicable redemption date, as set forth below:

	Redemption Price
12-month period commencing July 15:	
2023	102.563%
2024	101.281%
2025 and thereafter	100.000%

In addition, at any time prior to July 15, 2023, subject to certain conditions specified in the 2028 VTR Senior Secured Notes indenture, we may redeem up to 40% of the aggregate principal amount of the 2028 VTR Senior Secured Notes with the net proceeds of one or more specified equity offerings at a redemption price equal to 105.125% of the principal amount of the notes redeemed, plus accrued and unpaid interest and additional amounts, if any, to the applicable redemption date. Prior to July 15, 2023, during each 12-month period commencing on the July 1, 2020, we may redeem up to 10% of the aggregate principal amount of the 2028 VTR Senior Secured Notes at a redemption price equal to 103% of the principal amount of the notes redeemed, plus accrued and unpaid interest to (but excluding) the redemption date.

The 2028 VTR Senior Secured Notes are guaranteed by VTR.com SpA (**VTR.com**), a wholly-owned subsidiary of VTR, and are the senior obligations of VTR Comunicaciones SpA and VTR.com. The 2028 VTR Senior Secured Notes are secured by first-ranking pledges over (i) all of the capital stock of the VTR Comunicaciones SpA and VTR.com and (ii) certain subordinated shareholder loans.

2028 VTR Senior Notes. In July 2020, VTR Finance N.V. issued $550 million aggregate principal amount, at par, of 6.375% senior notes (the **2028 VTR Senior Notes**) due July 15, 2028. Interest on the 2028 VTR Senior Notes is payable semi-annually on January 15 and July 15, commencing on January 15, 2021.

Redemption Rights. The 2028 VTR Senior Notes may be redeemed, in whole or in part, at any time prior to July 15, 2023 at a price equal to 100% of the principal amount of the notes redeemed, plus accrued and unpaid interest to (but excluding) the redemption date, and a "make whole" premium, as described in the 2028 VTR Senior Notes indenture. The 2028 VTR Senior Notes may be redeemed, in whole or in part, at any time on or after July 15, 2023 at the following redemption prices (expressed as a percentage of the principal amount), plus accrued and unpaid interest and additional amounts, if any, to the applicable redemption date, as set forth below:

	Redemption Price
12-month period commencing July 15:	
2023	103.188%
2024	101.594%
2025 and thereafter	100.000%

In addition, at any time prior to July 15, 2023, subject to certain conditions specified in the 2028 VTR Senior Notes indenture, we may redeem up to 40% of the aggregate principal amount of the 2028 VTR Senior Notes with the net proceeds of one or more specified equity offerings at a redemption price equal to 106.375% of the principal amount of the notes redeemed, plus accrued and unpaid interest and additional amounts, if any, to the applicable redemption date.

The 2028 VTR Senior Notes are the senior obligations of VTR and are secured by a pledge over all the shares of VTR.

VTR Finance Senior Notes. In January 2014, VTR issued $1.4 billion principal amount of senior notes (the **VTR Finance Senior Notes**), due January 15, 2024.

In October 2018, VTR redeemed $140 million of aggregate principal amount of the VTR Finance Senior Notes for total consideration of $147 million, including (i) the 103% redemption price and (ii) accrued and unpaid interest on the redeemed notes. In connection with this transaction, VTR recognized a loss on debt modification and extinguishment of $6 million, which includes the net effect of redemption premiums paid and the write-off of deferred financing costs.

In July 2020, as further described above, VTR redeemed the remaining $1,260 million principal amount of the VTR Finance Senior Notes.

VTR Credit Facilities

In May 2018, VTR.com entered into (i) the VTR TLB-1 Facility and the VTR TLB-2 Facility (collectively, the **VTR Term Loan Facilities**) and (ii) new U.S. dollar and CLP revolving credit facilities (collectively, the **VTR Revolving Credit Facilities** and together with the VTR Term Loan Facilities, the **VTR Credit Facilities**). Upon closing of the VTR Credit Facilities, the previously existing credit facility at VTR.com was cancelled.

The details of our borrowings under the VTR Credit Facilities as of December 31, 2020 are summarized in the following table:

VTR Credit Facilities	Maturity	Interest rate	Unused borrowing capacity				Outstanding principal amount				Carrying value (a)
			Borrowing currency		US $ equivalent		Borrowing currency		US $ equivalent		
							in millions				
VTR TLB-1 Facility	(b)	ICP (c) + 3.80%	CLP	—	$	—	CLP	140,900.0	$	198.0	$ 195.5
VTR TLB-2 Facility	May 23, 2023	7.00%	CLP	—		—	CLP	33,100.0		46.5	45.9
VTR RCF–A (d)	May 23, 2023	TAB (e) + 3.35%	CLP	45,000.0		63.2	CLP	—		—	—
VTR RCF–B (f)	June 15, 2026	LIBOR + 2.75%	$	200.0		200.0	$	—		—	—
Total					$	263.2			$	244.5	$ 241.4

(a) Amounts are net of deferred financing costs.

(b) Under the terms of the credit agreement, VTR.com is obligated to repay 50% of the outstanding aggregate principal amount of the VTR TLB-1 Facility on November 23, 2022, with the remaining principal amount due on May 23, 2023, which represents the ultimate maturity date of the facility.

(c) Índice de Cámara Promedio rate.

(d) The VTR RCF – A has a fee on unused commitments of 1.34% per year.

(e) Tasa Activa Bancaria rate.

(f) Includes a $1 million credit facility that matures on May 23, 2023. The VTR RCF – B has a fee on unused commitments of 1.10% per year.

Financing and Refinancing Transactions

VTR RCF – A. In March 2019, the commitment under the VTR RCF – A was increased to CLP 45 billion ($63 million).

VTR RCF – B. In March 2020, we borrowed $92 million under the VTR RCF – B. In June 2020, (i) the drawdown was fully repaid and (ii) the commitment under the VTR RCF – B was increased to $200 million and the term was extended to June 15, 2026.

LPR Senior Secured Notes

In October 2019, LCPR Senior Secured Financing Designated Activity Company (**LCPR Senior Secured Financing**) issued $1.2 billion principal amount, at par, of 6.75% senior secured notes, due October 15, 2027 (the **2027 LPR Senior Secured Notes**). Interest is payable semi-annually on April 15 and October 15. LCPR Senior Secured Financing is a special purpose financing entity, created for the primary purpose of facilitating the issuance of certain debt offerings. Liberty Mobile is required to consolidate LCPR Senior Secured Financing as a result of certain variable interests in LCPR Senior Secured Financing, of which Liberty Mobile is considered the primary beneficiary.

Subject to the circumstances described below:

- The 2027 LPR Senior Secured Notes are non-callable until October 15, 2022.
- At any time prior to October 15, 2022, LCPR Senior Secured Financing may redeem some or all of the 2027 LPR Senior Secured Notes by paying a price equal to 100% of the principal amount of the 2027 LPR Senior Secured Notes redeemed plus accrued and unpaid interest and a “make-whole” premium, which is generally the present value of all

remaining scheduled interest payments to October 15, 2022 using the discount rate (as specified in the indenture) as of the redemption date plus 50 basis points.

- At any time prior to October 15, 2022, subject to certain restrictions (as specified in the indenture), up to 40% of the 2027 LPR Senior Secured Notes may be redeemed with the net proceeds of one or more specified equity offerings at a redemption price equal to 106.750% of the principal amount redeemed, plus accrued and unpaid interest and additional amounts (as specified in the indenture), if any, to the redemption date.
- Prior to October 15, 2022, during each 12-month period commencing on October 9, 2019, up to 10% of the principal amount of the 2027 LPR Senior Secured Notes may be redeemed at a redemption price equal to 103% of the principal amount redeemed, plus accrued and unpaid interest and additional amounts (as specified in the indenture), if any, to the redemption date.

On and after October 15, 2022, LCPR Senior Secured Financing may redeem some or all of the 2027 LPR Senior Secured Notes at the following redemption prices (expressed as a percentage of principal amount) plus accrued and unpaid interest and additional amounts (as specified in the indenture), if any, to the applicable redemption date:

	Redemption Price
12-month period commencing October 15:	
2022	103.375%
2023	101.688%
2024 and thereafter	100.000%

The net proceeds from the 2027 LPR Senior Secured Notes, the 2027 LPR Senior Secured Notes Add-on (as defined and described below) and the SPV Escrowed Proceeds (as defined and described below) were deposited into escrow (collectively, the "**AT&T Acquisition Restricted Cash**"), subsequently released upon consummation of the AT&T Acquisition and used to fund one or more loans to a wholly-owned subsidiary of Liberty Puerto Rico. The payment of all obligations under such loans are guaranteed by LCPR and certain of its affiliates and their respective significant subsidiaries, and all the issued capital stock or share capital of LCPR and each guarantor, and substantially all assets of LCPR and each guarantor is pledged to secure the payment of such obligations. Such loans and a capital contribution from Liberty Latin America were used to finance the AT&T Acquisition and to pay related fees and expenses. At December 31, 2019, the AT&T Acquisition Restricted Cash was included in restricted cash in our consolidated balance sheet.

At December 31, 2020, the carrying value of the 2027 LPR Senior Secured Notes was $1,265 million.

Financing Transactions

2027 LPR Senior Secured Notes Add-on. In May 2020, LCPR Senior Secured Financing Designated Activity Company (**LCPR Senior Secured Financing**) issued an additional $90 million aggregate principal amount, at 102.5% of par, under the existing 2027 LPR Senior Secured Notes indenture (the **2027 LPR Senior Secured Notes Add-on**). The terms and conditions of the 2027 LPR Senior Secured Notes Add-on are consistent with the original indenture.

As further described above, the net proceeds from the 2027 LPR Senior Secured Notes Add-on were deposited into escrow and subsequently released upon consummation of the AT&T Acquisition.

LPR Credit Facilities

The LPR Credit Facilities are the senior secured credit facilities of Liberty Puerto Rico. The details of our borrowings under the LPR Credit Facilities as of December 31, 2020 are summarized in the following table:

LPR Credit Facilities	Maturity	Interest rate	Facility amount (in borrowing currency)	Unused borrowing capacity	Outstanding principal amount	Carrying value (a)
				in millions		
LPR Revolving Credit Facility (b)	October 15, 2025	LIBOR + 3.50%	$ 125.0	$ 125.0	$ —	$ —
2026 SPV Credit Facility	October 15, 2026	LIBOR + 5.0%	$ 1,000.0	—	1,000.0	985.5
Total				$ 125.0	$ 1,000.0	$ 985.5

(a) Amounts are net of discounts and deferred financing costs.

(b) The LPR Revolving Credit Facility has a fee on unused commitments of 0.5% per year.

Financing Transactions

2026 SPV Credit Facility. In October 2019, LCPR Loan Financing LLC (**LCPR Loan Financing**) entered into a LIBOR plus 5.0% $1.0 billion principal amount term loan facility, issued at 99.0% of par, due October 15, 2026 (the **2026 SPV Credit Facility**). Interest on the 2026 SPV Credit Facility is currently payable monthly. LCPR Loan Financing is a special purpose financing entity, created for the primary purpose of facilitating the issuance of certain term loan debt. LCPR is required to consolidate LCPR Loan Financing as a result of certain variable interests in LCPR Loan Financing, for which LCPR is considered the primary beneficiary.

LCPR Loan Financing used the proceeds from the 2026 SPV Credit Facility to (i) fund a new $947 million term loan (the **LPR Financing Loan**) to LCPR and (ii) deposit $53 million into escrow (the **SPV Escrowed Proceeds**), which was ultimately used to fund a portion of the AT&T Acquisition. The terms and conditions, including maturity and applicable interest rate, for the LPR Financing Loan are the same as those for the 2026 SPV Credit Facility. LCPR Loan Financing's obligations under the 2026 SPV Credit Facility are secured by interests over various assets, as further described in the 2026 SPV Credit Facility agreement.

The net proceeds from the LPR Financing Loan were used to redeem, in full, the $923 million then outstanding principal amount of the LPR Bank Facility. This borrowing and repayment activity was treated as a non-cash transaction in our consolidated statement of cash flows. In connection with this transaction, we recognized a loss on debt modification and extinguishment of $7 million, which includes the write-off of unamortized discounts and deferred financing costs.

LPR Revolving Credit Facility. In October 2019, LCPR entered into a LIBOR plus 3.5%, 6-year senior secured credit facility agreement providing for $125 million of revolving commitments (the **LPR Revolving Credit Facility**). Upon closing of the LPR Revolving Credit Facility, the previously existing revolving credit facility at LCPR was cancelled.

In March 2020, we borrowed $63 million under the LPR Revolving Credit Facility. This drawdown was fully repaid in 2020.

Cabletica Credit Facilities

In October 2018, in connection with the completion of the Cabletica Acquisition, Cabletica entered into certain senior secured credit facilities (the **Cabletica Credit Facilities**).

The details of our borrowings under the Cabletica Credit Facilities as of December 31, 2020 are summarized in the following table:

Cabletica Credit Facilities	Maturity	Interest rate	Unused borrowing capacity: Borrowing currency	Unused borrowing capacity: U.S. $ equivalent	Outstanding principal: Borrowing currency	Outstanding principal: U.S. $ equivalent	Carrying value (a)
					in millions		
Cabletica Term Loan B-1 Facility	(b)	LIBOR + 5.50% (c)	$ —	$ —	$ 49.2	$ 49.2	$ 44.4
Cabletica Term Loan B-2 Facility	(b)	TBP (d) + 6.75%	CRC —	—	CRC 43,177.4	70.4	68.7
Cabletica Revolving Credit Facility (e)	August 1, 2024	LIBOR + 4.25%	$ 15.0	15.0	$ —	—	—
				$ 15.0		$ 119.6	$ 113.1

(a) Amounts are net of deferred financing costs.

(b) Under the terms of the credit agreement, Cabletica is obligated to repay 50% of the outstanding aggregate principal amounts of the Cabletica Term Loan B-1 Facility and the Cabletica Term Loan B-2 Facility on February 1, 2024, with the remaining respective principal amounts due on August 1, 2024, which represents the ultimate maturity date of each facility.

(c) Subject to a LIBOR floor of 75 basis points.

(d) Tasa Básica Pasiva rate.

(e) The Cabletica Revolving Credit Facility has a fee on unused commitments of 1.70% per year.

Financing and Refinancing Transactions

In November 2020, we amended and restated the Cabletica Credit Facilities credit agreement, which included (i) an upsize of the Cabletica Term Loan B-1 Facility by $228 million, (ii) an upsize of the Cabletica Term Loan B-2 Facility by $59 million, which is expected to be converted to the CRC denominated facility upon close of the Telefónica-Costa Rica Acquisition, and (iii) replacing the existing Cabletica Revolving Credit Facility with a new $15 million revolving credit facility. The upsize commitments under the Cabletica Term Loan B-1 Facility and Cabletica Term Loan B-2 Facility remain undrawn at December 31, 2020 and are contingent upon closing of the Telefónica-Costa Rica Acquisition. These undrawn amounts are also subject to ticking fees, currently estimated to be approximately 2% per year through the closing date of the Telefónica-Costa Rica Acquisition.

Maturities of Debt

Maturities of our debt as of December 31, 2020 are presented below. Amounts presented below represent U.S. dollar equivalents based on December 31, 2020 exchange rates.

	C&W	VTR	Liberty Puerto Rico	Cabletica	Liberty Latin America (a)	Consolidated
			in millions			
Years ending December 31:						
2021	$ 59.9	$ 99.6	$ —	$ —	$ 0.5	$ 160.0
2022	17.6	99.0	—	—	0.6	117.2
2023	124.3	145.5	—	—	0.8	270.6
2024	62.2	—	—	119.6	403.0	584.8
2025	146.0	—	—	—	—	146.0
Thereafter	3,782.3	1,150.0	2,290.0	—	—	7,222.3
Total debt maturities	4,192.3	1,494.1	2,290.0	119.6	404.9	8,500.9
Premiums, discounts and deferred financing costs, net	(28.2)	(22.8)	(39.1)	(6.5)	(60.5)	(157.1)
Total debt	$ 4,164.1	$ 1,471.3	$ 2,250.9	$ 113.1	$ 344.4	$ 8,343.8
Current portion	$ 59.9	$ 99.6	$ —	$ —	$ 0.5	$ 160.0
Noncurrent portion	$ 4,104.2	$ 1,371.7	$ 2,250.9	$ 113.1	$ 343.9	$ 8,183.8

(a) Represents the amount held by Liberty Latin America on a standalone basis plus the aggregate amount held by subsidiaries of Liberty Latin America that are outside our borrowing groups.

