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

r ended December 31, 2022

OR

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

to

For the transition period from

Commission file number 001-38335



Liberty Latin America Ltd.

(Exact name of Registrant as specified in its charter)

	(Exact name	e of Registrant as specifie	d in its charter)			
Bermuda	I			98-1386359		
(State or Other Jurisdiction of Incom	poration or Organization	n)	(I.R.S	. Employer Identification No.)		
2 Church Str	reet,					
Hamilton	1			HM 11		
(Address of Principal Ex	ecutive Offices)			(Zip Code)		
Regi	strant's telephone number	r, including area code:	(441) 295-5950 or (303) 925-6000		
	Securities regist	tered pursuant to Section	n 12(b) of the Act:			
Title of Each Class		Frading Symbols	Name	f Each Exchange on Which Registered		
Class A Common Shares, par value \$0.01 pe	LILA	The NASDAQ Stock Market LLC				
Class C Common Shares, par value \$0.01 pe	er share	LILAK		The NASDAQ Stock Market LLC		
	Securities registe	ered pursuant to Section 1	2(g) of the Act: none			
Indicate by check mark if the Registrant is a well-known se	asoned issuer, as defined in Ru	le 405 of the Securities A	ct. Yes ☑ No □			
Indicate by check mark if the Registrant is not required to a	ile reports pursuant to Section	13 or Section 15(d) of the	Act. Yes 🗆 No	☑		
Indicate by check mark whether the Registrant (1) has filed period that the Registrant was required to file such reports)				÷ . •	ths (or for such shorter	
Indicate by check mark whether the Registrant has submitted preceding 12 months (or for such shorter period that the Re	<u> </u>	•	e submitted pursuant to No □	Rule 405 of Regulation S-T (§232.405 of	this chapter) during the	
Indicate by check mark whether the Registrant is a large ac accelerated filer," "accelerated filer," "smaller reporting co					ee the definitions of "large	
Large Accelerated Filer	Acc	elerated 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.

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements.

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b).

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: \$1.1 billion.

The number of outstanding common shares of Liberty Latin America Ltd. as of January 31, 2023 was: 42.3 million Class A; 2.1 million Class B; and 171.2 million Class C.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the definitive proxy statement for the Registrant's 2023 Annual General Meeting of Shareholders are incorporated by reference in Part III of this Form 10-K.

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Unless the context requires otherwise, references to **Liberty Latin America**, "we," "our," "our company" and "us" in this Annual Report on Form 10-K (as defined below) may refer to Liberty Latin America Ltd. or collectively to Liberty Latin America Ltd. and its subsidiaries. We have used several other terms in this Annual Report on Form 10-K, most of which are defined or explained below.

2020 Share Repurchase Program	The share repurchase program that was authorized by our Directors on March 16, 2020 that authorized us to repurchase from time to time up to \$100 million of our Class A and/or Class C common shares and expired in March 2022
2022 Share Repurchase Program	The share repurchase program that was authorized by our Directors on February 22, 2022 that authorizes us to repurchase from time to time up to \$200 million of our Class A and/or Class C common shares through December 2024
2026 C&W Senior Notes	\$500 million principal amount 7.5% senior notes due October 15, 2026 issued by C&W Senior Finance Limited (repaid during 2021)
2026 SPV Credit Facility	\$1.0 billion principal amount LIBOR + 5.0% term loan facility due October 15, 2026 issued by LCPR Loan Financing (repaid during 2021)
2027 C&W Senior Notes	\$1.2 billion aggregate principal amount 6.875% senior notes due September 15, 2027 issued by C&W Senior Finance
2027 C&W Senior Notes Add-on A	\$300 million principal amount issued at 99.205% of par under the existing 2027 C&W Senior Notes indenture
2027 C&W Senior Notes Add-on B	\$220 million principal amount issued at 103.625% of par under the existing 2027 C&W Senior Notes indenture
2027 C&W Senior Secured Notes	\$495 million aggregate principal amount 5.75% senior secured notes due September 7, 2027 issued by Sable International Finance Limited
2027 C&W Senior Secured Notes Add-on	\$150 million principal amount issued at 106.0% of par under the existing 2027 C&W Senior Secured Notes indenture
2027 LPR Senior Secured Notes	\$1.2 billion aggregate principal amount 6.75% senior secured notes due October 15, 2027 issued by LCPR Senior Secured Financing
2027 LPR Senior Secured Notes Add-on	\$90 million principal amount issued at 102.5% of par under the existing 2027 LPR Senior Secured Notes indenture
2028 CWP Term Loan	\$435 million principal amount 4.25% term loan facility due January 18, 2028 issued by CWP
2028 LPR Term Loan	\$620 million principal amount LIBOR + 3.75% term loan facility due October 15, 2028 issued by LCPR Loan Financing
2028 VTR Senior Notes	\$483 million principal amount 6.375% senior notes due July 15, 2028 issued by VTR Finance N.V.
2028 VTR Senior Secured Notes	\$474 million principal amount 5.125% senior secured notes due January 15, 2028 issued by VTR Comunicaciones SpA
2029 LPR Senior Secured Notes	\$820 million principal amount 5.125% senior secured notes due July 15, 2029 issued by LCPR Senior Secured Financing
2029 VTR Senior Secured Notes	\$392 million principal amount 4.375% senior secured notes due April 15, 2029 issued by VTR Comunicaciones SpA
2031 LCR Term Loan A	\$50 million principal amount 10.875% senior secured term loan due January 15, 2031 issued by Liberty Servicios; from July 15, 2028 and thereafter, the applicable interest rate will increase by 0.125% per annum for each of the Sustainability Performance Targets (as defined in the credit agreement) not achieved by the Liberty Costa Rica by no later than December 31, 2027
2031 LCR Term Loan B	\$400 million principal amount 10.875% senior secured term loan due January 15, 2031 issued by Liberty Servicios; from July 15, 2028 and thereafter, the applicable interest rate will increase by 0.125% per annum for each of the Sustainability Performance Targets (as defined in the credit agreement) not achieved by the Liberty Costa Rica by no later than December 31, 2027
ACODECO	Authority of Competition and Consumer Protection
ACP	Affordable Connectivity Program
Acquisition Agreement	Stock purchase agreement entered into between Liberty Communications PR and Liberty Latin America and AT&T to acquire the AT&T Acquired Entities

Adjusted OIBDA	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.
Adjusted Term SOFR	SOFR U.S. dollar denominated loans adjusted as follows: (i) 0.11448% for a one-month interest period, (ii) 0.26161% for a three-month interest period and (iii) 0.42826% for a six-month interest period
América Móvil	América Móvil S.A.B. de C.V.
Annual Report on Form 10-K	Annual Report on Form 10-K as filed with the SEC under the Exchange Act
ARPU	Average monthly subscription revenue per average fixed RGU or mobile subscriber, as applicable
ASEP	Authority of Public Services
ASU	Accounting Standards Update
AT&T	AT&T Inc.
AT&T Acquisition	October 31, 2020 acquisition of all of the outstanding shares of the AT&T Acquired Entities
AT&T Acquired Entities	Collectively, Liberty Mobile Inc., Liberty Mobile Puerto Rico Inc. and Liberty Mobile USVI Inc.
AT&T TSA	Transition services agreement dated October 31, 2020 by and between AT&T Liberty Communications PR Holding, a wholly-owned subsidiary of Liberty Latin America, for a period up to 36 months following the closing of the AT&T Acquisition
B2B	Business-to-business
BBVI Acquisition	December 31, 2021 acquisition of 96% of Broadband VI, LLC
BEPS	Base Erosion and Profit Shifting
Cable Onda	Cable Onda S.A.
C&W	Cable & Wireless Communications Limited and its subsidiaries
C&W Bahamas	The Bahamas Telecommunications Company Limited, a 49%-owned subsidiary of C&W that owns all of our operations in the Bahamas
C&W Caribbean	Reportable segment that includes all subsidiaries of C&W, excluding those within our C&W Panama and C&W Networks & LatAm segments
C&W Credit Facilities	Senior secured credit facilities of certain subsidiaries of C&W comprised of: (i) C&W Term Loan B-6 Facility; (ii) C&W Term Loan B-5 Facility; (iii) C&W Revolving Credit Facility; and (iv) C&W Regional Facilities
C&W Jamaica	Cable & Wireless Jamaica Limited, a 92%-owned subsidiary of C&W
C&W Networks & LatAm	Reportable segment comprising our managed services and wholesale business, which primarily operates through our subsea and terrestrial fiber optic cable networks; the segment comprises certain subsidiaries of C&W
C&W Notes	The senior and senior secured notes of C&W comprised of: (i) 2027 C&W Senior Secured Notes; and (ii) 2027 C&W Senior Notes
C&W Panama	Reportable segment for our operations in Panama
C&W Regional Facilities	Primarily comprised of credit facilities at CWP, Columbus Communications Trinidad Limited and C&W Jamaica
C&W Revolving Credit Facility	\$630 million LIBOR + 3.25% revolving credit facility, \$50 million of which is due June 30, 2023 and \$580 million due January 30, 2027, of C&W
C&W Senior Finance	C&W Senior Finance Limited, a wholly-owned subsidiary of C&W
C&W Term Loan B-4 Facility	\$1,640 million principal amount term loan B-4 facility of C&W (repaid during 2020)
C&W Term Loan B-5 Facility	\$1,510 million principal amount LIBOR + 2.25% term loan B-5 facility due January 31, 2028 of C&W
C&W Term Loan B-6 Facility	\$590 million principal amount LIBOR + 3.00% term loan B-6 facility due October 15, 2029 of C&W
CAGR	Compound annual growth rate