(11) Leases

The following table provides details of our operating lease expense:

	Year ended December 31,		
	2020	2019	2018 (a)
		in millions	
Operating lease expense:			
Operating lease cost	$ 52.8	$ 45.7	$ 48.2
Short-term lease cost	13.5	10.4	—
Total operating lease expense	$ 66.3	$ 56.1	$ 48.2

(a) Amounts reflect operating lease expense recorded under ASC 840, *Leases*, prior to adoption of ASU 2016-02 on January 1, 2019. Accordingly, amounts are not comparable.

Certain other details of our operating leases are set forth below:

	December 31,	
	2020	2019
	in millions	
Operating lease right-of-use assets	$ 328.6	$ 150.9
Operating lease liabilities:		
Current	$ 63.2	$ 31.5
Noncurrent	269.7	119.2
Total operating lease liabilities	$ 332.9	$ 150.7
Weighted-average remaining lease term	7.2 years	6.4 years
Weighted-average discount rate	5.6 %	6.6 %

	Year ended December 31,	
	2020	2019
	in millions	
Operating cash flows from operating leases	$ 47.0	$ 46.2
Right-of-use assets obtained in exchange for new operating lease liabilities (a)	$ 230.5	$ 48.0

(a) Represents non-cash transactions associated with operating leases entered into during the year, including $196 million acquired in connection with the AT&T Acquisition.

Maturities of Operating Leases

Maturities of our operating lease liabilities as of December 31, 2020 are presented below. Amounts presented below represent U.S. dollar equivalents (in millions) based on December 31, 2020 exchange rates.

Years ending December 31:	
2021	$ 78.7
2022	62.7
2023	51.4
2024	44.4
2025	34.6
Thereafter	136.9
Total operating lease liabilities on an undiscounted basis	408.7
Amount representing interest	(75.8)
Present value of operating lease liabilities	$ 332.9

(12) Restructuring Liabilities

A summary of changes in our restructuring liabilities during 2020 is set forth in the table below:

	Employee severance and termination	Contract termination and other	Total
		in millions	
Restructuring liability as of January 1, 2020	$ 19.0	$ 13.3	$ 32.3
Restructuring charges	13.2	11.6	24.8
UTS liabilities at acquisition date (a)	2.1	—	2.1
Cash paid	(25.7)	(10.4)	(36.1)
Foreign currency translation adjustments	(5.0)	2.1	(2.9)
Restructuring liability as of December 31, 2020	$ 3.6	$ 16.6	$ 20.2
Current portion	$ 3.6	$ 14.3	$ 17.9
Noncurrent portion	—	2.3	2.3
Total	$ 3.6	$ 16.6	$ 20.2

(a) Represents an adjustment related to the completion of our purchase price accounting for the UTS Acquisition, as further discussed in note 4.

Our restructuring charges during 2020 primarily relate to reorganization programs at C&W Panama, C&W Caribbean and Networks and VTR. Current and noncurrent restructuring liabilities are included in other accrued and current liabilities and other long-term liabilities, respectively, in our consolidated balance sheets.

A summary of changes in our restructuring liabilities during 2019 is set forth in the table below:

	Employee severance and termination	Contract termination and other	Total
		in millions	
Restructuring liability as of January 1, 2019	$ 7.6	$ 18.0	$ 25.6
Restructuring charges	30.9	9.3	40.2
UTS liabilities at acquisition date	8.3	—	8.3
Cash paid	(27.6)	(13.0)	(40.6)
Foreign currency translation adjustments	(0.2)	(1.0)	(1.2)
Restructuring liability as of December 31, 2019	$ 19.0	$ 13.3	$ 32.3
Current portion	$ 13.1	$ 10.5	$ 23.6
Noncurrent portion	5.9	2.8	8.7
Total	$ 19.0	$ 13.3	$ 32.3

Our restructuring charges during 2019 primarily relate to employee severance and termination costs associated with reorganization programs at VTR, C&W Caribbean and Networks and C&W Panama.

A summary of changes in our restructuring liabilities during 2018 is set forth in the table below:

	Employee severance and termination	Contract termination and other	Total
		in millions	
Restructuring liability as of January 1, 2018	$ 6.2	$ 25.4	$ 31.6
Restructuring charges	25.6	8.8	34.4
Cash paid	(24.3)	(13.5)	(37.8)
Foreign currency translation adjustments	0.1	(2.7)	(2.6)
Restructuring liability as of December 31, 2018	$ 7.6	$ 18.0	$ 25.6

Our restructuring charges during 2018 primarily relate to employee severance and termination costs associated with reorganization programs at C&W Caribbean and Networks, VTR and C&W Panama.

In addition to the restructuring charges set forth in the tables above, we also incurred $3 million, $5 million and $9 million during 2020, 2019 and 2018, respectively, in restructuring charges related to employee severance and termination costs at C&W Caribbean and Networks, which impacted our net pension liability. For additional information, see note 16.

(13) Programming and Other Direct Costs of Services

Programming and other direct costs of services include programming and copyright costs, interconnect and access costs, commissions, costs of mobile handsets and other devices, and other direct costs related to our operations.

Our programming and other direct costs of services by major category are set forth below.

	Year ended December 31,		
	2020	2019	2018
		in millions	
Programming and copyright	$ 389.3	$ 404.8	$ 401.1
Interconnect and commissions	249.9	280.0	298.7
Equipment and other	206.8	193.0	177.4
Total programming and other direct costs	$ 846.0	$ 877.8	$ 877.2

(14) Other Operating Costs and Expenses

Other operating costs and expenses set forth in the table below comprise the following cost categories:

- **Personnel and contract labor-related** costs, which primarily include salary-related and cash bonus expenses, net of capitalizable labor costs, and temporary contract labor costs;
- **Network-related** expenses, which primarily include costs related to network access, system power, core network, and CPE repair, maintenance and test costs;
- **Service-related** costs, which primarily include professional services, information technology-related services, audit, legal and other services;
- **Commercial**, which primarily includes sales and marketing costs, such as advertising, commissions and other sales and marketing-related costs, and customer care costs related to outsourced call centers;

- **Facility, provision, franchise and other**, which primarily includes facility-related costs, provision for bad debt expense, franchise-related fees, bank fees, insurance, travel and entertainment and other operating-related costs; and

- **Share-based compensation** costs that relate to (i) SARs, RSUs and PSUs (each as defined in note 3) issued to our employees and Directors (as defined in note 17) and (ii) bonus-related expenses that will be paid in the form of equity (as further described in note 17).

Our other operating costs and expenses by major category are set forth below.

	Year ended December 31,		
	2020	2019	2018
	in millions		
Personnel and contract labor	$ 483.6	$ 500.4	$ 475.3
Network-related	261.4	264.4	266.6
Service-related	161.7	149.9	144.5
Commercial	168.1	172.6	166.7
Facility, provision, franchise and other	359.1	360.5	348.4
Share-based compensation expense	97.5	57.5	39.8
Total other operating costs and expenses	$ 1,531.4	$ 1,505.3	$ 1,441.3

(15) Income Taxes

On July 11, 2017, Liberty Latin America was formed as a corporation in Bermuda where a Tax Assurance Certificate has been granted to guarantee that any imposition of income or other taxes will not be applicable to Liberty Latin America through March 31, 2035. Accordingly, Liberty Latin America does not file a primary corporate income tax return in Bermuda, although various subsidiaries in other jurisdictions are taxable operations and file income tax returns in their respective jurisdictions. The income taxes of Liberty Latin America are presented on a standalone basis, and each tax paying entity or group within Liberty Latin America is presented on a separate return basis, unless a combined or consolidated tax return regime is permitted.

We maintain a tax sharing agreement with Liberty Global (the **Tax Sharing Agreement**) that became effective upon consummation of the Split-Off. The Tax Sharing Agreement governs the parties' respective rights, responsibilities and obligations with respect to taxes and tax benefits, the filing of tax returns, the control of audits and other tax matters. Pursuant to the Tax Sharing Agreement, tax liabilities and benefits relating to taxable periods before and after the Split-Off will be computed and apportioned between Liberty Latin America and Liberty Global, and responsibility for payment of those tax liabilities (including any taxes attributable to the Split-Off and related internal restructurings) and use of those tax benefits, will be allocated between Liberty Latin America and Liberty Global. Furthermore, the Tax Sharing Agreement sets forth the rights of Liberty Latin America and Liberty Global with respect to the preparation and filing of tax returns, the handling of audits or other tax proceedings and assistance and cooperation and other matters, in each case, for taxable periods ending on or before or that otherwise include the date of the Split-Off.

The components of our loss before income taxes are as follows:

	Year ended December 31,		
	2020	2019	2018
	in millions		
Domestic (a)	$ (67.3)	$ (46.0)	$ (32.5)
Foreign (b) (c)	(770.9)	(234.6)	(552.2)
Total	$ (838.2)	$ (280.6)	$ (584.7)

(a) Liberty Latin America is considered a stand-alone Bermuda entity.

(b) Amounts for the year ended December 31, 2020, include impairment charges of $177 million and $99 million at our C&W Panama and C&W Caribbean and Networks reporting units, respectively. Amounts for the years ended December 31, 2019 and 2018 include impairment charges at our Panamanian reporting unit of $182 million and $608 million, respectively. For additional information regarding asset impairments, see note 9.

(c) For the year ended December 31, 2020, material jurisdictions that comprise the "foreign" component of our loss before income taxes include Bahamas, Barbados, Chile, Costa Rica, Jamaica, the Netherlands, Panama, Puerto Rico, Trinidad, the U.K. and the U.S. For the year ended December 31, 2019, material jurisdictions that comprise the "foreign" component of our loss before income taxes include Bahamas, Barbados, Chile, Costa Rica, Jamaica, the Netherlands, Panama, Puerto Rico, Trinidad, the U.K. and the U.S. For the year ended December 31, 2018, material jurisdictions that comprise the "foreign" component of our loss before income taxes include Barbados, Chile, the Netherlands, Panama, Puerto Rico and the U.K.

Income tax benefit (expense) consists of:

	Current	Deferred	Total
		in millions	
Year ended December 31, 2020:			
Domestic	$ —	$ —	$ —
Foreign	(35.8)	65.1	29.3
Total	$ (35.8)	$ 65.1	$ 29.3
Year ended December 31, 2019:			
Domestic	$ —	$ —	$ —
Foreign	65.5	32.7	98.2
Total	$ 65.5	$ 32.7	$ 98.2
Year ended December 31, 2018:			
Domestic	$ —	$ —	$ —
Foreign	(84.0)	32.9	(51.1)
Total	$ (84.0)	$ 32.9	$ (51.1)

Income tax benefit (expense) attributable to our earnings (loss) before income taxes differs from the amounts computed by using the applicable tax rate as a result of the following:

	Year ended December 31,		
	2020	2019	2018
		in millions	
Computed expected tax benefit (a)	$ —	$ —	$ —
Permanent differences (b)	(17.7)	(13.9)	(23.3)
Basis and other differences in the treatment of items associated with investments in Liberty Latin America entities	0.5	19.9	0.4
Increases in valuation allowances	(223.0)	(60.9)	(23.8)
International rate differences (a) (c)	180.7	56.0	130.3
Changes in uncertain tax positions	33.4	161.7	8.9
Enacted tax law and rate changes (d) (e) (f) (g)	149.4	11.3	1.5
Effect of non-deductible goodwill impairments	(70.3)	(43.8)	(157.0)
Withholding Tax	(40.0)	(15.8)	(13.2)
Other, net	16.3	(16.3)	25.1
Total income tax benefit (expense)	$ 29.3	$ 98.2	$ (51.1)

(a) On July 11, 2017, Liberty Latin America was formed as a corporation in Bermuda where the company is exempt from income taxes on ordinary income and capital gains, and therefore has a "statutory" or "expected" tax rate of 0% in 2020, 2019, and 2018. The majority of our subsidiaries operate in jurisdictions where income tax is imposed at local applicable rates, resulting in "international rate differences," as shown in the table above that reflect the computed tax benefit (expense) of pre-tax book income (loss) in the respective taxable jurisdiction.

(b) Permanent differences primarily relate to various non-taxable income or non-deductible expenses, such as CARICOM treaty income, limitations on deductible management fees, or executive compensation, among others.

(c) The 2020 corporate tax rates applicable to our primary tax jurisdictions are as follows: Chile, 27%; Costa Rica, 30%; Jamaica, 33.33%; the Netherlands, 25%; Panama, 25%; Puerto Rico, 37.5%; the U.K., 19%; and the U.S., 21%.

(d) In March 2020, the United Kingdom enacted budget confirmed that its corporate tax rate would maintain at 19% as opposed to a previously announced reduction to 17% which was to be effective from April 1, 2020. While deferred tax assets were re-valued, there is a net nil tax impact of this on total tax result due to a full valuation allowance on all deferred tax items in the U.K.

(e) During 2018, legislation was enacted that changed the income tax rate in Barbados from 25.0% to 30.0% on Regular Barbados Companies. Substantially all of the impact of this rate change on our deferred tax balances was recorded during the fourth quarter of 2018 when the change in law was enacted. During 2019, legislation was enacted that changed the income tax rate in Barbados from 30.0% on Regular Business Companies to a regressive tax rate ranging from 5.5% to 1% applicable to all Barbados companies, dependent upon taxable income levels. Substantially all of the impact of this rate change on our deferred tax balances was recorded during the first quarter of 2019 when the change in law was enacted.

(f) On December 27, 2019, legislation was enacted in Colombia that replaces tax reform which had previously been enacted in 2018 but had been declared unconstitutional due to procedural flaws. The legislation confirms provisions from the original 2018 reform, including a phasing down of the corporate tax rates through 2022, whereby the rate will be 30% going forward. Substantially all of the impact of this rate change on our deferred tax balances was recorded during the fourth quarter of 2019 when the change in law was enacted.

(g) On December 10, 2018, legislation was enacted that changed the total corporate income tax rate in Puerto Rico from 39.0% to 37.5% for tax years beginning after December 31, 2018. Substantially all of the impact of this rate change on our deferred balances was recorded during the fourth quarter of 2018 when the change in law was enacted.

Deferred income taxes reflect the impact of temporary differences between the amount of assets and liabilities recognized for financial reporting purposes and such amounts recognized for tax purposes. The components of our deferred tax assets (liabilities) are as follows:

	December 31,	
	2020	2019
	in millions	
Deferred tax assets	$ 41.9	$ 55.7
Deferred tax liabilities	(619.9)	(401.8)
Net deferred tax liability	$ (578.0)	$ (346.1)

The tax effects of temporary differences that give rise to significant portions of the deferred tax assets and deferred tax liabilities are presented below:

	December 31,	
	2020	2019
	in millions	
Deferred tax assets:		
Net operating losses, credits and other carryforwards	$ 2,085.8	$ 1,520.2
Deferred revenue	16.8	—
Unrealized gains and losses	24.8	64.9
Accrued expenses	15.5	23.7
Other future deductible amounts	2.4	2.3
Deferred tax assets	2,145.3	1,611.1
Valuation allowance	(1,630.9)	(1,402.8)
Deferred tax assets, net of valuation allowance	514.4	208.3
Deferred tax liabilities:		
Investments	(205.7)	(224.1)
Intangible assets	(618.0)	(168.6)
Property and equipment, net	(266.3)	(158.1)
Un-remitted foreign earnings	(2.4)	(3.1)
Other future taxable amounts	—	(0.5)
Deferred tax liabilities	(1,092.4)	(554.4)
Net deferred tax liability	$ (578.0)	$ (346.1)

The changes in our valuation allowances are summarized below:

	Year ended December 31,		
	2020	2019	2018
	in millions		
Balance at beginning of period	$ 1,402.8	$ 1,308.9	$ 1,282.2
Net tax expense related to operations	223.0	60.9	23.8
Translation adjustments	0.3	8.8	2.9
Business acquisitions and other	4.8	24.2	—
Balance at end of period	$ 1,630.9	$ 1,402.8	$ 1,308.9

Deferred tax assets related to net operating losses may be used to offset future taxable income. The significant components of our tax loss carryforwards at December 31, 2020 are as follows:

Country	Tax loss carryforward	Related tax asset	Expiration date
	in millions		
U.K.:			
Amount attributable to capital losses	$ 5,031.5	$ 956.0	Indefinite
Amount attributable to net operating losses	1,414.1	267.7	Indefinite
Barbados	1,086.2	29.1	2021 - 2027
Jamaica	443.0	146.9	Indefinite
Curacao	213.0	48.5	2021 - 2030
Chile	146.4	39.5	Indefinite
Puerto Rico	135.8	50.9	2024 - 2037
U.S.	135.6	34.0	2029 - 2037
Netherlands	110.8	27.7	2024 - 2026
Other	105.4	28.4	Various
Total	$ 8,821.8	$ 1,628.7	

As of December 31, 2020, a valuation allowance of $1,489 million has been recorded on the net operating loss carryforwards where we do not expect to generate future taxable income, or where certain losses may be limited in use due to change in control or same-business tests.