Constant Calle	Constitution contracts in a bin connection with the instance of the Connectibility Network
Capped Calls	Capped call option contracts issued in connection with the issuance of our Convertible Notes
CBRS	Citizens Broadband Radio Service
Chile JV	Joint venture between Liberty Latin America and América Móvil that is 50:50 owned by each investee
Chile JV Entities	Represents the entities that were contributed to the Chile JV, consisting of Lila Chile Holding BV and its subsidiaries, which include VTR
Chile JV Transaction	October 6, 2022 formation of the Chile JV
CIP	Construction-in-process
Claro Panama	América Móvil's operations in Panama
Claro Panama Acquisition	July 1, 2022 acquisition of Claro Panama
Class C Right	Pro rata subscription rights granted to holders of our Class A, Class B and Class C common shares in connection with the Rights Offering
CLEC	Competitive local exchange carrier
CLP	Chilean peso
Communications Act	The United States Communications Act of 1934, as amended
Convertible Notes	\$403 million principal amount 2% convertible senior notes due July 15, 2024 issued by Liberty Latin America
Conversion Option	A conversion option associated with the Convertible Notes, which is subject to certain conditions, and adjustments if certain events occur (as specified in the indenture governing the Convertible Notes)
СОР	Colombian peso
CPE	Customer premises equipment
CRC	Costa Rican colón
CRU	Corporate Responsible User
CWP	Cable & Wireless Panama, S.A., a 49%-owned subsidiary of C&W that owns most of our operations in Panama
CWP Credit Facilities	Credit facilities of CWP comprised of: (i) 2028 CWP Term Loan; and (iii) CWP Revolving Credit Facility
CWP Revolving Credit Facility	\$20 million principal amount at Adjusted Term SOFR + 3.75% revolving credit facility due January 18, 2027 issued by CWP
CWSF	Cable & Wireless Superannuation Fund
Digicel	Digicel Group Ltd.
Directors	Members of Liberty Latin America's board of directors
DirecTV	DIRECTV Latin America Holdings, Inc.
Dish Network	Dish Network Corporation
DOCSIS	Data over cable service interface specification
DOJ	United States Department of Justice
DSL	Digital subscriber line
DTH	Direct-to-home
DTT	Digital terrestrial television
DVR	Digital video recorder
EBU	Equivalent billing unit
ECTEL	The Eastern Caribbean Telecommunications Authority
EIP	Equipment installment-plan
Employee Incentive Plan	Liberty Latin America Ltd. 2018 Incentive Plan
EPS	Earnings or loss per share
ETC	Eligible Telecommunications Carrier
ETECSA	La Empresa de Telecomunicaciones de Cuba S.A.

EURIBOR	Euro Interbank Offered Rate
Exchange Act	Securities Exchange Act of 1934, as amended
Executives	Liberty Latin America's Principal Executive Officer and Principal Financial Officer
FASB	Financial Accounting Standards Board
FCC	United States Federal Communications Commission
FCPA	United States Foreign Corrupt Practices Act of 1977, as amended
FTA	Free-to-air
FTTH	Fiber-to-the-home/-cabinet/-building/-node
FX	Foreign currency translation effects
HD	High definition
HFC	Hybrid fiber coaxial cable networks
Hurricane Dorian	Hurricane impacting our operations in the Bahamas during September 2019
Hurricane Fiona	Hurricane impacting our operations in Puerto Rico during September 2022
ICE	The Costa Rican Electricity Institute
ILEC	Incumbent local exchange carrier
Infrastructure Act	The Infrastructure Investment and Jobs Act of 2021
IPTV	Internet protocol television
ISPs	Internet service providers
JMD	Jamaican dollar
Law 213	The Puerto Rico Telecommunications Act of 1996
LCPR	Liberty Communications of Puerto Rico LLC
LCPR Loan Financing	LCPR Loan Financing LLC, a consolidated special purpose financing entity that was 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 Senior Secured Financing	LCPR Senior Secured Financing Designated Activity Company, a consolidated special purpose financing entity that was 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.
LCR Credit Facilities	Senior secured credit facilities of Liberty Servicios comprised of: (i) Liberty Servicios Term Loan B-1 Facility; (ii) Liberty Servicios Term Loan B-2 Facility; and (iii) Liberty Servicios Revolving Credit Facility
LCR Revolving Credit Facility	\$15 million LIBOR + 4.25% revolving credit facility due August 1, 2024 of Liberty Servicios (amended and restated subsequent to December 31, 2022, refer to note 9 of our consolidated financial statements for additional information)
LCR Term Loan B-1 Facility	\$277 million principal amount LIBOR + 5.50% term loan facility, 50% of which is due February 1, 2024 and 50% due August 1, 2024, of Liberty Servicios
LCR Term Loan B-2 Facility	CRC 80 billion principal amount TBP + 6.75% term loan facility, 50% of which is due February 1, 2024 and 50% due August 1, 2024, of Liberty Servicios
Liberty Communications PR	Liberty Communications PR Holding LP and its subsidiaries, which include LCPR and Liberty Mobile and its subsidiaries
Liberty Costa Rica	Reportable segment comprising Liberty Servicios and Liberty Telecomunicaciones
Liberty Global	Liberty Global plc
Liberty Latin America Shares	Collectively, Class A, Class B and Class C common shares of Liberty Latin America
Liberty Mobile	Liberty Mobile Inc. and it subsidiaries
Liberty Puerto Rico	Reportable segment comprising Liberty Communications PR, which has operations in Puerto Rico and the U.S. Virgin Islands
Liberty Servicios	Liberty Servicios Fijos LY, S.A. (formerly known as Cabletica, S.A.), an indirectly 80%-owned subsidiary in Costa Rica, and its subsidiaries, including Liberty Telecomunicaciones

Liberty Telecomunicaciones	Liberty Telecomunicaciones de Costa Rica LY, S.A. (formerly known as Telefónica de Costa Rica TC, S.A.), an indirectly 80%-owned subsidiary in Costa Rica and it's subsidiary
Liberty Telecomunicaciones Acquisition	August 9, 2021 acquisition of Telefónica's wireless operations in Costa Rica
LIBOR	London Inter-Bank Offered Rate
LILAK	Class C common shares of Liberty Latin America
LNP	Local number portability
LPR Credit Facilities	Senior secured credit facilities of Liberty Puerto Rico comprised of: (i) 2028 LPR Term Loan; and (ii) LPR Revolving Credit Facility
LPR Revolving Credit Facility	\$173 million LIBOR + 3.5% revolving credit facility due March 15, 2027 of LCPR
LPR Senior Secured Notes	Senior secured notes of Liberty Puerto Rico comprised of: (i) 2029 LPR Senior Secured Notes; (ii) 2027 LPR Senior Secured Notes; and (iii) 2027 LPR Senior Secured Notes Add-on
LTE	Long term evolution standard
MICITT	Ministry of Science and Technology and Telecommunications of Costa Rica
Millicom	Millicom International Cellular S.A.
MMG Program	The Middle Mile Broadband Infrastructure Grant Program established by the Infrastructure Act
Network Extensions	Network extension and upgrade programs across Liberty Latin America
Nonemployee Director Incentive Plan	Liberty Latin America Ltd. 2018 Nonemployee Director Incentive Plan
NTIA	National Telecommunications and Information Administration
OECD	Organization for Economic Cooperation and Development
OFAC	Office of Foreign Assets Control
OTT	Over-the-top
OUR	Office of Utilities Regulation in Jamaica
PRTC	Telecommunications Of Puerto Rico, Inc.
PSARs	Performance-based stock appreciation rights
PSUs	Performance-based restricted stock units
Quarterly Report on Form 10-Q	Quarterly Report on Form 10-Q as filed with the SEC under the Exchange Act
RGU	Revenue generating unit
Rights Distribution	Authorized distribution of Class C Rights to acquire Class C common shares in the Rights Offering
Rights Offering	September 2020 rights offering whereby we distributed 0.269 of a Class C Right for each share of Class A, Class B and Class C commons shares held as of the record date
RSUs	Restricted stock units
SARs	Stock appreciation rights
SEC	U.S. Securities and Exchange Commission
SDWAN	Software defined wide area network
Share Repurchase Programs	Collectively, the 2020 Share Repurchase Program and the 2022 Share Repurchase Program
SIM	Subscriber identification module
SOFR	Reference rate based on secured overnight financing rate administered by the Federal Reserve Bank of New York
SOHO	Small office / home office
Sutel	Costa Rican Telecommunications Superintendence
TAB	Tasa Activa Bancaria interest rate
ТВ	The Puerto Rico Telecommunications Regulatory Bureau
TBP	Tasa Básica Pasiva interest rate
Tbps	Terabits per second