Our tax loss carryforwards within each jurisdiction combine all companies' tax losses (both capital and ordinary losses) in that jurisdiction; however, certain tax jurisdictions limit the ability to offset taxable income of a separate company or different tax group with the tax losses associated with another separate company or group. Further, tax jurisdictions restrict the type of taxable income that the above losses are able to offset.

In 2020 and 2019, we have foreign tax credit carryforwards of $24 million and $25 million, respectively, which are available in the U.S. Substantially all credits not utilized will expire at the end of 2027. Other credit carry forwards at the end of 2020 and 2019, in the amounts of $50 million and $17 million, respectively, predominantly represent alternative minimum tax credits attributable to our operations in Puerto Rico for which the current tax law provides no period of expiration.

Through our consolidated subsidiaries, we maintain a presence in many countries. Many of these countries maintain highly complex tax regimes. We have accounted for the effect of these taxes based on what we believe is reasonably expected to apply to us and our consolidated subsidiaries based on tax laws currently in effect and reasonable interpretations of these laws. Because some jurisdictions do not have systems of taxation that are as well established as the system of income taxation used in other major industrialized countries, it may be difficult to anticipate how other jurisdictions will tax our and our consolidated subsidiaries' current and future operations.

Although we intend to take reasonable tax planning measures to limit our tax exposures, no assurance can be given that we will be able to do so.

We file income tax returns in various jurisdictions. In the normal course of business, our income tax filings are subject to review by various taxing authorities. In connection with such reviews, disputes could arise with the taxing authorities over the interpretation or application of certain income tax rules related to our business in that tax jurisdiction. Such disputes may result in future tax and interest and penalty assessments by these taxing authorities. The ultimate resolution of tax contingencies will take place upon the earlier of (i) the settlement date with the applicable taxing authorities in either cash or agreement of income tax positions or (ii) the date when the tax authorities are statutorily prohibited from adjusting the company's tax computations.

In general, tax returns filed by, or that include, entities comprising Liberty Latin America for years prior to 2009 are no longer subject to examination by tax authorities. We are currently undergoing income tax audits in Chile, Panama, Trinidad and

Tobago and certain other jurisdictions within the Caribbean and Latin America. Except as noted below, any adjustments that might arise from the foregoing examinations are not expected to have a material impact on our consolidated financial position or results of operations.

The changes in our unrecognized tax benefits are summarized below:

	Year ended December 31,		
	2020	2019	2018
		in millions	
Balance at January 1	$ 64.1	$ 249.0	$ 264.5
Additions for tax positions of prior years	2.6	20.3	26.2
Effects of business acquisitions	—	3.1	—
Additions based on tax positions related to the current year	1.6	1.0	29.6
Lapse of statute of limitations	(16.7)	(2.7)	(10.7)
Foreign currency translation	(0.8)	(11.5)	(29.9)
Decrease for settlement with tax authorities	—	(42.0)	—
Reductions for tax positions of prior years	(18.8)	(153.1)	(30.7)
Balance at December 31	$ 32.0	$ 64.1	$ 249.0

No assurance can be given that any of these unrecognized tax benefits will be recognized or realized.

As of December 31, 2020, all of our unrecognized tax benefits would have a favorable impact on our effective income tax rate if ultimately recognized.

During 2021, it is reasonably possible that the resolution of ongoing examinations by tax authorities as well as expiration of statutes of limitation could result in reductions to our unrecognized tax benefits related to tax positions taken as of December 31, 2020. Other than the potential impacts of ongoing examinations and the expected expiration of certain statutes of limitation, we do not expect any material changes to our unrecognized tax benefits during 2021. No assurance can be given as to the nature or impact of any changes in our unrecognized tax positions during 2021.

During 2020, 2019 and 2018, our income tax benefit (expense) includes interest releases of $2 million and $33 million and interest expense of $8 million, respectively, representing the net accrual of interest and penalties incurred during the respective period. Our other long-term liabilities include accrued interest and penalties of $13 million and $15 million at December 31, 2020 and 2019, respectively.

(16) Pension Plans

Defined Benefit Plans

C&W maintains various funded defined benefit plans for its employees, including (i) the Cable & Wireless Superannuation Fund (**CWSF**), which is C&W's largest defined benefit plan, and (ii) plans in the Bahamas, Jamaica, Barbados and Curacao. A significant portion of these defined benefit plans are closed to new entrants, and existing participants do not accrue any additional benefits.

C&W also operates unfunded defined benefit arrangements in the U.K., which are governed by individual trust deeds (the **U.K. unfunded plans**). One arrangement incorporates a covenant requiring C&W to hold security against the value of the liabilities. The security is in the form of U.K. Government Gilts, which are included in other assets, net, in our consolidated balance sheets. At December 31, 2020 and 2019, the carrying value of our investment in the U.K. Government Gilts was $38 million and $37 million, respectively.

Prior to the UTS Acquisition, UTS had unfunded defined benefit liabilities for certain of its employees. In connection with the UTS Acquisition, an insurance policy was purchased for 64 million Netherlands Antillean Guilders (**ANG**) ($36 million). The payments from this policy effectively match the corresponding obligations to the UTS employees.

Annual service cost for these employee benefit plans is determined using the projected unit credit actuarial method. The C&W subsidiaries that maintain funded plans have established investment policies for plan assets. The investment strategies are long-term in nature and generally designed to meet the following objectives:

- ensure that funds are available to pay benefits as they become due;
- maximize the total returns on plan assets subject to prudent risk taking; and
- preserve or improve the funded status of the trusts over time.

The weighted average assumptions used in determining our benefit obligations and net periodic pension cost are as follows:

	December 31,	
	2020	2019
Expected rate of salary increase	1.0%	0.8%
Discount rate	2.4%	3.0%
Return on plan assets	2.4%	3.0%
Retail price index inflation rate	2.9%	3.0%
Consumer price index inflation rate	2.1%	2.1%

The present value of the CWSF vested benefit obligations has been calculated and, together with the U.K. unfunded plans, represents 77% of the overall projected benefit obligation as of December 31, 2020. Assumptions used are best estimates from a range of possible actuarial assumptions, which may not necessarily be borne out in practice. The assumptions related to mortality rates for the CWSF and the U.K. unfunded plans are based upon the third series of Self-Administered Pension Scheme and the actual experience of the plan participants and dependents. In addition, allowance was made for future mortality improvements in line with the 2019 Continuous Mortality Investigation core projections with a long-term rate of improvement of 1.25% per annum. Based on these assumptions, the life expectancies of participants aged 60 at the following dates are as follows:

	December 31,		
	2020	2030	2040
		years	
Male participants and dependents	27	28	29
Female participants	28	28	29
Female dependents	28	29	30

Risk

Through our defined benefit pension plans, we are exposed to a number of risks, the most significant of which are detailed below. The net pension liability can be significantly influenced by short-term market factors.

The calculation of the net surplus or deficit of the respective plans depends on factors that are beyond our control, principally (i) the value at the balance sheet date of equity securities in which the respective plan has invested and (ii) long-term interest rates, which are used to discount future liabilities. Generally, the long-term interest rates are based on applicable AA corporate bond yields over the period for which the pension obligations are expected to be settled. The funding of the respective plans is based on long-term trends and assumptions relating to market growth, as advised by qualified actuaries and investment advisors, including:

- Investment returns: Our net pension assets (liabilities) and contribution requirements are heavily dependent upon the return on the invested assets;
- Longevity: The cost to the company of the pensions promised to members is dependent upon the expected term of these payments. To the extent that members live longer than expected this will increase the cost of these arrangements; and
- Inflation rate risk: In the U.K., pension obligations are impacted by inflation and, as such, higher inflation will lead to higher pension liabilities.

At December 31, 2020, the above risks have been mitigated for approximately 66% of the CWSF's liabilities, 68% of the Jamaican plan's liabilities and 100% of the UTS liabilities through the purchase of insurance policies, the payments from which match the corresponding obligations to employees. The remaining investment risks in the plans have also been mitigated to a reasonable extent by a combination of matching assets and diversification of the return-seeking assets.

Sensitivity analysis

The following table summarizes (i) the impact a 1.0% increase or decrease in the applicable actuarial assumed rate would have on the valuation of our pension plans, (ii) the impact a 1.0% increase or decrease in the assumed inflation rate would have on the valuation of the CWSF and the U.K. unfunded plans and (iii) the impact of plan participants living, on average, one year longer or one year less than assumed would have on the valuation of our pension plans. The sensitivity analysis is based on a standalone change in each assumption while holding all other assumptions constant.

	Increase	Decrease
	in millions	
CWSF and U.K. unfunded arrangements		
Discount rate:		
Effect on defined benefit obligation	$ (233)	$ 290
Effect on defined benefit obligation, net of annuity insurance policies	$ (102)	$ 133
Inflation (and related increases):		
Effect on defined benefit obligation	$ 168	$ (154)
Effect on defined benefit obligation, net of annuity insurance policies	$ 79	$ (70)
Life expectancy:		
Effect on defined benefit obligation	$ 102	$ (99)
Effect on defined benefit obligation, net of annuity insurance policies	$ 24	$ (24)
Other plans		
Effect on defined benefit obligation:		
Discount rate	$ (53)	$ 65
Life expectancy	$ 12	$ (12)

Using the projected unit credit method for the valuation of liabilities, the current service cost is expected to increase when expressed as a percentage of pensionable payroll as the members of the plans approach retirement.

The following tables summarize the activities of the C&W pension plans for 2020, 2019 and 2018, as applicable.

The following is a summary of the funded status of our defined benefit plans:

	December 31,	
	2020	2019
	in millions	
Projected benefit obligation at beginning of period	$ 2,313.4	$ 2,096.7
UTS acquisition (a)	—	36.0
Service cost	4.3	4.6
Prior service cost	2.8	—
Contributions by plan participants	1.3	1.2
Interest cost	63.9	73.5
Actuarial loss	163.1	148.3
Benefits paid	(116.1)	(114.4)
Other	2.4	3.6
Effect of changes in foreign currency exchange rates	45.4	63.9
Projected benefit obligation at end of period	$ 2,480.5	$ 2,313.4
Accumulated benefit obligation at end of period	$ 2,470.2	$ 2,302.5
Fair value of plan assets at beginning of period	$ 2,263.4	$ 2,068.1
UTS acquisition (a)	—	36.0
Actual return on plan assets	214.4	197.0
Contributions by employer	6.5	6.9
Contributions by plan participants	1.3	1.2
Benefits paid	(116.1)	(114.4)
Other	0.6	0.6
Effect of changes in foreign currency exchange rates	48.4	68.0
Fair value of plan assets at end of period	$ 2,418.5	$ 2,263.4
Net pension liability	$ (62.0)	$ (50.0)

(a) 2019 amounts represent the initial projected benefit obligation of the UTS unfunded defined benefit plan at the UTS Acquisition date and a corresponding plan asset associated with the expected cash flows from the insurance policy covering the projected benefit obligation.

During 2018, C&W Bahamas recognized a net pension liability that is largely indemnified by the Commonwealth of The Bahamas. At December 31, 2020 and 2019, the indemnification asset balance was $182 million and $155 million, respectively, which is included in other assets, net, in our consolidated balance sheets.

Defined benefit plan amounts included in our consolidated balance sheets are as follows:

	December 31,	
	2020	2019
	in millions	
Other assets, net	$ 210.2	$ 184.9
Other long-term liabilities	(272.2)	(234.9)
Net pension liability	$ (62.0)	$ (50.0)

The asset allocation by asset category, asset mix and fair value hierarchy level (as further described in note 6) of our defined benefit plan assets are as follows:

	Asset mix (a)	December 31, 2020			
		Total	Level 1	Level 2	Level 3
	%	in millions			
Equity securities	8.9	$ 212.0	$ 155.0	$ 57.0	$ —
Bonds (b)	32.4	784.1	771.6	12.5	—
Insurance annuity contracts (c)	56.2	1,360.0	—	141.2	1,218.8
Real estate	1.1	27.3	12.1	1.1	14.1
Private equity	0.2	4.9	—	—	4.9
Cash	1.2	30.2	30.2	—	—
Total	100.0	$ 2,418.5	$ 968.9	$ 211.8	$ 1,237.8

	Asset mix (a)	December 31, 2019			
		Total	Level 1	Level 2	Level 3
	%	in millions			
Equity securities	11.5	$ 259.1	$ 157.0	$ 102.1	$ —
Bonds (b)	28.6	646.9	633.9	13.0	—
Insurance annuity contracts (c)	56.8	1,285.5	—	142.0	1,143.5
Real estate	1.2	28.0	12.5	1.6	13.9
Private equity	0.4	9.9	—	—	9.9
Cash	1.5	34.0	34.0	—	—
Total	100.0	$ 2,263.4	$ 837.4	$ 258.7	$ 1,167.3

(a) We review the asset allocations within the respective portfolios on a regular basis. Generally, the plans do not have explicit asset mix targets other than for the equity securities and bond portfolios within the CWSF on a consolidated basis. The asset mix is primarily subject to, among other considerations, a de-risking plan related to the CWSF.

(b) Amounts primarily include (i) fixed-interest and index-linked U.K. Government Gilts held by the CWSF and (ii) bonds held by the Bahamas and Jamaica plans.

(c) The trustees of the CWSF, Jamaica plan and UTS unfunded liabilities have each purchased annuity policies pursuant to which the insurer assumed responsibility for the benefits payable to certain participants of the CWSF, Jamaica plan and UTS liabilities. The liabilities in the CWSF, Jamaica plan and at UTS are matched by related annuity policy assets, which reduces our funding risk for these plans, as follows:

	December 31,	
	2020	2019
CWSF	66 %	67 %
Jamaica plan	68 %	66 %
UTS	100 %	100 %

A reconciliation of the beginning and ending balances of our plan assets measured at fair value using Level 3 inputs is as follows:

	December 31,	
	2020	2019
	in millions	
Balance at beginning of year	$ 1,167.3	$ 1,052.9
Gains relating to assets still held at year-end	97.6	94.9
Purchases, sales and settlements of investments, net	(62.2)	(24.9)
Foreign currency translation adjustments	35.1	44.4
Balance at end of year	$ 1,237.8	$ 1,167.3

The components of net periodic pension expense (benefit) recorded in our consolidated statements of operations are as follows:

	Year ended December 31,		
	2020	2019	2018
	in millions		
Included in operating income – service costs	$ 2.9	$ 3.4	$ 3.7
Other income (expense), net:			
Interest costs	48.3	57.6	64.5
Expected return on plan assets	(49.5)	(59.6)	(74.8)
Other	1.1	—	(1.9)
	(0.1)	(2.0)	(12.2)
Total net periodic pension expense (benefit)	$ 2.8	$ 1.4	$ (8.5)

In addition to the net periodic pension expense in 2020, 2019 and 2018, we incurred (i) administrative expenses of $2 million each year associated with certain of our defined benefit plans and (ii) $3 million, $5 million and $9 million, respectively, in restructuring charges related to employee severance and termination costs at C&W, which impacted our net pension liability. For information on our restructuring charges, see note 12.

The net actuarial gain (loss) recognized in accumulated other comprehensive loss during each period and not yet recognized as a component of net period benefit cost at each period end is as follows:

	Year ended December 31,		
	2020	2019	2018
	in millions		
Balance at beginning of year	$ 8.6	$ 10.7	$ (19.8)
Actuarial gain (loss) on projected benefit obligation	(148.3)	(134.5)	81.9
Actuarial gain (loss) on plan assets (a)	158.7	131.9	(51.1)
Prior service costs and other	1.0	0.5	(0.3)
Balance at end of year	$ 20.0	$ 8.6	$ 10.7

(a) Represents the actual less expected return on plan assets.

Based on December 31, 2020 exchange rates, the benefits that we currently expect to pay during the next five years and in the aggregate for the five years thereafter with respect to our defined benefit plans are as follows (in millions):

Year ending December 31:	
2021	$ 116.9
2022	118.9
2023	123.1
2024	124.6
2025	130.4
2026 – 2030	701.8

2021 Expected Contributions

Based on December 31, 2020 foreign exchange rates, we expect to make contributions of $9 million in aggregate to our defined benefit plans in 2021.

Defined Contribution Plans

We have established various defined contribution benefit plans for our employees. Our aggregate expense for matching contributions under the various defined contribution employee benefit plans was $14 million, $13 million and $10 million during 2020, 2019 and 2018, respectively.

(17) Share-based Compensation

Our share-based compensation expense includes amounts related to share-based incentive awards held by our employees and employees of our subsidiaries.

The following table summarizes certain information related to the share-based incentive awards granted and exercised:

	Year ended December 31,		
Assumptions used to estimate fair value of SARs granted:	**2020**	**2019**	**2018**
Risk-free interest rate	0.18 - 0.88%	1.69 - 2.41%	2.24 - 3.05%
Expected life	4.5 - 7.0 years	4.6 - 7.0 years	4.6 - 7.0 years
Expected volatility	48.1 - 90.6%	33.1 - 36.4%	29.8 - 38.2%
Expected dividend yield	none	none	none
Weighted average grant-date fair value per share of awards granted:			
SARs	$ 5.39	$ 6.86	$ 7.05
RSUs	$ 10.07	$ 19.75	$ 18.41
PSUs	$ —	$ 16.95	$ 19.49
Income tax benefit related to share-based compensation (in millions)	$ 4.9	$ 3.8	$ 6.2

As of December 31, 2020, we have $58 million of total unrecognized compensation expense related to awards held by our employees that is expected to be recognized as a future expense over a weighted-average period of approximately 2.0 years.

Equity Incentive Plans

In 2017, we adopted the Liberty Latin America Ltd. 2018 Incentive Plan (the **Employee Incentive Plan**) and the Liberty Latin America Ltd. 2018 Nonemployee Director Incentive Plan (the **Nonemployee Director Incentive Plan**). Options, SARs, RSUs, cash awards, performance awards or any combination of the foregoing may be granted under the Employee Incentive Plan and the Nonemployee Director Incentive Plan. The maximum number of Liberty Latin America common shares that may be issued under the Employee Incentive Plan and the Nonemployee Director Incentive Plan is 25 million (of which no more than 10 million shares may consist of Class B shares) and 5 million, respectively, in each case subject to anti-dilution and other adjustment provisions in the respective plans. Liberty Latin America common shares issuable pursuant to awards will be made available from either authorized but unissued shares or shares that have been issued but reacquired by Liberty Latin America.

Prior to 2020, RSUs and SARs granted under the Employee Incentive Plan generally vested 12.5% on the seven-month anniversary of the grant date and then vested at a rate of 6.25% each quarter thereafter over a four year term. Awards granted in 2020 vest 33.3% on the anniversary of the grant date over a three year vesting term. All SARs granted under the Employee Incentive Plan expire seven years after the grant date and may be granted with an exercise price at or above the fair market value of the shares on the date of grant in any class of common shares. RSUs issued under the Nonemployee Director Incentive Plan vest on the first anniversary of the grant date.

Liberty Latin America Ltd. Transitional Share Conversion Plan

Prior to the Split-Off, share-based incentive awards were granted in respect to Liberty Global's “LiLAC Shares.” Liberty Global's LiLAC Shares were tracking shares, which were intended to reflect or "track" the economic performance of Liberty Global's "LiLAC Group" rather than the economic performance of Liberty Global as a whole. The LiLAC Group comprised the same entities as Liberty Latin America at the time of the aforementioned Split-Off. In connection with the Split-Off on December 29, 2017, share-based incentive awards in respect to LiLAC Shares were cancelled and replaced with corresponding share-based incentive awards in respect to shares of Liberty Latin America pursuant to the Liberty Latin America Ltd. Transitional Share Conversion Plan (the **Transition Plan**). Specifically, each option, SAR, RSU and PSU outstanding as of December 29, 2017 was cancelled and replaced with the same number of corresponding Liberty Latin America awards. The PSUs granted in connection with the Transition Plan covered a three-year performance period ending December 31, 2018 and included a performance target metric based on the achievement of specified compound annual growth rates (**CAGR**) in a consolidated Adjusted OIBDA metric. Participants earned 80% of their targeted awards under the Transition Plan PSUs, which vested 50% on each of April 1 and October 1 of 2019.

Performance Awards

The following is a summary of the material terms and conditions with respect to our performance-based awards for certain executive officers and key employees.

Equity awards are granted to executive officers and key employees based on a target annual equity value for each executive and key employee, of which approximately two-thirds would be delivered in the form of PSUs and approximately one-third in the form of an annual award of SARs. Each currently-outstanding PSU represents the right to receive one Liberty Latin America Class A or Class C common share, as applicable, subject to performance and vesting.

PSUs are granted to executive officers and key employees, generally annually, pursuant to performance plans that are based on the achievement of specified CAGRs of our Adjusted OIBDA (as defined in note 21) during a 2-year period (**Adjusted OIBDA CAGR**). The performance targets will be adjusted for events such as acquisitions, dispositions and changes in foreign currency exchange rates that affect comparability. These PSUs require delivery of a specified Adjusted OIBDA during the applicable two-year performance periods, with adjustments to the payout should the Adjusted OIBDA exceed or fail to meet the target, as applicable. A performance range of 50% to 125% or more of the applicable target **Adjusted OIBDA CAGR** generally results in award recipients earning 50% to 150% of their target PSU subject to reduction or forfeiture based on individual performance. The earned PSUs generally vest 50% on each of April 1, and October 1, of the year following the end of the performance period.

Liability-Based Awards

Our share-based compensation expense during 2020 includes estimated bonus-related expenses for the 2020 year that will be paid in the form of equity. Accordingly, such expenses have been included in share-based compensation expense effective January 1, 2020 and are being accounted for using the liability-based method.

Modification

Prior to the Split-Off, certain of our employees received share-based incentive awards in shares of Liberty Global that had a legal life of seven years. During 2020, the expiration period for certain of these awards related to Liberty Global shares held by our employees was extended from 7 years to 10 years, which resulted in incremental expense of $7 million.

Share-based Incentive Awards

The following tables summarize the share-based incentive award activity during 2020 with respect to Liberty Latin America awards held by our employees and our board of directors (**Directors**).

	Number of shares	Weighted average base price	Weighted average remaining contractual term	Aggregate intrinsic value
SARs – Class A shares			in years	in millions
Outstanding at January 1, 2020	3,427,663	$ 21.80		
Granted	2,110,072	$ 10.42		
Forfeited	(280,226)	$ 22.38		
Exercised	(1,443)	$ 18.63		
Outstanding at December 31, 2020	5,256,066	$ 17.20	5.0	$ 1.5
Exercisable at December 31, 2020	1,986,355	$ 22.68	3.9	$ —

	Number of shares	Weighted average base price	Weighted average remaining contractual term	Aggregate intrinsic value
SARs – Class C shares			in years	in millions
Outstanding at January 1, 2020	6,904,412	$ 21.87		
Granted	4,244,786	$ 10.47		
Forfeited	(638,593)	$ 22.76		
Exercised	(873)	$ 18.24		
Outstanding at December 31, 2020	10,509,732	$ 17.22	5.0	$ 2.5
Exercisable at December 31, 2020	3,970,651	$ 22.70	3.9	$ —

	Number of shares	Weighted average grant-date fair value per share	Weighted average remaining contractual term
RSUs – Class A shares			in years
Outstanding at January 1, 2020	245,826	$ 20.23	
Granted	666,067	$ 10.42	
Forfeited	(27,241)	$ 15.75	
Released from restrictions	(429,400)	$ 13.14	
Outstanding at December 31, 2020	455,252	$ 12.83	1.8

	Number of shares	Weighted average grant-date fair value per share	Weighted average remaining contractual term
RSUs – Class C shares			**in years**
Outstanding at January 1, 2020	491,325	$ 20.25	
Granted	1,825,771	$ 10.00	
Forfeited	(51,914)	$ 15.99	
Released from restrictions	(1,354,931)	$ 11.56	
Outstanding at December 31, 2020	910,251	$ 12.87	1.8

	Number of shares	Weighted average grant-date fair value per share	Weighted average remaining contractual term
PSUs – Class A shares			**in years**
Outstanding at January 1, 2020	678,848	$ 18.08	
Granted	—	$ —	
Forfeited	(22,941)	$ 17.00	
Released from restrictions	(311,479)	$ 19.39	
Outstanding at December 31, 2020	344,428	$ 16.97	0.8

	Number of shares	Weighted average grant-date fair value per share	Weighted average remaining contractual term
PSUs – Class C shares			**in years**
Outstanding at January 1, 2020	1,357,696	$ 18.19	
Granted (a)	30,365	$ —	
Forfeited	(56,509)	$ 19.09	
Released from restrictions	(612,715)	$ 19.53	
Outstanding at December 31, 2020	718,837	$ 16.21	0.8

(a) Due to the dilutive impact of the Rights Offering (as defined and further described in note 19), holders of outstanding Class C PSU awards received additional awards following completion of the Rights Offering. As the number of additional awards issued reflects the dilution impact of the Rights Offering, there is a zero grant-date fair value for these issued awards.

(18) Accumulated Other Comprehensive Loss

Accumulated other comprehensive loss included in our consolidated balance sheets and statements of equity reflect the aggregate impact of foreign currency translation adjustments and pension-related adjustments and other. The changes in the components of accumulated other comprehensive loss, net of taxes, are summarized as follows:

	Liberty Latin America shareholders				
	Foreign currency translation adjustments	Pension-related adjustments and other	Accumulated other comprehensive loss	Non-controlling interests	Total accumulated other comprehensive loss
			in millions		
Balance at January 1, 2018	$ (42.4)	$ (21.8)	$ (64.2)	$ —	$ (64.2)
Other comprehensive earnings	5.6	35.1	40.7	(1.3)	39.4
Impact of the C&W Jamaica NCI Acquisition	7.0	0.2	7.2	(7.2)	—
Balance at December 31, 2018	(29.8)	13.5	(16.3)	(8.5)	(24.8)
Other comprehensive earnings	4.3	(2.8)	1.5	(0.3)	1.2
Balance at December 31, 2019	(25.5)	10.7	(14.8)	(8.8)	(23.6)
Other comprehensive loss	(117.7)	6.9	(110.8)	(0.8)	(111.6)
Balance at December 31, 2020	$ (143.2)	$ 17.6	$ (125.6)	$ (9.6)	$ (135.2)

The components of other comprehensive earnings (loss), net of taxes, are reflected in our consolidated statements of comprehensive loss. The following table summarizes the tax effects related to each component of other comprehensive earnings (loss), net of amounts reclassified to our consolidated statements of operations:

	Pre-tax amount	Tax benefit (expense)	Net-of-tax amount
		in millions	
Year ended December 31, 2020:			
Foreign currency translation adjustments	$ (118.5)	$ —	$ (118.5)
Pension-related adjustments and other	4.9	2.0	6.9
Other comprehensive loss	(113.6)	2.0	(111.6)
Other comprehensive loss attributable to noncontrolling interests (a)	0.8	—	0.8
Other comprehensive loss attributable to Liberty Latin America shareholders	$ (112.8)	$ 2.0	$ (110.8)
Year ended December 31, 2019:			
Foreign currency translation adjustments	$ 1.8	$ —	$ 1.8
Pension-related adjustments and other	(1.5)	0.9	(0.6)
Other comprehensive earnings	0.3	0.9	1.2
Other comprehensive loss attributable to noncontrolling interests (a)	0.3	—	0.3
Other comprehensive earnings attributable to Liberty Latin America shareholders	$ 0.6	$ 0.9	$ 1.5
Year ended December 31, 2018:			
Foreign currency translation adjustments	$ 2.7	$ —	$ 2.7
Pension-related adjustments and other	37.9	(1.2)	36.7
Other comprehensive earnings	40.6	(1.2)	39.4
Other comprehensive loss attributable to noncontrolling interests (a)	1.3	—	1.3
Other comprehensive earnings attributable to Liberty Latin America shareholders	$ 41.9	$ (1.2)	$ 40.7

(a) Amounts represent the noncontrolling interest owners' share of our foreign currency translation adjustments and pension-related adjustments.

(19) Equity

Share Capital

A summary of the changes in our share capital during 2020, 2019 and 2018 is set forth in the table below:

	Class A	Class B	Class C
Balance at January 1, 2018	48,428,841	1,940,193	120,843,539
LPR NCI Acquisition	—	—	9,500,000
Issued in connection with share-based compensation plans	68,718	—	153,629
Issued in connection with 401(k) company match	—	—	28,990
Conversion of Class B to Class A	4,244	(4,244)	—
Balance at December 31, 2018	48,501,803	1,935,949	130,526,158
Balance at January 1, 2019	48,501,803	1,935,949	130,526,158
Issued in connection with share-based compensation plans	292,486	—	596,153
Issued in connection with 401(k) company match	—	—	59,060
Conversion of Class B to Class A	1,263	(1,263)	—
Balance at December 31, 2019	48,795,552	1,934,686	131,181,371
Balance at January 1, 2020	48,795,552	1,934,686	131,181,371
Issued in connection with the Rights Offering	—	—	49,049,074
Repurchase of Liberty Latin America common shares	(293,816)	—	(673,158)
Issued in connection with share-based compensation plans	505,549	—	1,460,334
Issued in connection with 401(k) company match	—	—	96,145
Conversion of Class B to Class A	2,300	(2,300)	—
Balance at December 31, 2020	49,009,585	1,932,386	181,113,766

Voting rights. Holders of Class A common shares and Class B common shares vote together as a single class on all matters submitted to a vote of Liberty Latin America's shareholders. The holders of Class A common shares have one vote per share; the holders of Class B common shares have 10 votes per share; and the holders of Class C common shares generally have no votes per share. In the event a right to vote is required under applicable law, holders of Class C common shares will vote as a single class with the holders of Class A common shares and Class B common shares and will be entitled to 1/100 of a vote on such matter for each Class C common share. Each Class B common share is convertible at the option of the holder for one Class A common share.

Share Repurchase Program

On March 16, 2020, our Directors approved a share repurchase program (the **Share Repurchase Program**), which authorizes us to repurchase from time to time up to $100 million of our Class A common shares and/or Class C common shares through March 2022, subject to certain limitations and conditions. The Share Repurchase Program does not obligate us to repurchase any of our Class A or C common shares. Under the Share Repurchase Program, we may repurchase our common shares from time to time in open market purchases at prevailing market prices, in privately negotiated transactions, in block trades, derivative transactions and/or through other legally permissible means. At December 31, 2020, the remaining amount authorized for share repurchases was $91 million.