Telefónica	Telefónica, S.A., a telecommunications company with operations primarily in Europe and Latin America
Telefónica Acquisition Agreement	The agreement dated July 30, 2020 with Telefónica for our acquisition of their operations in Costa Rica
TSTT	
	Telecommunications Services of Trinidad and Tobago Limited
U.K.	United Kingdom
UPR Fund	Uniendo a Puerto Rico Fund
U.S.	United States
USD	United States Dollar
U.S. GAAP	Generally accepted accounting principles in the United States
USF	Universal Service Fund
USVI	U.S. Virgin Islands
UTS	United Telecommunication Services N.V.
VAT	Value-added taxes
VDSL	Very high-speed DSL
VoD	Video-on-demand
VoIP	Voice-over-internet-protocol
VTR	VTR Finance N.V. and its subsidiaries, a reportable segment through the date of close of the Chile JV
VTR Credit Facilities	Senior secured credit facilities of VTR comprising: (i) VTR RCF - A; and (ii) VTR RCF - B
VTR Finance Senior Notes	\$1.4 billion principal amount senior notes issued by VTR (repaid in 2020)
VTR RCF – A	CLP 45 billion TAB + 3.35% revolving credit facility due June 15, 2026 of VTR
VTR RCF – B	\$200 million LIBOR + 2.75% revolving credit facility due June 15, 2026 of VTR
VTR TLB-1 Facility	CLP 141 billion principal amount ICP +3.8% term loan facility of VTR (repaid during 2021)
VTR TLB-2 Facility	CLP 33 billion principal amount 7% term loan facility of VTR (repaid during 2021)
Weather Derivatives	Weather derivative contracts that provide insurance coverage for certain weather-related events

PART I

Item 1. BUSINESS

(a) General Development of Business

Liberty Latin America Ltd. is a registered company in Bermuda that primarily includes: (i) C&W; (ii) Liberty Communications PR; (iii) LBT CT Communications, S.A. (a less than wholly-owned entity) and its subsidiaries, which include Liberty Servicios and, as of August 9, 2021 and as further described in note 4 to our consolidated financial statements, Liberty Telecomunicaciones; and (iv) prior to the closing of the formation of the Chile JV, VTR. C&W owns less than 100% of certain of its consolidated subsidiaries, including C&W Bahamas, C&W Jamaica and CWP.

We are an international provider of fixed, mobile and subsea telecommunications services. We provide:

- A. 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 C&W Panama;
 - ii. Puerto Rico, through our reportable segment Liberty Puerto Rico;
 - iii. Costa Rica, through our reportable segment Liberty Costa Rica;
 - iv. Chile, through our reportable segment VTR through September 30, 2022; and
- B. through our reportable segment C&W Networks & LatAm, (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 approximately 40 markets in that region.

Effective September 29, 2021, in connection with the pending formation of the Chile JV, as further described in note 8 to our consolidated financial statements, we began accounting for the Chile JV Entities as "held for sale." Accordingly, the assets and liabilities of the Chile JV Entities, excluding certain cash balances, are included in assets held for sale and liabilities associated with assets held for sale, respectively, on our December 31, 2021 consolidated balance sheet. Consistent with the applicable guidance, we have not reflected similar reclassifications to exclude the Chile JV Entities from continuing operations in our consolidated statements of operations or cash flows and related footnote disclosures during the period they were accounted for as held for sale. In October 2022, we contributed the Chile JV Entities to the Chile JV and began accounting for our 50% interest in the Chile JV as an equity method investment. For additional information, see note 8 to out consolidated financial statements.

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 approximately 1 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 have completed the following transactions:

 on October 6, 2022, we completed the formation of the Chile JV pursuant to an agreement with América Móvil to contribute the Chile JV Entities to América Móvil's Chilean operations. The Chile JV is owned 50:50 by Liberty Latin



America and América Móvil. Beginning in October 2022, we began accounting for our 50% interest in the Chile JV as an equity method investment;

- on July 1, 2022, we completed the acquisition of América Móvil's operations in Panama in an all-cash transaction based upon an enterprise value of \$200 million on a cash- and debt-free basis;
- on August 9, 2021, we completed the acquisition of Telefónica's operations in Costa Rica (the Liberty Telecomunicaciones Acquisition), in an all-cash transaction based upon an enterprise value of \$500 million on a cash- and debt-free basis; and
- on October 31, 2020, we completed the acquisition of AT&T's wireless and wireline operations in Puerto Rico and the U.S. Virgin Islands in an all-cash transaction based upon an enterprise value of \$1.95 billion.

For information regarding our material financing transactions, see note 9 to our consolidated financial statements.

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; our anticipated integration plans, synergies, opportunities and integration costs in Puerto Rico following the AT&T Acquisition, in Costa Rica following the Liberty Telecomunicaciones Acquisition and in Panama following the Claro Panama Acquisition; the UPR Fund; 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 transition of LIBOR; internal control over financial reporting and remediation of material weaknesses; foreign currency risks; compliance with debt, financial and other covenants; our future projected sources and uses of cash; and other information and statements that are not historical fact. Where, in any forward-looking statement, we 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 co

- · 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, some of which are also offering content directly to consumers, and our ability to
 maintain access to desirable programming on acceptable economic terms;
- · 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;
- 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 AT&T Acquisition, the Liberty Telecomunicaciones Acquisition, and the Claro Panama 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 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, the Liberty Telecomunicaciones Acquisition and the Claro Panama Acquisition;
- our ability to profit from investments in joint ventures that we do not solely control;

- 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 anti-corruption laws and regulations, such as the FCPA;
- our ability to comply with economic and trade sanctions laws, such as the U.S. Treasury Department's OFAC;
- · the impacts of climate change such as rising sea levels or increasing frequency and intensity of certain weather phenomena; 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

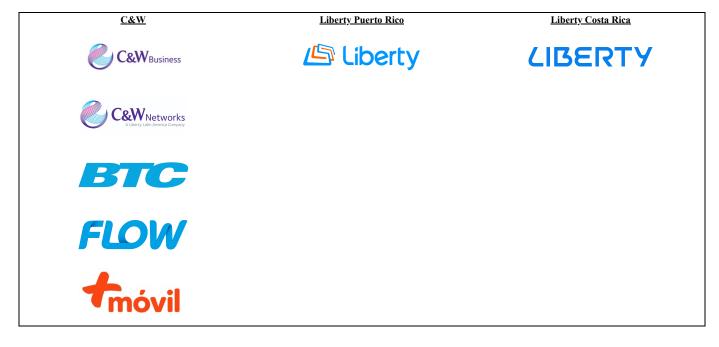
Overview

We are a leading communications company with operations in Puerto Rico, 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 bundles of services, including video, broadband internet and telephony products in one subscription. We are also focused on leveraging our full-service product suite to deliver fixed-mobile convergence offerings.

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 approximately 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, Jamaica and Trinidad and Tobago. In addition, we offer mobile services across our operating footprint. As a network operator across most of our markets, we are able to offer a full range of voice and data services, including value-added, data-based and fixed-mobile converged services. For a breakdown of revenue by major category, see note 20 to our consolidated financial statements in Part II of this Annual Report on Form 10-K.

Our operating brands include the following:



Operating Data

The following tables present certain operating data as of December 31, 2022. The tables reflect 100% of the data applicable to each of our reportable segments, 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	Fixed Line Customer Relationships	Total RGUs	Video RGUs	Internet RGUs	Telephony RGUs	Total Mobile Subscribers	Prepaid	Postpaid
C&W Caribbean:										
Jamaica	685,700	685,700	331,800	741,100	132,000	308,200	300,900	1,193,700	1,120,000	73,700
The Bahamas	120,900	120,900	35,900	62,300	5,600	23,100	33,600	170,400	146,400	24,000
Trinidad and Tobago	340,900	340,900	155,600	336,300	101,800	140,300	94,200			
Barbados	140,400	140,400	84,300	184,000	38,000	75,700	70,300	128,000	87,600	40,400
Other	336,000	316,100	215,100	376,600	74,400	187,200	115,000	433,300	333,200	100,100
Total C&W Caribbean	1,623,900	1,604,000	822,700	1,700,300	351,800	734,500	614,000	1,925,400	1,687,200	238,200
C&W Panama	829,200	829,200	251,700	566,600	159,300	207,400	199,900	2,178,900	1,820,700	358,200
Total C&W	2,453,100	2,433,200	1,074,400	2,266,900	511,100	941,900	813,900	4,104,300	3,507,900	596,400
Liberty Puerto Rico (a)	1,173,600	1,173,600	551,100	1,024,200	242,800	524,000	257,400	1,085,600	182,300	903,300
Liberty Costa Rica (b)	700,300	694,400	299,200	528,400	204,800	268,200	55,400	2,979,600	2,162,400	817,200
Total	4,327,000	4,301,200	1,924,700	3,819,500	958,700	1,734,100	1,126,700	8,169,500	5,852,600	2,316,900

(a) Postpaid mobile subscribers include 206,700 CRUs. A CRU represents an individual receiving mobile services through an organization that has entered into a contract for mobile services with us and where the organization is responsible for the payment of the CRU's mobile services.

(b) Our homes passed in Liberty Costa Rica include 57,000 homes on a third-party network that provides us long-term access.

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 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 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 60 to 90 days, based on industry standards within the respective country. In a number of countries, our mobile subscribers receive mobile services pursuant to prepaid contracts.

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 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 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 on those reviews.

Fixed Network and Product Penetration Data (%)

	Panama	Jamaica	The Bahamas	Trinidad and Tobago	Barbados	Other C&W	Costa Rica	Puerto Rico
Network data:								
Two-way homes passed (1)	100 %	100 %	100 %	100 %	100 %	94 %	99 %	100 %
Homes passed:								
Cable ⁽²⁾	43 %	40 %	%	99 %	%	58 %	84 %	91 %
FTTH ⁽²⁾	53 %	37 %	54 %	1 %	100 %	38 %	16 %	9 %
VDSL ⁽²⁾	4 %	23 %	46 %	%	%	4 %	%	%
Product penetration:								
Television ⁽³⁾	16 %	19 %	5 %	30 %	27 %	22 %	29 %	21 %
Broadband internet (4)	25 %	45 %	19 %	41 %	54 %	59 %	39 %	45 %
Fixed-line telephony (4)	24 %	44 %	28 %	28 %	50 %	36 %	8 %	22 %
Double-play ⁽⁵⁾	32 %	49 %	50 %	18 %	30 %	35 %	44 %	13 %
Triple-play ⁽⁵⁾	47 %	37 %	12 %	49 %	44 %	20 %	17 %	36 %

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

(2) Percentage of two-way homes passed served by a cable, FTTH or 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	Costa Rica	Puerto Rico
Video services:								
Network System ⁽¹⁾	VDSL/HFC/FTTH	VDSL/HFC/FTTH	VDSL/FTTH	HFC	FTTH	VDSL/HFC/FTTH	HFC/FTTH	HFC / FTTH
Broadband internet service:								
Maximum download speed offered (Mbps)	1,000	500	600	500	1,000	~450 (2)	450	1,000
Mobile services:								
Network Technology	LTE	LTE	LTE	—	LTE	LTE	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.

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	Х	Х	Х	Х
Antigua & Barbuda	Х	Х	Х	—
Barbados	Х	Х	Х	Х
Bonaire	Х	_		—
British Virgin Islands	Х	Х	Х	Х
Cayman Islands	Х	Х	Х	Х
Curaçao	Х	Х	Х	Х
Dominica	Х	Х	Х	Х
Grenada	Х	Х	Х	Х
Jamaica	Х	Х	Х	Х
Montserrat	Х	Х		Х
Saba	Х	_	—	—
St. Eustatius	Х	_		—
St. Maarten	Х	Х		—
St. Martin	Х	—		—
St. Kitts & Nevis	Х	Х	Х	Х
St. Lucia	Х	Х	Х	Х
St. Vincent & the Grenadines	Х	Х	Х	Х
The Bahamas	Х	Х	Х	Х
Trinidad and Tobago	_	Х	Х	Х
Turks & Caicos	Х	Х	Х	Х
Panama	Х	Х	Х	Х
Liberty Puerto Rico:				
Puerto Rico	Х	Х	Х	Х
USVI	Х	Х	—	Х
Costa Rica	Х	Х	Х	Х

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 our operating footprint. We are a mobile network operator, delivering high-speed services in Puerto Rico and the USVI, Panama, Costa Rica and all but one of our Caribbean markets. 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 and the USVI, spectrum licenses are typically held for perpetuity with the exception of CBRS spectrum which has a priority term of 10 years. We also hold mobile spectrum licenses in Costa Rica with a 15-year term that may be extended for an additional 10 year term.

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. Customers subscribing to a postpaid plan in Puerto Rico are offered installment agreements if they buy a new handset with acceleration provisions if they cancel the account without penalty. Long-term contracts are often taken with a subsidized mobile handset.

Broadband Internet Services. To support our customers' connectivity demands, we are expanding our networks to make high-speed broadband available to more people. This includes investment in the convergence of our fixed and mobile data systems and through our next generation WiFi products, which enable us to maximize the impact of our broadband networks by providing reliable, high-speed 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. During 2022, our Network Extension programs (as defined and described below) upgraded or passed approximately 484,400 homes across Liberty Latin America.

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 predominantly via FTTH or HFC networks and with 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, Costa Rica, and in most of C&W's residential markets. In most markets, we are enhancing our video offerings 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 predominantly delivered over our FTTH and HFC networks and customers access a range of features that include a DVR, a VoD offering and an advanced user interface including an electronic programming guide, voice search and recommendation. These video customers can pause their programming while a live broadcast is in progress, return to the start and find programs they may have missed. They can also stream a selection of channels and non-linear content on their own devices through "TV Everywhere" mobile applications such as, "Flow Sports" in the Caribbean, "Liberty Go" in Puerto Rico, "+movil Total" in Panama and "Liberty Go" in Costa Rica.

Our operations with video services typically offer multiple tiers of digital video programming starting with affordable entry or skinny and basic video service tiers. Subscribers have the option to select extended and/or premium subscription packages combining linear channels and VoD. Subscribers to our digital video services pay a fixed monthly fee and, in most of our markets, all tiers include a number of HD channels as well as access to enhanced features. In addition, through our latest generation of video CPE, subscribers can access most leading internet streaming services. 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 regulatory requirements. We aim to offer the most relevant mix of 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, a sports channel available across the Caribbean (excluding Puerto Rico and the US Virgin Islands).

Telephony Services. C&W is the incumbent fixed-line telephony service provider in most of its residential markets. In Puerto Rico and Costa Rica we also offer telephony services over our respective networks.

We offer multi-feature telephony service over our various fixed networks, including HFC cable, FTTH and copper networks. Depending on location, these services are provided via either circuit-switched telephony or 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

B2B Services. We offer B2B services across our operations, leveraging our high-speed and extensive fixed and mobile infrastructure. In C&W, we have our most developed B2B business and are the largest provider of services in many of our markets, representing a significant portion of C&W's revenue. Our B2B offerings by Liberty Puerto Rico and Liberty Costa Rica are less developed and provide an opportunity for future growth.

C&W Networks & LatAm. 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 service to major commercial zones, wireless carrier cell sites and customers in key markets within our operating footprint. Our networks deliver critical infrastructure for the transport 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 and terrestrial fiber networks within C&W Networks & LatAm.





With approximately 50,000 km of fiber optic cable, and activated capacity of over 10 Tbps, C&W Networks & LatAm is able to carry large volumes of voice and data traffic on behalf of our customers, businesses and carriers. Our 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, ISPs and large corporations. In the case of network outage or maintenance activity, our network provides built-in resiliency through our traffic re-routing capability.

Across our regional footprint we also provide services to business customers in 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 best end-to-end solutions, using standardized best in class products to fit their service needs. 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 dedicated IP networks, wavelength and metro-access fiber lines. We offer tailored solutions that combine our standard services with value-added features, such as dedicated customer care, professional services and enhanced service performance monitoring, to meet specific customer requirements. Our business products and services include voice, broadband, enterprise-grade connectivity, network security, software defined networking, unified communications and a range of cloud-based IT solutions, such as Infrastructure as a Service, 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 backed by a strong service level agreement guarantee. Our networks also allow us to provide our services over dedicated access fiber lines, and local and international private networks which are dedicated to our business customers.