Rights Offering

On August 5, 2020, our Directors authorized the distribution (the **Rights Distribution**) of pro rata subscription rights to holders of our Class A, Class B and Class C common shares (the "**Class C Rights**") to acquire Class C common shares

("**LILAK**" or "**Class C**"), in a rights offering (the "**Rights Offering**"). In the Rights Distribution, we distributed 0.269 of a Class C Right for each share of Class A, Class B or Class C common shares held as of September 8, 2020, which was the record date for the Rights Distribution. Fractional Class C Rights were rounded up to the nearest whole right. Each whole Class C Right entitled the holder to purchase, pursuant to the basic subscription privilege, one share of LILAK at a subscription price of $7.14, which was equal to an approximate 25% discount to the volume weighted average trading price of LILAK for the 3-day trading period ending on and including September 2, 2020. Each Class C Right also entitled the holder to subscribe for additional shares of LILAK that were unsubscribed for in the Rights Offering pursuant to an over-subscription privilege. The Rights Offering commenced on September 11, 2020, which was also the ex-dividend date for the Rights Distribution. The Rights Offering expired in accordance with its terms on September 25, 2020 and was fully subscribed with 49,049,073 shares of LILAK issued to those rights holders exercising basic and, if applicable, over-subscription privileges. The proceeds from the Rights Offering, which aggregated $350 million before expenses, are expected to be used to finance acquisitions, including our recently announced Telefónica-Costa Rica Acquisition, and for other general corporate purposes.

Capped Calls

In connection with the issuance of our Convertible Notes, Liberty Latin America entered into capped call option contracts (the **Capped Calls**). The Capped Calls are used as an economic hedge to reduce or offset potential dilution to our Class C common shares upon any conversion of the Convertible Notes and/or offset any cash payments we are required to make in excess of the principal amount of such converted notes, as the case may be, with such reduction and/or offset subject to a cap. Collectively, the Capped Calls cover the number of the Company's Class C common shares underlying the Convertible Notes, or 19.5 million of Class C common shares, as adjusted for the impact of the Rights Offering as described below. The Capped Calls had an initial strike price of $22.2337 per Class C common share and an initial cap price of $31.7625 per Class C common share, subject to anti-dilution adjustments substantially similar to those applicable to the conversion rate of the Convertible Notes, and expire on July 15, 2024. Following the completion of the Rights Offering, the strike price of the Capped Calls is $20.65 per Class C common share and the cap price per Class C common share ranges from $28.00 to $29.50. The Capped Calls are not considered a derivative instrument under ASC 815, *Derivatives and Hedging*, as the contracts are indexed to our Class C common shares and therefore classified within shareholders' equity. The aggregate premiums paid for the Capped Calls of $46 million are included in additional paid-in capital in our consolidated statement of equity for the three and nine months ended September 30, 2019.

Conversion Option – Convertible Notes

In connection with the issuance of the Convertible Notes, we recorded $77 million in additional paid-in capital in our consolidated statement of equity for the Conversion Option, which represents the fair value of the Conversion Option at issuance less $1 million of allocated transaction fees and costs. For additional information, see notes 6 and 10.

Noncontrolling interests

During 2019, we increased our ownership interest in UTS from 87.5% to 100.0% (the **UTS NCI Acquisition**). We paid $5 million in 2019 and $6 million in 2020, respectively, related to the UTS NCI Acquisition.

During 2018, we increased our ownership in C&W Jamaica from 82.0% to 92.3% by acquiring 1,727,047,174 of the issued and outstanding ordinary stock units of C&W Jamaica that we did not already own (the **C&W Jamaica NCI Acquisition**) for JMD 1.45 per share or JMD 2,504 million ($20 million at the transaction dates) of paid consideration.

On October 17, 2018, we acquired the remaining 40.0% partnership interests in LCPR from Searchlight Capital Partners, L.P. (**Searchlight**) in exchange for 9,500,000 unregistered Liberty Latin America Class C common shares (the **LPR NCI Acquisition**). In connection with the LPR NCI Acquisition (i) we entered into a registration rights agreement with Searchlight related to the Class C common shares and (ii) Searchlight is subject to certain restrictions regarding the transfer of the shares issued in the transaction for a period of up to two years, which expired in October 2020.

Liberty Puerto Rico Equity Commitment

In December 2017, and in connection with challenging circumstances that Liberty Puerto Rico experienced as a result of the damage caused by the 2017 Hurricanes, the LPR Credit Agreements were amended to provide for, among other things, a commitment from Liberty Puerto Rico's shareholders through December 31, 2018 to fund potential liquidity shortfalls. During 2018, prior to the LPR NCI Acquisition, capital contributions aggregating $45 million were provided to Liberty Puerto Rico consisting of $27 million from us and $18 million from investment funds affiliated with Searchlight. The capital contributions from Searchlight are included in our consolidated statement of equity as an increase to noncontrolling interests.

(20) Commitments and Contingencies

Commitments

In the normal course of business, we have entered into agreements that commit our company to make cash payments in future periods with respect to programming contracts, network and connectivity commitments, purchases of customer premises and other equipment and services, and other items. The following table sets forth the U.S. dollar equivalents of such commitments as of December 31, 2020:

	Payments due during:						
	2021	2022	2023	2024	2025	Thereafter	Total
	in millions						
Programming commitments	$ 139.9	$ 89.7	$ 52.8	$ 43.2	$ 0.5	$ —	$ 326.1
Network and connectivity commitments	57.5	13.7	10.0	9.1	6.3	9.5	106.1
Purchase commitments	98.2	6.5	1.4	—	—	—	106.1
Other commitments	9.4	1.9	1.6	1.5	1.4	8.4	24.2
Total (a)	$ 305.0	$ 111.8	$ 65.8	$ 53.8	$ 8.2	$ 17.9	$ 562.5

(a) The commitments included in this table do not reflect any liabilities that are included in our December 31, 2020 consolidated balance sheet.

Programming commitments consist of obligations associated with certain contracts including channels, programming, and sports rights contracts with a wide range of providers that are enforceable and legally binding on us, as we have agreed to pay minimum fees without regard to (i) the actual number of subscribers to the programming services, (ii) whether we terminate service to a portion of our subscribers or dispose of a portion of our distribution systems or (iii) whether we discontinue our premium sports services. In addition, programming commitments do not include increases in future periods associated with contractual inflation or other price adjustments that are not fixed. Accordingly, the amounts reflected in the above table with respect to these contracts are significantly less than the amounts we expect to pay in these periods under these contracts. Historically, payments to programming vendors have represented a significant portion of our operating costs, and we expect that this will continue to be the case in future periods.

Network and connectivity commitments include (i) domestic network service agreements with certain other telecommunications companies and (ii) VTR's mobile virtual network operator (**MVNO**) agreement. The amounts reflected in the above table with respect to our MVNO commitment represent fixed minimum amounts payable under this agreement and, therefore, may be significantly less than the actual amounts VTR ultimately pays in these periods.

Purchase commitments include unconditional and legally-binding obligations related to (i) the purchase of customer premises and other equipment and (ii) certain service-related commitments, including call center, information technology and maintenance services.

In addition to the commitments set forth in the table above, we have commitments under (i) derivative instruments and (ii) defined benefit plans and similar agreements, pursuant to which we expect to make payments in future periods. For information regarding our derivative instruments, including the net cash paid or received in connection with these instruments during 2020, 2019 and 2018, see note 5. For information concerning our defined benefit plans, see note 16.

Guarantees and Other Credit Enhancements

In the ordinary course of business, we may provide (i) indemnifications to our lenders, our vendors and certain other parties and (ii) performance and/or financial guarantees to local municipalities, our customers and vendors. Historically, these arrangements have not resulted in our company making any material payments and we do not believe that they will result in material payments in the future.

Legal and Regulatory Proceedings and Other Contingencies

VTR Class Action. On August 25, 2020, VTR was notified that the Chilean National Consumer Authority ("**SERNAC**", the Spanish acronym for Servicio Nacional del Consumidor) had filed a class action complaint against VTR in the 14th Civil Court of Santiago. The complaint relates to consumer complaints regarding VTR's broadband service and capacity during the pandemic and raises claims regarding, among other things, VTR's disclosure of its broadband speeds and aggregate capacity availability and VTR's response to address the causes of service instability during the pandemic. VTR was also notified in August about two additional class action complaints filed by two Chilean consumer associations (ODECU and AGRECU) making similar claims and allegations. The class action complaint of ODECU was filed in the 21st Civil Court of Santiago, and the class action complaint of AGRECU was filed in the 26th Civil Court of Santiago. The complaint of SERNAC and ODECU seeks (i) the Court declare that VTR has infringed the rules of the Consumer Protection Law; (ii) the responsibility of VTR for such infractions and, if so, establish the corresponding fines; and (iii) compensatory damages. In the case of AGRECU, the complaint only seeks compensatory damages. On October 22, 2020, VTR was notified of a fourth class action complaint filed by Conadecus in the 16th Civil Court of Santiago alleging that VTR did not adhere to certain call center, technical visit and service level requirements under applicable law. We believe that the allegations contained in the complaints are without merit, in particular as it relates to VTR's service and response during the pandemic and intend to defend the complaints vigorously. We cannot predict at this point the length of time that these actions will be ongoing. Additionally, a liability, if any, or a reasonable range of loss is not currently determinable based upon the current facts and circumstances of these claims.

Regulatory Issues. Video distribution, broadband internet, fixed-line telephony and mobile businesses are regulated in each of the countries in which we operate. The scope of regulation varies from country to country. Adverse regulatory developments could subject our businesses to a number of risks. Regulation, including conditions imposed on us by competition or other authorities as a requirement to close acquisitions or dispositions, could limit growth, revenue and the number and types of services offered and could lead to increased operating costs and property and equipment additions. In addition, regulation may restrict our operations and subject them to further competitive pressure, including pricing restrictions, interconnect and other access obligations, and restrictions or controls on content, including content provided by third parties. Failure to comply with current or future regulation could expose our businesses to various penalties.

In addition to the foregoing items, we have contingent liabilities related to matters arising in the ordinary course of business, including (i) legal proceedings, (ii) issues involving wage, property, withholding and other tax issues and (iii) disputes over interconnection, programming and copyright fees. While we generally expect that the amounts required to satisfy these contingencies will not materially differ from any estimated amounts we have accrued, no assurance can be given that the resolution of one or more of these contingencies will not result in a material impact on our results of operations, cash flows or financial position in any given period. Due, in general, to the complexity of the issues involved and, in certain cases, the lack of a clear basis for predicting outcomes, we cannot provide a meaningful range of potential losses or cash outflows that might result from any unfavorable outcomes.

(21) Segment Reporting

Our reportable segments derive their revenue primarily from residential and B2B services, including video, broadband internet and fixed-line telephony services and mobile services. Our corporate category includes our corporate operations. We generally identify our reportable segments as those operating segments that represent 10% or more of our revenue, Adjusted OIBDA (as defined below) or total assets.

During the fourth quarter of 2020, we completed an organizational change with respect to our C&W operations whereby management of the CWP subsidiary of C&W now reports directly to the President and Chief Operating Officer of Liberty Latin America and no longer reports to the former C&W segment decision maker. As a result, CWP is now a separate operating and reportable segment, herein referred to as the C&W Panama segment. Accordingly, as of December 31, 2020, our reportable segments are as follows:

- C&W Caribbean and Networks;
- C&W Panama;
- VTR/Cabletica; and
- Liberty Puerto Rico.

For each of the respective years in the tables set forth below, the amounts presented exclude the pre-acquisition revenue, Adjusted OIBDA, property and equipment additions and long-lived assets of Cabletica, UTS and the AT&T Acquired Entities, which were acquired on October 1, 2018, March 31, 2019 and October 31, 2020, respectively. For more information regarding our acquisitions, see note 4.

Performance Measures of our Reportable Segments

We evaluate performance and make decisions about allocating resources to our reportable segments based on financial measures such as revenue and Adjusted OIBDA. In addition, we review non-financial measures such as subscriber growth.

Adjusted OIBDA is the primary measure used by our chief operating decision maker to evaluate segment operating performance. Adjusted OIBDA is also a key factor that is used by our internal decision makers to (i) determine how to allocate resources to segments and (ii) evaluate the effectiveness of our management for purposes of incentive compensation plans. As we use the term, "Adjusted OIBDA" is defined as operating income or loss before share-based compensation, depreciation and amortization, provisions and provision releases related to significant litigation and impairment, restructuring and other operating items. Other operating items include (i) gains and losses on the disposition of long-lived assets, (ii) third-party costs directly associated with successful and unsuccessful acquisitions and dispositions, including legal, advisory and due diligence fees, as applicable, and (iii) other acquisition-related items, such as gains and losses on the settlement of contingent consideration. Our internal decision makers believe Adjusted OIBDA is a meaningful measure because it represents a transparent view of our recurring operating performance that is unaffected by our capital structure and allows management to (i) readily view operating trends, (ii) perform analytical comparisons and benchmarking between segments and (iii) identify strategies to improve operating performance in the different countries in which we operate. A reconciliation of total Adjusted OIBDA to operating income (loss) and to loss before income taxes is presented below.

The amounts presented below represent 100% of the revenue and Adjusted OIBDA of each of our reportable segments and our corporate operations. As further described in note 1, as we have the ability to control Cabletica and certain subsidiaries of C&W that are not wholly owned, we include 100% of the revenue and expenses of these entities in our consolidated statements of operations despite the fact that third parties own significant interests in these entities. On October 17, 2018, we acquired the remaining 40.0% interest in LCPR that we did not already own. The noncontrolling owners' interests in the operating results of (i) certain subsidiaries of C&W, (ii) Cabletica and (iii) prior to October 17, 2018, LCPR, are reflected in net earnings or loss attributable to noncontrolling interests in our consolidated statements of operations.

	Revenue		
	Year ended December 31,		
	2020	2019	2018
	in millions		
C&W Caribbean and Networks	$ 1,706.8	$ 1,812.8	$ 1,738.7
C&W Panama	500.2	582.7	600.9
VTR/Cabletica	949.0	1,073.8	1,043.7
Liberty Puerto Rico	624.1	412.1	335.6
Corporate	2.7	—	—
Intersegment eliminations	(18.2)	(14.4)	(13.2)
Total	$ 3,764.6	$ 3,867.0	$ 3,705.7

	Adjusted OIBDA		
	Year ended December 31,		
	2020	2019	2018
	in millions		
C&W Caribbean and Networks	$ 713.2	$ 732.1	$ 664.3
C&W Panama	177.2	227.6	251.4
VTR/Cabletica	361.9	433.6	421.1
Liberty Puerto Rico	276.9	203.2	195.8
Corporate	(44.5)	(55.1)	(46.1)
Total	$ 1,484.7	$ 1,541.4	$ 1,486.5

The following table provides a reconciliation of total Adjusted OIBDA to operating income (loss) and to loss before income taxes:

	Year ended December 31,		
	2020	2019	2018
	in millions		
Total Adjusted OIBDA	$ 1,484.7	$ 1,541.4	$ 1,486.5
Share-based compensation expense	(97.5)	(57.5)	(39.8)
Depreciation and amortization	(914.6)	(871.0)	(829.8)
Impairment, restructuring and other operating items, net	(380.9)	(259.1)	(640.5)
Operating income (loss)	91.7	353.8	(23.6)
Interest expense	(533.4)	(499.2)	(443.7)
Realized and unrealized gains (losses) on derivative instruments, net	(352.7)	(17.2)	94.8
Foreign currency transaction gains (losses), net	1.2	(112.5)	(180.0)
Losses on debt modification and extinguishment, net	(45.1)	(19.8)	(32.1)
Other income (expense), net	0.1	14.3	(0.1)
Loss before income taxes	$ (838.2)	$ (280.6)	$ (584.7)

Property and Equipment Additions of our Reportable Segments

The property and equipment additions of our reportable segments and corporate operations (including capital additions financed under vendor financing or finance lease arrangements) are presented below and reconciled to the capital expenditure amounts included in our consolidated statements of cash flows. For additional information concerning capital additions financed under vendor financing, see note 9.