Our business services fall into five broad categories:

- VoIP and circuit-switch telephony;
- 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, SDWAN and WiFi networks;
- · Wireless services for mobile voice and data; and
- · Value added Managed Services, including:
 - Private and Public Cloud Infrastructure Services and integration, including Disaster Recovery Backup Services;
 - Cloud and premise based Private Branch eXchange solutions, conferencing options and Hosted Contact Center solutions;
 - Cyber Security Services, including structured solutions, rapid response, and other professional services;
 - · Emerging technologies in Software Defined Networking, Internet of Things, Digitalization and Digital Currencies; and
 - Specialized services such as Tele-Health, Digital Signage, and Retail Analytics.

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 an HFC cable network, and increasingly through FTTH 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 FTTH network uses fiber-to-the-home/-cabinet/-building/-node. In a minority of cases, we transmit our services over a fixed network consisting of 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 DOCSIS 3.0 channels and adding DOCSIS 3.1 channels;
 - · replacing copper lines with modern fiber optic lines; 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 head-end 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 HFC and FTTH 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 10 Tbps, which represent less than 20% 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.

We continue to expand our wireless coverage and capacity across our markets. We have built our region-wide 5G core and upgraded all of our Puerto Rico wireless network to 5G.



Mobile

We operate mobile networks in all of our consumer markets except Trinidad & Tobago. Our networks deliver high-speed services, with over 90% LTE population coverage. Our wireless networks predominantly use LTE technologies, which we offer in most of the countries where we operate. In Puerto Rico and USVI we operate 5G networks and across other markets we aim to increase the speed of transmission of our data services and have been expanding our 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 LTE and 5G (Puerto Rico & USVI only) technologies. 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. In 2022, AWS spectrum was allocated to our Panama operations, and we acquired additional spectrum in Barbados and Cayman.

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 approximately 95% 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, and redundant. These 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

Content is one of the key drivers for customers in selecting a provider of video, broadband and/or wireless services. Therefore, we aim to provide products that allow our customers to consume content whenever and wherever they want and feature 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, catch-up, restart with the ability to pause programming, personal
 recording, on-demand and internet streaming apps);
- proposition (meeting our customers' content and entertainment expectations by offering access to a wider range of channels and on-demand content, and
 internet streaming services at affordable and competitive price points);
- · partnering (alliances with content partners and leading distributors to aggregate the best linear, on-demand and streaming content); and
- variety (expanding the content offering from video to other categories and creating an ecosystem across music, sports, retail, culinary, fitness etc. through the
 convenience of our products, broadband and wireless connectivity services).

Except for Flow Sports and Flow 1 services, that we operate, in the Caribbean, and the RUSH sports channel operated by a consolidated joint venture with the Digicel Group, we license our programming and on-demand content through distribution agreements with third-party content providers, including broadcasters, leading cable networks and major Hollywood studios. For such licenses, we generally pay a variable monthly fee on a per subscriber basis, through multi-year programming licenses. In our distribution agreements, we seek to include the rights to offer the licensed channels and on-demand programming to our authenticated customers through multiple delivery platforms including through our apps for IP-connected mobile and/or fixed devices, and our websites. We also acquire rights to make available, in most of our markets, video services to mobile subscribers and 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 locally relevant sports and general entertainment content. Additionally, we produce original series and stories. Our latest video consumer equipment that is distributed to a growing number of markets, including Puerto Rico, Costa

Rica and Panama, also enables our customers to access, through the Google App Store, leading streaming services such as Netflix, Disney+, 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.

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

The video, broadband, telephony and mobile services provided by C&W Caribbean 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, with some markets such as the Dutch Caribbean being more heavily regulated than others. Generally, C&W Caribbean 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 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 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 in the process of being renewed in Jamaica, the Cayman Islands, the British Virgin Islands, Antigua and the 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 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 may be re-allocated by regulatory authorities to other operators in the market. Alternatively, spectrum sought by C&W Caribbean 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. In the Dutch Caribbean the frequencies are allotted on a "first come, first serve" basis, and they operate in the same frequency band divisions as mainland Europe. The regulator reserves the various spectrum evenly between the market players and grants these when needed. Once granted, the operator must start paying for the allocated spectrum.

Rate regulation of C&W Caribbean's 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 or non-price changes. In addition, all regulators determine and set the rates that may be charged by all telephony operators, including C&W Caribbean, 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 and wholesale dedicated internet access. 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. On the BES-islands, also known as the Caribbean Netherlands, data services are considered obligated services that are subject to price regulation requiring regulatory approval of any pricing changes, and Curacao is also considering whether to adjust its rules and regulations to make data services obligated services.

In recent years, a number of markets in which C&W Caribbean operate 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's network infrastructure, including dark fiber and landing stations, as well as to regulate wholesale services and prices. In the Dutch Caribbean and French territories, there are rules and regulations requiring such third party access to network infrastructure. 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, further to the recommendation of the OUR, the responsible minister approved the promulgation of The Telecommunications (Infrastructure Sharing) Rules 2022 that seeks to require dominant licensees to share infrastructure (including dark fiber, ducts, subsea cable landing stations and mobile network towers) with third parties, including competitors, effective February 1, 2023. However, it is anticipated that these rules will not become operational for some time as there are specific actions (including a prescribed costing methodology) that will take considerable time to complete. Our operations in Jamaica have already submitted their objections to the OUR on the premise that due process was not followed leading up to the promulgation of these new infrastructure sharing rules. Our operations in Jamaica are resolved to challenge the process ultimately to the courts for changes to be made to any 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 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's 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. St. Kitts and Nevis enacted the bill in 2021 and was later followed by St. Vincent and the Grenadines in 2022, so that the bill is now currently in effect in those markets. Other ECTEL states will follow to enact the legislation in the next few years, although a specific timeline is unclear, as it is the purview of each legislature to determine the precise date on which the legislation will be introduced for deliberation. Although the legislation does contain provisions which potentially increase the level and variety of regulation to which C&W Caribbean's operations in ECTEL states may be subject, implementation of such rules will be time consuming and complex.

In addition to rate regulation, several markets in which C&W Caribbean 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 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. Barbados launched fixed LNP and mobile LNP in January 2023. Other jurisdictions, including Antigua & Barbuda, Curacao and Turks and Caicos, have considered or begun to implement LNP. Although fixed LNP and mobile LNP are already in place in Trinidad and Tobago, the regulator has yet to enforce it amongst the operators. Additionally, regulators in The Bahamas have eased restrictions on the mobile market.

The pay television service provided in certain C&W Caribbean 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. Pay television service in certain C&W Caribbean markets is also under heavy pressure from illegal IP-setup boxes that are swamping the markets. The price point that these pirates offer are difficult to compete against, and regulators are having a difficult time acting against these pirates or, in some cases, are unwilling to act against them.

C&W Caribbean 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 Caribbean's individual markets have access to basic telecommunication services at minimum quality standards. In a number of cases, C&W Caribbean is required to support universal access/service goals through contributions to universal service funds or participate in universal service-related projects.

In addition to the industry-specific regimes discussed above, C&W Caribbean'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, in connection with its approval of C&W's acquisition of Columbus International Inc. in March 2015, to dispose of its 49% shareholding in 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.

C&W Networks & LatAm

With respect to C&W Networks & LatAm'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. Some licenses and concessions are in the process of being renewed: Costa Rica (Internet and Voice), Honduras (Internet and Videoconferencing), Nicaragua (Carrier), Panama (Carrier), and United States (Carrier). We believe we have complied with all local requirements to have existing licenses renewed. We expect that such licenses will be 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.

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

C&W Panama

C&W Panama is subject to regulatory entities, principally ASEP. 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

ACODECO, guarantor of consumer protection and antitrust, which operates under the direction of the Ministry of Commerce and Industries.

Public services in Panama are classified as "Type A services," and "Type B services," with Mobile Telephony and Personal Communication (PCS) services being classified as Type A services. In 1997, a concession was awarded to BSC (now Grupo Milicom) and C&W Panama. On January 2, 2003, the Local, National and International Basic Services were opened to competition by virtue of the termination of the temporary exclusivity granted to C&W Panama for the privatization of the public operator, INTEL.

With the opening of the market, in 2008, concession contracts for the PCS Service were granted to Digicel (Panamá), S.A. and Claro Panama. Currently, C&W Panama is undergoing a mobile market consolidation process with Claro Panama, according to Law 36 of June 5, 2018 and subsequently, Digicel declared their intention to return their concession to the Panama. The law of market consolidation issued by the Panamanian government aims to maintain three mobile operators and therefore, the Panamanian state recently published the Public Bid for the acquisition of this concession and purchase of some assets of Digicel Panama.

Spectrum. C&W Panama currently has a total of 125 MHz allocated (30 MHz in the 700 MHz band, 40 MHz in the 1900 MHz band, 30 MHz of AWS Band (1710-1780 MHz and 2110 and 2180) and 25 MHz in the 850 MHz band). At the time of the acquisition of Claro Panama, C&W Panama had 65MHz allocated (20 MHz in the 700 Band, 20 MHz in the 900 MHz, 25 MHz in the 850 MHz Band), and Claro Panama had 60 MHz allocated (20 MHz in the 700 MHz band, 40 MHz in the 1900 MHz Band, A0 MHz in the 1900 MHz Band). As per a consolidation law, an acquiring operator could only have a maximum of 130MHz.

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.

Public Telephone Service. C&W Panama is the only operator that provides Public Telephone Service in Panama. Since 2021, efforts have been made with the regulatory authority to obtain authorization for disconnection and/or relocation of public phones, and in 2022, C&W Panama presented a formal request to remove 4,605 out of 8,445 public phones. The letter discussed the intention to provide a sustainable service given the drop in the use of public telephone services aggravated during the 2020 pandemic and the financial projections for 2023.

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 requirements regarding the fulfillment of quality goals for the provision of these services, such as the attention to recommendations issued by the International Telecommunications Union.

Mobile Services. 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 125 MHz, under the prepaid and post-paid contract modalities, including supplementary services and other Mobile Telephony services, throughout Panama, which is valid until 2037.

Internet Service: There are conditions and quality parameters for providing internet service to the public that became effective in 2018, setting new regulatory conditions and supervision of the service providers starting in 2019. During May 2019, ASEP conducted an inspection intended to validate that these requirements were duly configured in the system. C&W Panama has complied with the regulatory requirements.

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. 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.

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 TB. The TB 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. The TB consolidated the majority of Liberty Puerto Rico's cable franchises in December 2022.

Our business in Puerto Rico is subject to comprehensive regulation under 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 TB 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 TB 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 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. 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 the TB designate it as an ETC, which the TB did in June 2018. As part of its obligations as an ETC, Liberty Puerto Rico must offer services at a discounted rate 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.

On November 2, 2020, LCPR received preliminary approval from the FCC for an award of approximately \$72 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. After LCPR submitted all required materials in June 2021, this funding was authorized by the FCC. Liberty Puerto Rico will have six years to complete the network expansions and upgrades, during which certain milestones must be met. Liberty Puerto Rico is expected to receive approximately \$72 million, which will be paid in 120 equal monthly payments over a 10-year period that began in July 2021. The revenue recognized from such project will be reflected as "other revenue" in our revenue by product disclosures in our financial statements.

Effective December 31, 2021, in connection with the BBVI Acquisition, Liberty Puerto Rico acquired 96% of the outstanding shares of Broadband VI, LLC for \$33 million, subject to certain post-closing adjustments. On June 8, 2021, the FCC's Wireline Competition Bureau issued a public notice authorizing \$85 million in Connect USVI funding for Broadband VI, LLC to deploy wireline networks and provide voice and broadband services to more than 46,000 locations in the U.S. Virgin Islands. Given its acquisition of Broadband VI, LLC, Liberty Puerto Rico will now be the recipient of these funds, as well as responsible for the network expansions and upgrades committed to in the bid. Liberty Puerto Rico will have six years to complete the network expansions and upgrades committed to in the bid, and will receive FCC funding support over the course of ten years. In addition to expansions and upgrades, Broadband VI, LLC committed to a robust disaster preparation and response plan to harden its network and make it more resistant to storm damage.

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 Puerto Rico'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 \$34 million in annual funding over three years or a total amount of \$102 million in funding to expand, improve and harden the mobile networks in Puerto Rico and the U.S. Virgin Islands. That entity had previously obtained the required ETC designation in Puerto Rico. Having purchased this business in connection with the AT&T Acquisition, Liberty Puerto Rico is receiving these funds. The funds are paid in equal installments of \$3 million and since the date of the AT&T Acquisition, we have received approximately \$74 million in funding, including approximately \$71 million and \$3 million received by our mobile operations in Puerto Rico and the U.S. Virgin Islands, respectively.

On October 27, 2022, the FCC adopted a further notice of proposed rulemaking (**FNPR**) that would provide transitional support for two additional years, beginning in June 2023, to mobile carriers currently receiving Stage 2 UPR mobile support to encourage the continued hardening and expansion of advanced mobile networks in Puerto Rico and the USVI. Under the FNPR, the FCC would provide transitional support for each such mobile carrier in an amount equal to the Stage 2 upr mobile support it currently receives for 5G technologies. Adoption of the current FCC proposal would reduce Liberty Puerto Rico's annual Stage 2 UPR mobile support from approximately \$34 million to approximately \$8.5 million during the two-year period. Liberty Puerto Rico and other interested parties filed comments and reply comments in December 2022 regarding the FNPR. The FCC likely will issue an order regarding the FNPR in 2023.

Liberty Puerto Rico also is subject to certain regulatory requirements specific to it. Liberty Latin America entered into a Letter of Agreement on July 1, 2020 with the DOJ and the U.S. Department of Defense in connection with the AT&T Acquisition, and Liberty Communications PR entered into a Letter of Agreement on November 20, 2020 with the DOJ regarding an FCC application. Further, Liberty Latin America and LCPR are subject to a Final Judgment, filed on February 3, 2021, in connection with the divestiture of certain assets to complete the AT&T Acquisition, which does not expire for 10 years. Failure to comply with the Letters of Agreement or the Final Judgment could result in a variety of sanctions, including, for example, fines and/or license revocation.

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. Law 213, which created the TB, 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 TB before such increases take effect.

Video. The provision of cable television services requires a franchise issued by the TB. 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, which is passed to Liberty Puerto Rico's customers. 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.

Communications Act requirements and FCC regulations applicable to the video services provided by Liberty Puerto Rico include, among other things: (1) licensing of communications systems and facilities, such as various spectrum licenses; (2) customer and technical service standards; (3) ownership restrictions; (4) emergency alert systems; (5) disability access, including video description and closed captioning; (6) competitive availability of cable equipment; (7) equal employment obligations; and (8) public, education and government entity access requirements.

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. In 2019, the United States Court of Appeals for the District of Columbia Circuit largely upheld the 2017 Order. However, the current FCC may seek to re-impose the 2015 Restrictions or some varia

Liberty Puerto Rico is a participating provider in the ACP, which was known as the Emergency Broadband Benefit Program until it was renamed by the Infrastructure Act enacted on November 15, 2021. The ACP provides a long-term broadband affordability benefit program to low-income customers. The Infrastructure Act, among other things, reduced the standard benefit discount from \$50 per month to \$30 per month and requires a broadband provider to allow enrolled households to apply the ACP benefit to any of the provider's internet service offerings. The ACP launched on December 31, 2021, and the FCC adopted final rules for the ACP on January 21, 2022. Liberty Puerto Rico is subject to the proceedings and requirements regarding ACP administration and related subjects set forth in the Infrastructure Act and the FCC's rules for ACP.

On November 17, 2022, the FCC issued a report and order and a FNPR adopting rules that require broadband providers to display, at the point of sale, labels that disclose certain information regarding broadband prices, introductory rates, data allowances and broadband speeds. Broadband providers also must include links to their network management practices, privacy policies, and the ACP. The FCC also seeks comment regarding the adoption of additional disclosure requirements regarding price and performance information, among other matters.

The Infrastructure Act also established the Middle Mile Broadband Infrastructure Grant Program (MMG). The MMG Program is a competitive grant program that provides funding to telecommunications companies and other eligible entities for the construction, improvement or acquisition of middle mile infrastructure. Middle mile generally means any broadband infrastructure that does not connect directly to an end-user and provides a backbone for local providers to build on existing infrastructure and extend connectivity services to individual customers. Grants awarded under the MMG Program may not exceed 70% of the total project costs presented in each application. If a proposal is awarded with a middle mile grant, the recipient of such funds will have five years to complete the middle mile project presented under the winning proposal. In addition, the winner may be subject to certain NTIA rules regarding the MMG Program and other applicable regulatory requirements and proceedings. In 2022, LCPR submitted four middle mile grant proposals and Broadband VI, LLC submitted one proposal. The NTIA is expected to announce grant winners on or after March 1, 2023.

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, CLECs, like us, may require interconnection with the 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 ILEC, 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 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 rules regarding, among other things: (1) customer proprietary network information and customer privacy protections; (2) number portability; (3) network outage reporting; (4) rural call completion; (5) disability access; (6) back-up power obligations; and (7) robocall mitigation.

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, leasing 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, licensing and leasing, facilities siting, pole attachments, intercarrier compensation, USF contributions and distributions (such as through the UPR Fund), network neutrality, 911 services, consumer protection, consumer privacy protections, number portability, and cybersecurity. The FCC also released a final rule on July 6, 2022 making the industry-developed Wireless Network Resiliency Cooperative Framework mandatory. The new rule requires a five-pronged approach to enhance coordination during an emergency, typically resulting from a national disaster such as a hurricane. 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.