	Year ended December 31,		
	2020	2019	2018
	in millions		
C&W Caribbean and Networks	$ 246.8	$ 305.8	$ 302.0
C&W Panama	70.4	89.7	76.7
VTR/Cabletica	196.4	222.7	214.7
Liberty Puerto Rico	97.3	88.0	161.9
Corporate	20.2	15.3	16.1
Total property and equipment additions	631.1	721.5	771.4
Assets acquired under capital-related vendor financing arrangements	(99.1)	(96.1)	(53.9)
Acquisition of intangible assets (a)	7.8	—	—
Assets acquired under finance leases	—	(0.2)	(3.9)
Changes in current liabilities related to capital expenditures	26.0	(36.1)	62.8
Total capital expenditures	$ 565.8	$ 589.1	$ 776.4

(a) Represents cash paid for the acquisition of spectrum license intangible assets.

Balance Sheet Data of our Reportable Segments

We do not present the balance sheet data of our reportable segments, as this information is not a primary measure used by our chief operating decision maker to evaluate segment operating performance, determine the allocation of resources to segments, or assess the effectiveness of our management for purposes of annual or other incentive compensation plans.

Revenue by Major Category

Our revenue by major category for our reportable segments, set forth in the tables below, includes the following categories:

- residential fixed subscription and residential mobile services revenue include amounts received from subscribers for ongoing fixed and airtime services, respectively;
- residential fixed non-subscription revenue primarily includes interconnect and advertising revenue;
- B2B service revenue primarily includes broadband internet, video, fixed-line telephony, mobile and managed services (including equipment installation contracts) offered to small (including small or home office), medium and large enterprises and, on a wholesale basis, other telecommunication operators; and
- B2B subsea network revenue includes long-term capacity contracts with customers where the customer either pays a fee over time or prepays for the capacity upfront and pays a portion related to operating and maintenance of the network over time.

	Year ended December 31, 2020						
	C&W Caribbean and Networks	C&W Panama	VTR/Cabletica	Liberty Puerto Rico	Corporate (a)	Intersegment Eliminations	Total
	in millions						
Residential revenue:							
Residential fixed revenue:							
Subscription revenue:							
Video	$ 142.4	$ 27.8	$ 370.6	$ 147.2	$ —	$ —	$ 688.0
Broadband internet	250.0	39.0	382.7	204.7	—	—	876.4
Fixed-line telephony	74.6	18.8	77.2	25.5	—	—	196.1
Total subscription revenue	467.0	85.6	830.5	377.4	—	—	1,760.5
Non-subscription revenue	42.2	11.8	24.3	17.7	—	—	96.0
Total residential fixed revenue	509.2	97.4	854.8	395.1	—	—	1,856.5
Residential mobile revenue:							
Service revenue	294.1	160.1	55.7	82.9	—	—	592.8
Interconnect, inbound roaming, equipment sales and other (b)	44.4	41.0	8.2	50.6	2.7	—	146.9
Total residential mobile revenue	338.5	201.1	63.9	133.5	2.7	—	739.7
Total residential revenue	847.7	298.5	918.7	528.6	2.7	—	2,596.2
B2B revenue:							
Service revenue (c)	600.4	201.7	30.3	89.8	—	(4.1)	918.1
Subsea network revenue	258.7	—	—	—	—	(14.1)	244.6
Total B2B revenue	859.1	201.7	30.3	89.8	—	(18.2)	1,162.7
Other revenue (d)	—	—	—	5.7	—	—	5.7
Total	$ 1,706.8	$ 500.2	$ 949.0	$ 624.1	$ 2.7	$ (18.2)	$ 3,764.6

(a) Amount relates to services we now provide, following the AT&T Acquisition, for mobile handset insurance.

(b) During 2020, we changed our presentation of inbound roaming revenue whereby we no longer include it in “mobile services revenue” and now present it within “mobile interconnect, inbound roaming, equipment sales and other” to better align with how management evaluates the business. The total amount includes $27 million of inbound roaming revenue. The total amount also includes $68 million of revenue from sales of mobile handsets and other devices.

(c) The total amount includes $18 million of revenue from sales of mobiles handsets and other devices to B2B mobile customers.

(d) Amount relates to revenue received from the FCC related to Liberty Mobile following the closing of the AT&T Acquisition.

	Year ended December 31, 2019					
	C&W Caribbean and Networks	C&W Panama	VTR/Cabletica	Liberty Puerto Rico	Intersegment Eliminations	Total
	in millions					
Residential revenue:						
Residential fixed revenue:						
Subscription revenue:						
Video	$ 150.1	$ 31.0	$ 422.1	$ 140.9	$ —	$ 744.1
Broadband internet	225.1	34.9	412.0	175.0	—	847.0
Fixed-line telephony	79.5	22.4	100.7	23.4	—	226.0
Total subscription revenue	454.7	88.3	934.8	339.3	—	1,817.1
Non-subscription revenue	47.5	14.5	34.3	21.7	—	118.0
Total residential fixed revenue	502.2	102.8	969.1	361.0	—	1,935.1
Residential mobile revenue:						
Service revenue	339.1	183.8	62.7	—	—	585.6
Interconnect, inbound roaming, equipment sales and other (a)	65.3	56.8	12.0	—	—	134.1
Total residential mobile revenue	404.4	240.6	74.7	—	—	719.7
Total residential revenue	906.6	343.4	1,043.8	361.0	—	2,654.8
B2B revenue:						
Service revenue (b)	659.3	239.3	30.0	51.1	(4.2)	975.5
Subsea network revenue	246.9	—	—	—	(10.2)	236.7
Total B2B revenue	906.2	239.3	30.0	51.1	(14.4)	1,212.2
Total	$ 1,812.8	` $ 582.7	$ 1,073.8	$ 412.1	$ (14.4)	$ 3,867.0

(a) During 2020, we reclassified \$37 million of inbound roaming revenue from “mobile services revenue” to “interconnect, inbound roaming, equipment sales and other.” The total amount also includes \$43 million of revenue from sales of mobile handsets and other devices.

(b) The total amount includes \$26 million of revenue from sales of mobiles handsets and other devices.

	Year ended December 31, 2018					
	C&W Caribbean and Networks	C&W Panama	VTR/Cabletica	Liberty Puerto Rico	Intersegment Eliminations	Total
	in millions					
Residential revenue:						
Residential fixed revenue:						
Subscription revenue:						
Video	$ 143.0	$ 29.0	$ 401.4	$ 118.9	$ —	$ 692.3
Broadband internet	194.3	31.0	386.5	132.5	—	744.3
Fixed-line telephony	76.6	24.4	123.8	18.6	—	243.4
Total subscription revenue	413.9	84.4	911.7	270.0	—	1,680.0
Non-subscription revenue	50.0	18.3	30.2	17.4	—	115.9
Total residential fixed revenue	463.9	102.7	941.9	287.4	—	1,795.9
Residential mobile revenue:						
Service revenue	344.5	211.3	62.9	—	—	618.7
Interconnect, inbound roaming, equipment sales and other (a)	71.8	56.2	13.2	—	—	141.2
Total residential mobile revenue	416.3	267.5	76.1	—	—	759.9
Total residential revenue	880.2	370.2	1,018.0	287.4	—	2,555.8
B2B revenue:						
Service revenue (b)	610.5	230.7	25.7	37.1	(5.4)	898.6
Subsea network revenue	248.0	—	—	—	(7.8)	240.2
Total B2B revenue	858.5	230.7	25.7	37.1	(13.2)	1,138.8
Other revenue (c)	—	—	—	11.1	—	11.1
Total	$ 1,738.7	$ 600.9	$ 1,043.7	$ 335.6	$ (13.2)	$ 3,705.7

(a) During 2020, we reclassified $38 million of inbound roaming revenue from “mobile services revenue” to “interconnect, inbound roaming, equipment sales and other.” The total amount also includes $47 million of revenue from sales of mobile handsets and other devices.

(b) The total amount includes $23 million of revenue from sales of mobiles handsets and other devices.

(c) Represents funds received by Liberty Puerto Rico from the FCC, which were granted to help restore and improve coverage and service quality from damages caused by the 2017 Hurricanes.

Geographic Markets

The revenue from third-party customers for our geographic markets is set forth in the table below.

	Year ended December 31,		
	2020	2019	2018
	in millions		
Panama	$ 497.8	$ 580.4	$ 597.4
Networks & LatAm (a)	353.6	351.0	356.2
Jamaica	375.5	383.3	361.6
The Bahamas	181.1	207.3	229.2
Barbados	139.2	150.2	151.3
Trinidad and Tobago	160.6	161.3	157.4
Curacao	139.7	120.0	22.8
Chile	809.0	941.1	1,011.1
Costa Rica	139.9	132.7	32.6
Puerto Rico	611.0	410.5	333.8
Other (b)	357.2	429.2	452.3
Total	$ 3,764.6	$ 3,867.0	$ 3,705.7

(a) The amounts represent managed services and wholesale revenue from various jurisdictions across Latin America and the Caribbean, primarily related to the sale and lease of telecommunications capacity on C&W's subsea and terrestrial fiber optic cable networks.

(b) The amounts primarily relate to a number of countries in which we have less significant operations, all of which are located in the Caribbean, and to a lesser extent, in Latin America.

The long-lived assets of our geographic markets are set forth below:

	December 31,	
	2020	2019
	in millions	
Panama	$ 354.8	$ 391.6
Networks & LatAm (a)	721.7	751.0
Jamaica	360.5	374.6
The Bahamas	342.4	359.4
Barbados	185.2	193.7
Trinidad and Tobago	214.5	216.0
Curacao	161.5	169.6
Chile	755.0	710.8
Costa Rica	67.4	67.6
Puerto Rico	1,217.9	524.2
Other (b)	530.5	542.6
Total	$ 4,911.4	$ 4,301.1

(a) Represents long-lived assets related to C&W's subsea and terrestrial fiber optic cable networks that connect over 40 markets in Latin America and the Caribbean.

(b) The amounts primarily include long-lived assets of C&W's other operations, which are primarily located in the Caribbean, and to a lesser extent, in Latin America.

(22) Quarterly Financial Information (Unaudited)

	2020			
	1st quarter	2nd quarter	3rd quarter	4th quarter
	in millions, except per share amounts			
Revenue (a)	$ 931.0	$ 848.9	$ 887.5	$ 1,097.2
Operating income (loss)	$ 107.8	$ (206.0)	$ 86.6	$ 103.3
Net loss attributable to Liberty Latin America shareholders	$ (180.7)	$ (393.0)	$ (84.6)	$ (28.9)
Basic and diluted net loss per share attributable to Liberty Latin America shareholders (b)	$ (0.98)	$ (2.12)	$ (0.46)	$ (0.12)

	2019			
	1st quarter	2nd quarter	3rd quarter	4th quarter
	in millions, except per share amounts			
Revenue (c)	$ 942.7	$ 982.9	$ 966.8	$ 974.6
Operating income (loss)	$ 113.3	$ 143.5	$ (69.7)	$ 166.7
Net earnings (loss) attributable to Liberty Latin America shareholders	$ (41.7)	$ (116.0)	$ 35.3	$ 42.3
Basic and diluted net earnings (loss) per share attributable to Liberty Latin America shareholders (d)	$ (0.23)	$ (0.63)	$ 0.19	$ 0.23

(a) As discussed in note 4, we completed the AT&T Acquisition in October 2020.

(b) The basic net loss per share attributable to Liberty Latin America shareholders amounts are calculated based on a weighted average number of Liberty Latin America Shares outstanding of 184,950,252, 185,424,779, 185,380,797 and 232,014,448, respectively.

(c) As discussed in note 4, we completed the UTS Acquisition in March 2019.

(d) The basic net earnings (loss) per share attributable to Liberty Latin America shareholders amounts are calculated based on a weighted average number of Liberty Latin America Shares outstanding of 183,891,922, 184,366,504, 184,452,387 and 184,755,090, respectively. The dilutive net earnings per share attributable to Liberty Latin America shareholders amounts for the third and fourth quarters of 2019 are calculated based on a weighted average number of Liberty Latin America Shares outstanding of 184,807,225 and 184,820,386, respectively.

PART III

The following required information is incorporated by reference to our definitive proxy statement for our 2021 Annual General Meeting of Shareholders, which we intend to hold during the second quarter of 2021.

Item 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Item 11. EXECUTIVE COMPENSATION

Item 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Item 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

We intend to file our definitive proxy statement for our 2021 Annual General Meeting of Shareholders with the Securities and Exchange Commission on or before April 30, 2021.

PART IV

Item 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) (1) FINANCIAL STATEMENTS

The financial statements required under this Item begin on page II-57 of this Annual Report on Form 10-K.

(a) (2) FINANCIAL STATEMENT SCHEDULES

The financial statement schedule required under this Item is as follows:

Schedule I - Condensed Financial Information of Registrant (Parent Company Information):

(a) (3) EXHIBITS

Listed below are the exhibits filed as part of this Annual Report on Form 10-K (according to the number assigned to them in Item 601 of Regulation S-K):

2.1	Stock Purchase Agreement, dated October 9, 2019, by and among AT&T Corp, AT&T International Holdings, LLC, SBC Telecom, Inc., Leo Cable LP and, for the limited purpose specified therein, Liberty Latin America (incorporated by reference to Exhibit 99.1 to Liberty Latin America's Current Report on Form 8-K filed on October 15, 2019 (File No. 001-38335)).***
3.1	Memorandum of Association of Liberty Latin America (incorporated by reference to Exhibit 3.1 to Liberty Latin America's Registration Statement on Form S-1 filed on November 16, 2017 (File No. 333-221608) (the S-1 Registration Statement)).
3.2	Memorandum of Increase of Share Capital of Liberty Latin America (incorporated by reference to Exhibit 3.1 to Liberty Latin America's Current Report on Form 8-K filed on January 5, 2018 (File No. 001-38335) (the January 2018 8-K)).
3.3	Bye-laws of Liberty Latin America (incorporated by reference to Exhibit 3.2 to the January 2018 8-K).
4.1	Specimen Certificate for shares of Class A common shares, par value $.01 per share, of Liberty Latin America (incorporated by reference to Exhibit 4.1 to the S-1 Registration Statement).
4.2	Specimen Certificate for shares of Class B common shares, par value $.01 per share, of Liberty Latin America (incorporated by reference to Exhibit 4.2 to the S-1 Registration Statement).
4.3	Specimen Certificate for shares of Class C common shares, par value $.01 per share, of Liberty Latin America (incorporated by reference to Exhibit 4.3 to the S-1 Registration Statement).
4.4	Indenture dated January 24, 2014, between VTR Finance B.V. (VTR Finance), The Bank of New York Mellon, London Branch, as Trustee and Security Agent, and The Bank of New York Mellon as Paying Agent, Registrar and Transfer Agent, relating to VTR Finance's 6.875% senior secured notes due 2024 (incorporated by reference to Exhibit 4.1 to Liberty Global's Current Report on Form 8-K filed January 24, 2014 (File No. 001-35961)).
4.5	Registration Rights Agreement dated October 17, 2018, by and between Liberty Latin America, SCPV LEO,L.P., SC LEO, L.P., SC AIV LEO, L.P., Searchlight/SIP Holdco SPV II (TRI), L.P. and Searchlight LEO Co-Invest Partners, LP (incorporated by reference to Exhibit 4.8 to Liberty Latin America's Annual Report on Form 10-K for the year ended December 31, 2018 filed on February 21, 2019 (File No. 001-38335)).
4.6	Indenture, dated June 28, 2019, between Liberty Latin America and The Bank of New York Mellon relating to Liberty Latin America's 2.00% Convertible Senior Notes due 2024 (incorporated by reference to Exhibit 4.1 to Liberty Latin America's Quarterly Report on Form 10-Q for the quarter ended June 30, 2019 filed on August 6, 2019 (File No. 001-38335) (the August 2019 10-Q)).

4.7	Indenture, dated October 25, 2019, between LCPR Senior Secured Financing Designated Activity Company, as issuer, LCPR Loan Financing LLC, as guarantor, BNY Mellon Corporate Trustee Services Limited, as trustee and The Bank of Nova Scotia, as security trustee (incorporated by reference to Exhibit 4.7 to Liberty Latin America's Annual Report on Form 10-K for the year ended December 31, 2019 filed on February 19, 2020 (File No. 001-38335) (the 2019 10-K)).***
4.8	Indenture, dated July 1, 2020, by and between VTR Finance N.V. (VTR Finance) and BNY Mellon Corporate Trustee Services Limited, as Trustee, The Bank of New York Mellon, London Branch, as Security Agent, and The Bank of New York Mellon as Paying Agent, Registrar and Transfer Agent, relating to VTR Finance's 6.375% senior notes due 2028 (incorporated by reference to Exhibit 4.1 to Liberty Latin America's Quarterly Report on Form 10-Q for the quarter ended June 30, 2020 filed on August 5, 2020 (File No. 001-38335) (the August 2020 10-Q)).
4.9	Indenture, dated July 1, 2020, between VTR Comunicaciones SpA (VTR) and The Bank of New York Mellon, London Branch, as Trustee, and The Bank of New York Mellon as Paying Agent, Registrar and Transfer Agent, relating to VTR's 5.125% senior secured notes due 2028 (incorporated by reference to Exhibit 4.2 to the August 2020 10-Q).
4.10	Description of the Registrant's Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934 (incorporated by reference to Exhibit 4.8 to the 2019 10-K).
	The Registrant undertakes to furnish to the Securities and Exchange Commission, upon request, a copy of all instruments with respect to long-term debt not filed herewith.
10.1	Additional Facility Joinder Agreement dated July 24, 2017 and entered into between, among others, Sable, Coral-US Co-Borrower LLC and The Bank of Nova Scotia, relating to the Credit Agreement dated May 16, 2016 as amended and restated on May 26, 2017 (incorporated by reference to Exhibit 4.1 to Liberty Global's Current Report on Form 8-K filed July 28, 2017 (File No. 001-35961)).
10.2	Additional Facility Joinder Agreement dated February 7, 2018 and entered into between, among others, Sable, Coral-US Co-Borrower LLC and The Bank of Nova Scotia (incorporated by reference to Exhibit 4.1 to Liberty Latin America's Current Report on Form 8-K filed on February 12, 2018 (File. No. 001-38335)).
10.3	Tax Sharing Agreement, dated as of December 29, 2017, between Liberty Global and Liberty Latin America (incorporated by reference to Exhibit 10.1 to the January 2018 8-K).
10.4	Sublease Agreement, dated as of December 29, 2017, between Liberty Global, Inc. and LiLAC Communications Inc. (incorporated by reference to Exhibit 10.3 to the January 2018 8-K).
10.5	Facilities Sharing Agreement, dated as of December 29, 2017, between Liberty Global, Inc. and LiLAC Communications Inc. (incorporated by reference to Exhibit 10.4 to the January 2018 8-K).
10.6	Employment Agreement, dated as of November 1, 2017, by and among Liberty Latin America, LiLAC Communications Inc. and Balan Nair (incorporated by reference to Exhibit 10.8 to the S-1 Registration Statement).
10.7	Form of Indemnification Agreement by and between Liberty Latin America and its executive officers/directors (incorporated by reference to Exhibit 10.9 to Amendment No. 1 to Liberty Latin America's Registration Statement on Form S-1 filed on December 8, 2017 (File No. 333-221608)).
10.8	Liberty Latin America 2018 Incentive Plan (incorporated by reference to Exhibit 99.1 to Liberty Latin America's Registration Statement on Form S-8 filed on January 11, 2018 (File No. 333-222515) (the S-8 Registration Statement).
10.9	Liberty Latin America 2018 Nonemployee Director Incentive Plan (incorporated by reference to Exhibit 99.2 to the S-8 Registration Statement).
10.10	Liberty Latin America Transitional Share Conversion Plan (incorporated by reference to Exhibit 99.3 to the S-8 Registration Statement).
10.11	Form of Share Appreciation Rights Agreement under the Liberty Latin America 2018 Incentive Plan (incorporated by reference to Exhibit 10.3 to the May 2018 10-Q).
10.12	Deferred Compensation Plan effective May 1, 2018 (adopted effective March 23, 2018) (incorporated by reference to Exhibit 10.4 to the May 2018 10-Q).
10.13	Form of Share Appreciation Rights Agreement between Liberty Latin America and its Chief Executive Officer under the Liberty Latin America 2018 Incentive Plan (incorporated by reference to Exhibit 10.5 to the May 2018 10-Q).
10.14	Personal Usage of Aircraft Policy, adopted April 1, 2018 (incorporated by reference to Exhibit 10.1 to Liberty Latin America's Quarterly Report on Form 10-Q for the quarter ended June 30, 2018 filed on August 8, 2018 (File No. 001-38335) (the August 2018 10-Q)).

10.15	Form of Aircraft Time Sharing Agreement (incorporated by reference to Exhibit 10.2 to the August 2018 10-Q).
10.16	Form of Restricted Share Units Agreement under the Nonemployee Director Incentive Plan (incorporated by reference to Exhibit 10.3 to the August 2018 10-Q).
10.17	Form of Performance Share Units Agreement between Liberty Latin America and its Chief Executive Officer under the Liberty Latin America 2018 Incentive Plan (incorporated by reference to Exhibit 10.1 to Liberty Latin America's Quarterly Report on Form 10-Q for the quarter ended September 30, 2018 filed on November 7, 2018 (File No. 001-38335) (the November 2018 10-Q)).
10.18	Form of Performance Share Units Agreement under the Liberty Latin America 2018 Incentive Plan (incorporated by reference to Exhibit 10.2 to the November 2018 10-Q).
10.19	Form of Restricted Share Units Agreement under the Liberty Latin America 2018 Incentive Plan (incorporated by reference to Exhibit 10.1 to the August 2019 10-Q).
10.20	Form of Employment Agreement, approved as of July 17, 2019, by and among Liberty Latin America, LiLAC Communications Inc. and certain executive officers (incorporated by reference to Exhibit 10.1 to Liberty Latin America's Quarterly Report on Form 10-Q for the quarter ended September 30, 2019 filed on November 5, 2019 (File No. 001-38335)).
10.21	Credit Agreement, dated October 25, 2019, between LCPR Loan Financing LLC, as borrower, LCPR Senior Secured Financing Designated Activity Company, as guarantor, The Bank of Nova Scotia, as administrative agent, The Bank of Nova Scotia, as security agent, and the lenders party thereto (incorporated by reference to Exhibit 10.21 to the 2019 10-K).***
10.22	Credit Agreement, dated October 25, 2019, between Liberty Cablevision of Puerto Rico LLC, as borrower, Puerto Rico Cable Acquisition Company, as guarantor, The Bank of Nova Scotia, as administrative agent, The Bank of Nova Scotia, as security agent, and the lenders party thereto (incorporated by reference to Exhibit 10.22 of the 2019 10-K).***
10.23	Additional Facility Joinder Agreement dated January 24, 2020 and entered into between, among others, Sable International Finance Limited, Coral-US Co-Borrower LLC and The Bank of Nova Scotia (incorporated by reference to Exhibit 10.1 to Liberty Latin America's Current Report on Form 8-K filed on January 30, 2020 (File No. 001-38335) (the January 2020 8-K)).
10.24	Extension Amendment dated January 24, 2020 and entered into between, among others, Sable International Finance Limited, Coral-US Co-Borrower LLC and The Bank of Nova Scotia (incorporated by reference to Exhibit 10.2 to the January 2020 8-K).***
10.25	Liberty Latin America Ltd. Nonemployee Director Deferred Compensation Plan (incorporated by reference to Exhibit 10.3 to Liberty Latin America's Quarterly Report on Form 10-Q for the quarter ended March 31, 2020 filed on May 5, 2020 (File No. 001-38335)).
21	List of Subsidiaries.*
23.1	Consent of KPMG LLP (U.S.).*
31.1	Certification of President and Chief Executive Officer.*
31.2	Certification of Senior Vice President and Chief Financial Officer (Principal Financial Officer).*
32	Section 1350 Certifications.**
101.INS	XBRL Inline Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
101.SCH	XBRL Inline Taxonomy Extension Schema Document.*
101.CAL	XBRL Inline Taxonomy Extension Calculation Linkbase Document.*
101.DEF	XBRL Inline Taxonomy Extension Definition Linkbase.*
101.LAB	XBRL Inline Taxonomy Extension Label Linkbase Document.*
101.PRE	XBRL Inline Taxonomy Extension Presentation Linkbase Document.*
104	Cover Page Interactive Data File.* (formatted as Inline XBRL and contained in Exhibit 101)

* Filed herewith

** Furnished herewith

*** Certain schedules and exhibits have been omitted pursuant to Item 601(a)(5) of Regulation S-K. Liberty Latin America hereby undertakes to furnish supplemental copies of any of the omitted schedules and exhibits upon request by the

SEC; provided, however, that the Company may request confidential treatment pursuant to Rule 24b-2 of the Exchange Act for any schedule or exhibit so furnished.

Item 16. FORM 10-K SUMMARY

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

LIBERTY LATIN AMERICA LTD.

Dated: March 1, 2021

/s/ JOHN M. WINTER

John M. Winter
Senior Vice President, Chief Legal Officer and Secretary

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the date indicated.

Signature	Title	Date
/s/ MICHAEL T. FRIES Michael T. Fries	Executive Chairman of the Board	March 1, 2021
/s/ BALAN NAIR Balan Nair	President, Chief Executive Officer and Director (Principal Executive Officer)	March 1, 2021
/s/ ALFONSO DE ANGOITIA NORIEGA Alfonso de Angoitia Noriega	Director	March 1, 2021
/s/ CHARLES H.R. BRACKEN Charles H.R. Bracken	Director	March 1, 2021
/s/ MIRANDA CURTIS Miranda Curtis	Director	March 1, 2021
/s/ PAUL A. GOULD Paul A. Gould	Director	March 1, 2021
/s/ BRENDAN PADDICK Brendan Paddick	Director	March 1, 2021
/s/ DANIEL SANCHEZ Daniel Sanchez	Director	March 1, 2021
/s/ ERIC L. ZINTERHOFER Eric L. Zinterhofer	Director	March 1, 2021
/s/ CHRISTOPHER NOYES Christopher Noyes	Senior Vice President and Chief Financial Officer (Principal Financial Officer)	March 1, 2021
/s/ BRIAN ZOOK Brian Zook	Chief Accounting Officer (Principal Accounting Officer)	March 1, 2021

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LIBERTY LATIN AMERICA LTD.

SCHEDULE I
(Parent Company Information – See Notes to Consolidated Financial Statements)

CONDENSED BALANCE SHEETS
(Parent Company Only)

	December 31, 2020	December 31, 2019
	in millions	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 193.3	$ 524.6
Other receivables – related-party	122.1	60.7
Prepaid expenses	0.7	—
Other current assets	3.4	0.8
Total current assets	319.5	586.1
Long-term notes receivable – related-party	46.7	45.7
Investments in consolidated subsidiaries	2,757.5	3,072.0
Other assets, net	0.2	0.2
Total assets	$ 3,123.9	$ 3,704.0
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Related-party loan payable	$ 29.8	$ 245.8
Related-party liabilities	25.9	16.0
Accrued liabilities and other	11.5	5.2
Total current liabilities	67.2	267.0
Long-term debt and finance lease obligations, net	342.0	327.2
Total liabilities	409.2	594.2
Shareholders' equity:		
Class A, $0.01value; 500,000,000 shares authorized; 49,303,401 and 49,009,585 shares issued and outstanding, respectively, at December 31, 2020 and 48,795,552 shares issued and outstanding at December 31, 2019	0.5	0.5
Class B, $0.01 par value; 50,000,000 shares authorized; 1,932,386 shares issued and outstanding at December 31, 2020 and 1,934,686 shares issued and outstanding at December 31, 2019	—	—
Class C, $0.01par value; 500,000,000 shares authorized; 181,786,924 and 181,113,766 shares issued and outstanding, respectively, at December 31, 2020 and 131,181,371shares issued and outstanding at December 31, 2019	1.8	1.3
Treasury shares, at cost; 966,974 and nil shares, respectively	(9.5)	—
Additional paid-in capital	4,982.0	4,569.9
Accumulated deficit	(2,134.5)	(1,447.1)
Accumulated other comprehensive loss, net of taxes	(125.6)	(14.80)
Total shareholders' equity	2,714.7	3,109.80
Total liabilities and shareholders' equity	$ 3,123.9	$ 3,704.0

LIBERTY LATIN AMERICA LTD.

SCHEDULE I
(Parent Company Information - See Notes to Consolidated Financial Statements)

CONDENSED STATEMENTS OF OPERATIONS
(Parent Company Only)

	Year ended December 31,		
	2020	2019	2018
	in millions		
Operating costs and expenses:			
Other operating costs and expenses	$ 11.9	$ 11.8	$ 8.7
Depreciation and amortization	—	—	0.8
Impairment, restructuring and other operating items, net	33.1	23.8	24.5
Operating loss	(45.0)	(35.6)	(34.0)
Non-operating income:			
Interest expense – third-party	(22.0)	(10.9)	—
Interest income – third-party	—	4.6	—
Interest income – related-party	3.0	1.0	0.7
Other income (loss), net	(1.3)	(0.4)	1.1
	(20.3)	(5.7)	1.8
Loss before equity in losses of consolidated subsidiaries and income taxes	(65.3)	(41.3)	(32.2)
Equity in losses of consolidated subsidiaries, net	(621.9)	(38.8)	(313.0)
Net loss	$ (687.2)	$ (80.1)	$ (345.2)

LIBERTY LATIN AMERICA LTD.

SCHEDULE I
(Parent Company Information - See Notes to Consolidated Financial Statements)

CONDENSED STATEMENTS OF CASH FLOWS
(Parent Company Only)

	Year ended December 31,		
	2020	2019	2018
		in millions	
Cash flows from operating activities:			
Net loss	$ (687.2)	$ (80.1)	$ (345.2)
Adjustments to reconcile net loss to net cash used by operating activities:			
Equity in losses of consolidated subsidiaries, net	621.9	38.8	313.0
Share-based compensation expense	2.7	1.3	0.2
Depreciation and amortization	—	—	0.8
Amortization of debt financing costs	14.8	7.2	—
Changes in operating assets and liabilities	(8.2)	38.2	25.1
Net cash provided by (used) by operating activities	(56.0)	5.4	(6.1)
Cash flows from investing activities:			
Capital expenditures	—	(5.1)	(4.4)
Investments in and advances to consolidated subsidiaries	(511.7)	(5.1)	(45.0)
Net cash used by investing activities	(511.7)	(10.2)	(49.4)
Cash flows from financing activities:			
Borrowings of third-party debt	—	402.5	—
Repayments of related-party debt	(101.1)	—	
Capped calls	—	(45.6)	—
Repurchase of Liberty Latin America Shares	(9.5)	—	—
Issuance of Liberty Latin America common shares, net	347.0	—	—
Borrowings of related-party debt	—	123.4	—
Other financing activities, net	—	(0.8)	0.1
Net cash provided by financing activities	236.4	479.5	0.1
Net increase (decrease) in cash, cash equivalents and restricted cash	(331.3)	474.7	(55.4)
Cash, cash equivalents and restricted cash:			
Beginning of year	524.6	49.9	105.3
End of year	$ 193.3	$ 524.6	$ 49.9