Liberty Costa Rica

Liberty Servicios and Liberty Telecomunicaciones, as telecommunications operators and providers, are subject to regulation and enforcement under Article 121, paragraph 14, of Costa Rica's Constitution, which enumerates a list of assets that cannot permanently leave the state's domain, which includes the radio spectrum and the possible methods of its exploitation, the Law No. 8642, General Telecommunications Law (LGT), and Law No. 8860, Law for the Strengthening and Modernization of the Public Entities of the Telecommunications Sector, among other regulations. The main governmental entities involved in this industry are the MICITT, which leads policy development and implementation, Sutel, as regulator of the telecommunication operators and providers and competition agency exclusively for the telecommunications sector, and the Consumer Protection Agency of the Ministry of Economy, Industry and Commerce. In its activities, Liberty Servicios holds a telecommunications services license, expiring in 2028, issued by Sutel that authorizes the deployment and operation of its wireline HFC network throughout the country. This concession authorizes the following services: (i) paid television; (ii) the provision of fixed telephony service; (iii) internet access; and (iv) data links.

Liberty Telecomunicaciones has a total of 100 MHz allocated in two concessions. For the first, granted in 2011, MICITT awarded Telefonica 10 MHz in the 850 MHz band, 30 MHz in the 1800 MHz band and 20 MHz in the 1900/2100 MHz band. This concession has a 15-year renewable term, expiring on May 12, 2026, that may be extended for an additional 10 year term. The second one, granted in 2018, MICITT awarded Liberty Telecomunicaciones 20 MHz in the 1800 MHz band and 20 MHz in the 1900/2100 MHz band. This concession has a 15-year renewable term, expiring on April 23, 2033, that may be extended for an additional 10 year term.

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 60% 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. Sutel issued a regulation for the implementation of fixed number portability in 2014, however such regulation was challenged in court by the incumbent operator and no ruling has been issued as of December 31, 2022.

Mobile Services. Through concessions contracts N $^{\circ}$ C-001-2011-MINAET and -002-2017-MICITT DAF-034-2013, Liberty Telecomunicaciones is authorized to install, maintain, manage, operate and commercially exploit the mobile telephone service, in the assigned radio spectrum segments, under the prepaid and post-paid contract modalities.

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 Services

Across our footprint, we are either the leading or one of the leading mobile providers and we continue to seek additional bandwidth to deliver our wide range of services to our customers and increase our high-speed 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.* We typically operate in duopoly mobile market structures and face competition mainly from Digicel in most of our C&W Caribbean residential markets, and ALIV in the Bahamas. From time to time, new entrants come into the markets. For example, Rock Mobile announced its intent to launch a business, and has received spectrum to do so, in Jamaica.
- C&W Panama. In Panama, we primarily compete with Millicom (through the Tigo brand).
- Liberty Puerto Rico. Liberty Puerto Rico competes with T-Mobile US and América Móvil, S.A.B. de C.V. (Claro) for the provision of mobile services.
- Liberty Costa Rica. In Costa Rica, we compete with Claro and ICE (through the Kolbi brand) for the provision of mobile services.



Broadband Internet

With respect to broadband internet services and online content, our businesses face competition in a rapidly evolving marketplace from incumbent and nonincumbent 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 FTTH 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 100 Mbps to speeds of up to 1 Gbps. In many of our markets, we offer the highest download speeds available via our HFC cable and FTTH 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 and DOCSIS 3.1 technologies on our cable systems, we can compete with local FTTH initiatives and create a competitive advantage compared to DSL infrastructures and LTE initiatives on a national level.

In several of our C&W Caribbean markets, we are the incumbent phone company offering broadband internet products through a variety of technologies, predominantly HFC cable and FTTH. 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. Where C&W Caribbean is the incumbent telecommunications provider, it competes with cable operators, the largest of which are Cable Bahamas Limited in the Bahamas and Digicel in certain of C&W Caribbean markets. To distinguish itself from these competitors, C&W Caribbean 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 Millicom (through the Cable Onda brand).
- 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 1,000 Mbps.
- Liberty Costa Rica. In Costa Rica, we face competition primarily from ICE (Kolbi), Telecable and Millicom (Tigo).

Video Distribution

Our video services compete primarily with traditional FTA broadcast television services, DTH satellite service providers and other fixed-line telecommunications carriers and broadband providers, including operations offering (i) services over HFC cable 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 FTTH 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 FTTH 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 Sportsmax 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 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 Sports in C&W Caribbean's markets, +TV Total in C&W Panama, and Liberty Go in Puerto Rico and Costa Rica.

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, VoD and multi-screen services, along with exploring and aligning partnerships with adjacent categories like music, e-sports, fitness and others. 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. C&W Caribbean competes with a variety of pay TV service providers, with several of these competitors offering double-play and tripleplay packages. In several of its other markets, including Jamaica, Trinidad and Tobago and Barbados, C&W Caribbean 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 FTTH, such as Digicel.
- *C&W Panama*. **C&W** Panama competes primarily with Cable Onda which is owned by Millicom and which offers video, internet and fixed-line telephony over its cable network. To compete effectively, **C&W** Panama invests in leading mobile and fixed networks and content.
- 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. 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 fixed and mobile internet connectivity solutions to drive its video services.
- Liberty Costa Rica. We compete primarily with Millicom (Tigo) and Telecable over their cable network, and with the DTH services of Claro.

Fixed-Line Telephony

The market for fixed-line telephony services is mature across our footprint. 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 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, FTTH-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.* We face competition in the provision of fixed-telephony services mainly from Digicel in our Caribbean markets and Cable Bahamas Limited 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 Millicom (through the Tigo brand) in Panama.
- Liberty Puerto Rico. Liberty Puerto Rico primarily competes with Claro who is the incumbent fixed operator in Puerto Rico, and smaller fiber builders. For B2B services, Liberty Puerto Rico primarily competes with Claro, Aeronet, Neptuno and WorldNet.
- Liberty Costa Rica. In Costa Rica, we compete with ICE (through the Kolbi brand), who is the incumbent fixed telephony operator in Costa Rica, as well as Millicom (through the Tigo brand) and Telecable.

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, 2022, utilized less than 20% 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, 2022, we employed approximately 11,000 full-time employees across our five reportable segments. Our employees are employed across our segments as follows: C&W Caribbean approximately 3,700 full-time employees, C&W Panama approximately 2,600 full-time employees, C&W Networks & LatAm approximately 1,000 full-time employees, Liberty Puerto Rico approximately 2,300 employees, and Liberty Costa Rica approximately 800 employees. The remaining employees are employed by our corporate entities. Following the formation of the Chile JV in October 2022, 1,400 VTR employees transitioned out of Liberty Latin America and became employees of the Chile JV. Women represented 42% of our global employees and 40% of our managerial positions. Of our total employee population, approximately 3,400 are covered by contracts with various unions, primarily across our Caribbean markets, Panama, and Puerto Rico.

During 2022, our total employee attrition rate, both voluntary and involuntary, was approximately 11%. The Employee Net Promoter Score (eNPS) is a widelyused methodology to measure employee experience. In 2022, we measured our employee net promoter score (eNPS) at +32 as part of our annual employee survey, which we believe indicates 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. All leaders incorporate these initiatives as part of the operating strategy, 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 utilize an annual performance management 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.

In 2022, we continued our efforts to foster a more diverse and inclusive workplace as part of our Equality, Diversity, and Inclusion strategy. Our focus remains on the pillars of gender equity, LGBTQ+ inclusion, and issues of Race & Ethnicity. We launched our 'ELLAS at Liberty Latin America' employee resource group, which seeks to empower women inside the company and in our local communities to thrive and reach their full potential through representation, allyship, support and connection.

We partnered with the United Nations Foundation and Spotlight Initiative to support the WithHer Fund and the ongoing fight against gender-based violence. This initiative will direct much needed resources to women-led grassroots organizations working in the Global South to eliminate gender-based violence in their communities. Our efforts aim to educate, prevent, protect, and advocate against gender-based violence in our communities, while creating a safe workplace that prioritizes employees' wellbeing and mental health.

In 2022, we maintained our commitment to the CEO Action for Diversity & Inclusion pledge focused on: 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 continue to adapt to evolving conditions related to the pandemic in the markets where we operate. Our focus is ensuring we have appropriate stringent health and safety protocols in accordance with local regulations to help protect our employees, our customers, and our communities.

Corporate Social Responsibility. In addition to our core products and services, we meaningfully 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; and Disaster Relief.

Our employees lead many of our outreach programs, working alongside our local and regional charitable foundations. We proudly support and give back. In 2022, through our company-wide initiative, *Mission Week*, over 1,700 employees across 20 countries came together to contribute more than 7,000 volunteer hours in support of communities across Latin America and the Caribbean 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 such as cyber security.