Exhibit 21

Liberty Latin America Subsidiaries
December 31, 2020

Name	Country
Cable and Wireless (Anguilla) Limited	Anguilla
Cable & Wireless Antigua & Barbuda Limited	Antigua & Barbuda
Kelcom International (Antigua & Barbuda) Limited	Antigua & Barbuda
Columbus Communications Limited	Bahamas
CWC Bahamas Holdings Limited	Bahamas
The Bahamas Telecommunications Company Limited	Bahamas
Antilles Crossing (Barbados) IBC, Inc.	Barbados
Cable & Wireless (Barbados) Limited	Barbados
C&W Networks (Greater Antilles) Inc.	Barbados
Cable Jamaica (Barbados) Limited	Barbados
CNL-CWC Networks Inc.	Barbados
Columbus Acquisitions Inc.	Barbados
Columbus Antilles (Barbados) Limited	Barbados
Columbus Capital (Barbados) Limited	Barbados
Columbus Caribbean Acquisitions Inc.	Barbados
Columbus Curacao (Barbados) Inc.	Barbados
Columbus Eastern Caribbean (Barbados) Inc.	Barbados
Columbus Holdings (Barbados) II SRL	Barbados
Columbus Holdings (Barbados) SRL	Barbados
Columbus International Capital (Barbados) Inc.	Barbados
Columbus International Inc.	Barbados
Columbus Investments Inc.	Barbados
Columbus Jamaica Holdings (Barbados) Inc.	Barbados
Columbus Networks (Cayman) Holdco Limited	Barbados
Columbus Networks Finance Company Limited	Barbados
Columbus Networks Sales, Limited	Barbados
Columbus Networks, Limited	Barbados
Columbus Telecommunications (Barbados) Limited	Barbados
Columbus Trinidad (Barbados) Inc.	Barbados
Columbus TTNW Holdings Inc.	Barbados
CWC CALA Holdings Limited	Barbados
CWC-Columbus Asset Holdings Inc.	Barbados
CWI Caribbean Limited	Barbados
Gemini North Cable (Barbados) Inc.	Barbados
Karib Cable Inc.	Barbados
Liberty CWC Holdings Limited	Barbados
S.A.U.C.E. Holdings (Barbados) (I) Limited	Barbados
Wamco Technology Group Limited	Barbados
Cable and Wireless Network Services Limited	Bermuda
Liberty Latin America Limited	Bermuda
LiLAC Services Limited	Bermuda

Name	Country
New World Network International, Ltd	Bermuda
Columbus Networks (Bonaire), N.V.	Bonaire
UTS Bonaire N.V.	Bonaire
CNW Leasing Ltd.	Canada
CWC Canada Limited	Canada
C&W Senior Finance Limited	Cayman Islands
C&W Senior Secured Parent Limited	Cayman Islands
Coral Re SPC, Ltd.	Cayman Islands
Cable & Wireless Jamaica Finance (Cayman) Limited	Cayman Islands
Cable and Wireless (Cayman Islands) Limited	Cayman Islands
Columbus New Cayman Limited	Cayman Islands
CWC Acquisitions Holding Limited	Cayman Islands
CWC New Cayman Limited	Cayman Islands
CWC WS Holdings Cayman Ltd.	Cayman Islands
IT Outsource Ltd	Cayman Islands
Kelfenora Limited	Cayman Islands
LCPR Cayman Holding Inc.	Cayman Islands
Liberty Costa Rica Holdings Ltd.	Cayman Islands
Leopard Re PIC, Ltd.	Cayman Islands
LiLAC Ventures Ltd.	Cayman Islands
Sable International Finance Limited	Cayman Islands
United Chile Ventures, Inc.	Cayman Islands
C&W Networks Chile SPA	Chile
Sociedad Televisora CBC Limitada	Chile
VTR Comunicaciones S.p.A.	Chile
VTR Global Carrier S.A.	Chile
VTR Ingeniería S.A.	Chile
VTR Movíl S.p.A.	Chile
VTR Southam Chile S.p.A.	Chile
VTR.com SpA	Chile
Columbus Networks Zona Franca, Limitada	Colombia
ColumbusNetworks de Colombia, Limitada	Colombia
Cabletica S.A	Costa Rica
Columbus Networks de Costa Rica S.R.L.	Costa Rica
LBT CT Communications S.A	Costa Rica
Antelecom N.V.	Curacao
Cable & Wireless Curacao Holding B.V.	Curacao
Columbus Communications Curacao N.V.	Curacao
Columbus Networks Antilles Offshore N.V.	Curacao
Columbus Networks Curacao, N.V.	Curacao
Columbus Networks Netherlands Antilles N.V.	Curacao
E-Commercepark N.V.	Curacao
Fiberco N.V.	Curacao
International Data Gateway N.V.	Curacao
T.V. Distribution Services N.V.	Curacao

Name	Country
United Telecommunications Services N.V.	Curacao
Cable & Wireless Dominica Limited	Dominica
Marpin 2K4 Limited	Dominica
Columbus Networks Dominicana, S.A.	Dominican Republic
CWC Cable & Wireless Communications Dominican Republic SA	Dominican Republic
Columbus Networks de Ecuador S.A.	Ecuador
Columbus Networks El Salvador S.A. de C.V.	El Salvador
SSA Sistemas El Salvador, SA de CV	El Salvador
Columbus Holdings France SAS	France
New Technologies Group S.A.R.L.	France - French Sint Maarten
UTS Antilles Francaises S.A.R.L.	France - French Sint Maarten
UTS Caraibe S.A.R.L.	France - French Sint Maarten
Cable and Wireless Grenada Limited	Grenada
Columbus Communications (Grenada) Limited	Grenada
Columbus Networks de Guatemala, Limitada	Guatemala
Columbus Networks (Haiti) S.A.	Haiti
Columbus Networks de Honduras S. de R.L.	Honduras
PT Mitracipta Sarananusa	Indonesia
Lion Insurance PIC Limited	Isle of Man
Cable & Wireless Jamaica Limited	Jamaica
Caribbean Landing Company Limited	Jamaica
Chartfield Development Company Limited	Jamaica
Columbus Communications Jamaica Limited	Jamaica
Columbus Networks Jamaica Limited	Jamaica
D. & L. Cable & Satellite Network Limited	Jamaica
Dekal Wireless Jamaica Limited	Jamaica
Digital Media & Entertainment Limited	Jamaica
Jamaica Digiport International Limited	Jamaica
LIME Foundation Limited	Jamaica
Northern Cable & Communication Network Limited	Jamaica
S.A.U.C.E. Communication Network Limited	Jamaica
Columbus Eastern Caribbean Holdings Sàrl	Luxembourg
Columbus Networks de Mexico S.R.L.	Mexico
Cable & Wireless Australia & Pacific Holding B.V.	Netherlands
Dutch United Telecommunication Services B.V.	Netherlands
Lila Chile Holdings BV	Netherlands
VTR Finance NV	Netherlands
Winward Islands Cellular Company N.V.	Netherlands - Saba
Columbus Networks Nicaragua y Compania Limitada	Nicaragua
SSA Sistemas Nicaragua, Socieded Anonima	Nicaragua
Cable & Wireless Panama S.A.	Panama
Columbus Networks Centroamérica S. de R.L	Panama
Columbus Networks de Panamá SRL	Panama
Columbus Networks Marítima de Panamá S. de R.L.	Panama
CWC WS (Panama) SA	Panama

Name	Country
CWC WS Holdings Panama SA	Panama
Grupo Sonitel, SA	Panama
Sonitel, SA	Panama
Lazus Peru S.A.C	Peru
SSA Sistemas del Peru S.R.L.	Peru
Columbus Networks Puerto Rico, Inc.	Puerto Rico
Liberty Communications of Puerto Rico LLC	Puerto Rico
Cable & Wireless (Singapore) Pte Limited	Singapore
Liberty Iberoamerica	Spain
Cable & Wireless St. Kitts & Nevis Limited	St Kitts and Nevis
Antilles Crossing Holding Company (St. Lucia) Limited	St Lucia
Bandserve Inc.	St Lucia
Cable and Wireless (St Lucia) Limited	St Lucia
Caribbean Premier Sports Ltd.	St Lucia
Columbus Communications (St Lucia) Limited	St Lucia
Columbus Eastern Caribbean (St. Lucia) Inc.	St Lucia
Dekal Wireless Holdings Limited	St Lucia
Techvision Inc.	St Lucia
Tele (St. Lucia) Inc.	St Lucia
New Technologies Group N.V.	St Maarten
Radcomm Corporation N.V.	St Maarten
UTS Eastern Caribbean N.V.	St Maarten
UTS Sint Maarten N.V.	St Maarten
Cable & Wireless St Vincent and the Grenadines Limited	St Vincent and the Grenadines
Columbus Communications St. Vincent and the Grenadines Limited	St Vincent and the Grenadines
Petrel Communications SA	Switzerland
Columbus Communications Trinidad Limited	Trinidad and Tobago
Columbus Holdings Trinidad Unlimited	Trinidad and Tobago
Columbus Networks International (Trinidad) Ltd.	Trinidad and Tobago
Cable and Wireless (TCI) Limited	Turks and Caicos Islands
Cable & Wireless (UK) Group Limited	UK-England & Wales
Cable & Wireless Carrier Limited	UK-England & Wales
Cable & Wireless Central Holding Limited	UK-England & Wales
Cable & Wireless Communications Limited	UK-England & Wales
Cable & Wireless DI Holdings Limited	UK-England & Wales
Cable & Wireless International HQ Limited	UK-England & Wales
Cable & Wireless Limited	UK-England & Wales
Cable & Wireless Services UK Limited	UK-England & Wales
Cable & Wireless Trade Mark Management Limited	UK-England & Wales
Cable and Wireless (CALA Management Services) Limited	UK-England & Wales
Cable and Wireless (Investments) Limited	UK-England & Wales
Cable and Wireless (West Indies) Limited	UK-England & Wales
Cable and Wireless Pension Trustee Limited	UK-England & Wales
CWC Communications Limited	UK-England & Wales

Name	Country
CWC UK Finance Limited	UK-England & Wales
CWIG Limited	UK-England & Wales
CWIGroup Limited	UK-England & Wales
LGE Coral Holdco Ltd	UK-England & Wales
LLA UK Holding Limited	UK-England & Wales
Sable Holding Limited	UK-England & Wales
The Eastern Telegraph Company Limited	UK-England & Wales
The Western Telegraph Company Limited	UK-England & Wales
LGI International Holdings LLC	USA-Colorado
United Chile, LLC	USA-Colorado
LLA Operations, LLC	USA-Colorado
A.SUR NET, Inc.	USA-Delaware
ARCOS-1 USA, Inc.	USA-Delaware
Cable & Wireless Delaware 1, Inc.	USA-Delaware
Columbus Networks Telecommunications Services USA, Inc.	USA-Delaware
Columbus Networks USA (2015), Inc.	USA-Delaware
Columbus Networks USA, Inc.	USA-Delaware
Coral-US Co-Borrower LLC	USA-Delaware
KBW Spectrum LLC	USA-Delaware
LCPR Ventures LLC	USA-Delaware
Leo Cable LLC	USA-Delaware
Latam Technologies Holdings I, LLC	USA-Delaware
Leo Cable LP	USA-Delaware
Liberty Mobile Inc.	USA-Delaware
Liberty Mobile Puerto Rico Inc.	USA-Delaware
Liberty Mobile USVI Inc.	USA-Delaware
LiLAC Communications Inc.	USA-Delaware
LLA Holdco	USA-Delaware
Petrel Communications Corporation	USA-Delaware
SkyOnline Maya-1, LLC	USA-Delaware
Tarana Wireless, Inc.	USA-Delaware
Cable & Wireless Communications Inc.	USA-Virginia
Columbus Networks Venezuela S.A.	Venezuela
Cable and Wireless (BVI) Limited	Virgin Islands, British
Cable and Wireless (EWC) Limited	Virgin Islands, British

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

The Board of Directors
Liberty Latin America Ltd.:

We consent to the incorporation by reference in the registration statements (Nos. 333-222515 and 333-223322) on Form S-8 of Liberty Latin America Ltd. of our reports dated March 1, 2021, with respect to the consolidated balance sheets of Liberty Latin America Ltd. and subsidiaries as of December 31, 2020 and 2019, the related consolidated statements of operations, comprehensive loss, equity, and cash flows for each of the years in the three-year period ended December 31, 2020, and the related notes and financial statement schedule I (collectively, the consolidated financial statements), and the effectiveness of internal control over financial reporting as of December 31, 2020, which reports appear in the December 31, 2020 annual report on Form 10-K of Liberty Latin America Ltd.

Our report dated March 1, 2021, on the consolidated financial statements as of December 31, 2020, includes an explanatory paragraph related to the Company's change in method of accounting for leases as of January 1, 2019 due to the adoption of Accounting Standards Update No. 2016-02, Leases.

Our report dated March 1, 2021, on the effectiveness of internal control over financial reporting as of December 31, 2020, contains an explanatory paragraph that states the Company acquired AT&T Mobility Puerto Rico Inc., AT&T Mobility Virgin Islands Inc. & Beach Holding Corporation (the AT&T Acquired Entities) during 2020, and management excluded from its assessment of the effectiveness of the Company's internal control over financial reporting as of December 31, 2020, the AT&T Acquired Entities' internal control over financial reporting associated with total assets of $2,707 million and total revenues of $174 million included in the consolidated financial statements of the Company as of and for the year ended December 31, 2020. Our audit of internal control over financial reporting of the Company also excluded an evaluation of the internal control over financial reporting of the AT&T Acquired Entities.

Our report dated March 1, 2021, on the effectiveness of internal control over financial reporting as of December 31, 2020, expresses our opinion that Liberty Latin America Ltd. and subsidiaries did not maintain effective internal control over financial reporting as of December 31, 2020, because of the effect of material weaknesses on the achievement of the objectives of the control criteria and contains an explanatory paragraph that states the following material weaknesses have been identified:

- The Company did not have a sufficient number of trained resources with the appropriate skills and knowledge with assigned responsibilities and accountability for the design and operation of internal controls over financial reporting.
- The Company did not have an effective risk assessment process that successfully identified and assessed risks of misstatement to ensure controls were designed and implemented to respond to those risks. The Company did not adequately communicate the changes necessary in financial reporting and related internal controls throughout its organization and to affected third parties.
- The Company did not have an effective monitoring process to assess the consistent operation of internal control over financial reporting and to remediate known control deficiencies.
- The Company did not have an effective information and communication process to identify, capture and process relevant information necessary for financial accounting and reporting.
- The Company did not i) establish effective general information technology controls (GITCs), specifically program change controls and access controls, commensurate with financial and IT personnel job responsibilities that support the consistent operation of the Company's IT operating systems, databases and IT applications, and end user computing over all financial reporting, ii) have policies and procedures through which general information technology controls are deployed across the organization. Automated process-level controls and manual controls dependent upon the accuracy and completeness of information derived from information technology systems were also rendered ineffective because they are affected by the lack of GITCs.
- The Company did not effectively design, implement and operate process-level control activities related to order-to-cash (including revenue, trade receivables, and deferred revenue), procure-to-pay (including operating expenses, prepaid expenses, accounts payable, and accrued liabilities), hire-to-pay (including compensation expense and accrued liabilities), long-lived assets, inventory, and other financial reporting processes.

/s/ KPMG LLP

Denver, Colorado
March 1, 2021

Exhibit 31.1

CERTIFICATION

I, Balan Nair, certify that:

1. I have reviewed this annual report on Form 10-K of Liberty Latin America Ltd.;
2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;
3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;
4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and we have:
   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures as of the end of the period covered by this annual report based on such evaluation; and
   d) Disclosed in this annual report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 1, 2021

/s/ Balan Nair

Balan Nair
President and Chief Executive Officer

Exhibit 31.2

CERTIFICATION

I, Christopher Noyes, certify that:

1. I have reviewed this annual report on Form 10-K of Liberty Latin America Ltd.;
2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;
3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and we have:
    a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
    b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures as of the end of the period covered by this annual report based on such evaluation; and
    d) Disclosed in this annual report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
    a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
    b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 1, 2021

/s/ Christopher Noyes

Christopher Noyes
Senior Vice President and Chief Financial Officer

Exhibit 32

Certification
Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
(Subsections (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code)

Pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of section 1350, chapter 63 of title 18, United States Code), each of the undersigned officers of Liberty Latin America Ltd. (the "Company"), does hereby certify, to such officer's knowledge, that:

The Annual Report on Form 10-K for the year ended December 31, 2020 (the "Form 10-K") of the Company fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934 and information contained in the Form 10-K fairly presents, in all material respects, the financial condition and results of operations of the Company as of December 31, 2020 and December 31, 2019, and for the year ended December 31, 2020, 2019 and 2018.

Dated:	March 1, 2021	/s/ Balan Nair Balan Nair President and Chief Executive Officer
Dated:	March 1, 2021	/s/ Christopher Noyes Christopher Noyes Senior Vice President and Chief Financial Officer (Principal Financial Officer)

The foregoing certification is being furnished solely pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of section 1350, chapter 63 of title 18, United States Code) and is not being filed as part of the Form 10-K or as a separate disclosure document.