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 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 six 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 related to climate change;
- 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 DTT broadcasters, DTH satellite providers, networks using DSL, VDSL or vectoring technology, Multi-channel Multipoint Distribution System operators, FTTH networks, OTT content providers, and, in some countries where parts of our systems are overbuilt, with cable & fiber-to-the-home/-cabinet/-building/-node 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 telecommunications operators and other service 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, 5G (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 or fiber-to-the-home/-cabinet/-building/-node system operating in the same territory is referred to as an "overbuild." Overbuilds 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 FTTH 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 FTTH 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, broadcasters and rights owners for programming content, and a failure to acquire desirable programming on acceptable terms could adversely affect subscriptions of our video services.

The success of our video subscription offerings depends, in large part, on our ability to offer a selection of popular and desirable programming. We generally do not produce our own content and we therefore depend on our agreements and cooperation with public and private broadcasters, rights holders and collective rights associations to obtain such content. If we fail to obtain desirable and popular programming for our pay television offerings, including linear channels as well as non-linear content (such as a selection of attractive VoD content and rights for ancillary services such as network DVR services), on satisfactory terms, we may not be able to offer a compelling product to our video customers at a price they are willing to pay. Additionally, we periodically negotiate and renegotiate content agreements and our annual costs for programming can vary as a result of these negotiations. There can be no assurance that we will be able to renew the terms of our agreements on desirable terms or at all.

If we are unable to obtain or retain attractively priced content, demand for our video subscription services could decrease, thereby limiting our ability to attract new bundle customers to subscribe to video services and/or maintain existing video customers. Furthermore, we may be placed at a competitive disadvantage as certain OTT providers increasingly produce their own exclusive content if certain of our providers also offering content directly to consumers restrict our access to valued content or if certain of our pay- TV competitors acquire exclusive programming rights, particularly with respect to 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, and this may lead us to issue credit to customers which could adversely impact our revenue and cash flows. 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

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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 or we may issue credits to customers, 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.

Additionally, product shipments from third-party suppliers may be delayed due to supply chain challenges that our suppliers may face. If such a disruption were to extend over a prolonged period, it could have an impact on the continuity of our supply chain and our ability to build or upgrade our networks and customer premises equipment generally. 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 supplier. 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 would be negatively impacted.

We may be unable to obtain or maintain the roaming services we need from other carriers to remain competitive.

Some of our competitors have national networks that enable them to offer nationwide and/or international coverage to their subscribers at a lower cost than we do. The networks we operate do not, by themselves, provide national or international coverage and we must pay fees to other carriers who provide roaming services to us. For example, Liberty Puerto Rico currently relies on roaming agreements with several carriers for the majority of its roaming services.

The FCC requires commercial mobile radio service providers to provide roaming, upon request, for voice and SMS text messaging services on just, reasonable and non-discriminatory terms. The FCC also requires carriers to offer data roaming services. The rules do not provide or mandate any specific mechanism for determining the reasonableness of roaming rates for voice, SMS text messaging or data services and require that roaming complaints be resolved on a case-by-case basis, based on a non-exclusive list of factors that can be taken into account in determining the reasonableness of particular conduct or rates. If Liberty Puerto Rico were to lose the benefit of one or more key roaming or wholesale agreements unexpectedly, it may be unable to obtain similar replacement agreements and as a result may be unable to continue providing the same level of voice and data roaming services for its customers that they've grown accustomed to or may be unable to provide such services on a cost-effective basis. Liberty Puerto Rico's inability to obtain new or replacement roaming services on a cost-effective basis may limit its ability to compete effectively for wireless customers, which may increase its turnover and decrease its revenue, which in turn could materially adversely affect our business, financial condition and results of operations.

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 as well as natural disasters and extreme weather events as a result of climate change. 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 (in terms of people, processes and technology) 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 protection to cover damage or costs incurred due to natural catastrophes, which could expose us to significant liabilities.

We have entered into Weather Derivatives tied to a parametric wind index to protect us against various liability, property and business interruption damage risks if a natural catastrophe occurs in a market where we operate. We believe these instruments are an effective way to protect our assets against these risks. However, if we sustain certain damage from wind-related events that does not trigger coverage under our Weather Derivatives, we may receive no proceeds or proceeds that do not fully cover such damage. If we do not receive sufficient proceeds from our Weather Derivatives, we may be required to make material investments to repair such damage or incur other costs as a result of 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. For example, on January 6, 2023, the FCC released a notice of proposed rulemaking seeking comment regarding proposed revisions to its customer proprietary network information regulations requiring notice to customers and federal government agencies of certain data breaches. 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. 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

A substantial portion of our businesses is conducted outside of the U.S., which gives rise to numerous operational risks.

A substantial portion of our business operates 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.

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 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 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 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, 2022.

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. 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 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. In September 2022, OFAC issued a specific license to allow us to engage in all transactions necessary for U.S. financial institutions to process the collection of outstanding debts and the receipt of current and future payments relating to telecommunications services provided to Compañía Anónima Nacional Teléfonos de Venezuela.

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 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, such as in Jamaica where, further to the recommendation of the OUR, the responsible minister approved the promulgation of The Telecommunications (Infrastructure Sharing) Rules 2022 that seeks to require dominant licensees to share infrastructure (including dark fiber, ducts, subsea cable landing stations and mobile network towers) with third parties, including competitors. 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;
- impact the amount of government funding under certain support programs such as the FCC's UPR Fund;
- · 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 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.

Failure to comply with the FCC's requirements for the UPR Fund, the ACP or other funding programs in which Liberty Puerto Rico may participate may have an adverse impact on Liberty Puerto Rico's business and our financial position.

In May 2018, the FCC established the UPR Fund and the Connect USVI Fund to provide subsidies for the deployment and hardening of fixed wireline and mobile wireless communications networks in Puerto Rico and the U.S. Virgin Islands, and in 2021, the FCC launched the ACP which provides a long-term broadband affordability benefit to low-income customers. Liberty Puerto Rico receives funds from the FCC through these programs. To continue receiving funds under these programs, Liberty Puerto Rico must comply with certain requirements established by the FCC as described in Item 1. *Business—Description of Business—Regulatory Matters*. In addition, the FCC has proposed to extend its support under the UPR Fund to eligible facilities-based mobile carriers, such as Liberty Puerto Rico, for an additional two-year transitional period beginning in June 2023 in an amount equal to the mobile support such carriers receive for 5G technologies. Adoption of the current FCC proposal would reduce Liberty Puerto Rico's annual UPR Fund Stage 2 mobile support from approximately \$34 million to approximately \$8.5 million during the two-year period. If Liberty Puerto Rico fails to comply with these programs' requirements or if the FCC's current UPR Fund proposal is adopted, Liberty Puerto Rico may become ineligible to receive future funding or may receive reduced funding which may have an adverse impact on Liberty Puerto Rico's business and our RGUs, revenue and cash flow.

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, the Liberty Telecomunicaciones Acquisition and the Claro Panama Acquisition, may present significant costs and challenges associated with: realizing economies of scale in interconnection, programming and network operations; eliminating duplicative overheads; migrating our acquired businesses' customers to our systems; integrating personnel, networks, financial systems and operational systems and building new mobile cores and IT stacks; 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 Jamaica, the Cayman Islands, the British Virgin Islands, Antigua and the Turks and Caicos Islands are in the process of being renewed on the same terms and conditions as before. 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 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 OECD. The OECD, which represents a coalition of member countries that includes 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 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. In particular, the OECD has recently proposed a provision to impose a minimum tax rate of 15%, among other provisions, and as of 2022 more than 140 countries have tentatively signed on to the framework. As this framework is subject to further negotiation and implementation by each member country, the timing and ultimate impact of any such changes on our tax obligations are uncertain.

Failure to comply with anti-corruption laws and regulations, such as the FCPA.

Our operations, particularly in countries that have a perceived elevated risk of public corruption, expose us to a certain degree of exposure for violations of, among other anti-corruption laws, the FCPA. Although we forbid our employees and agents from violating the FCPA and other applicable anti-corruption laws and regulations and have implemented a compliance program to prevent and detect violations of the FCPA and other applicable anti-corruption laws and regulations, there remains some degree of risk that improper conduct could occur, thereby exposing our company to potential liability and the costs associated with investigating potential misconduct.

Failure to comply with trade controls.

Trade controls implemented by the United States and other governments, particularly with respect to certain suppliers designated by the United States as part of the Chinese Military Industrial Complex, expose our operations to supply chain risks

for certain telecommunications equipment in certain of our markets. Further, these trade controls expose us to a certain degree of exposure for violations of United States and other laws prohibiting certain transactions with restricted or prohibited companies. While we have implemented a compliance program to prevent and detect violations of these trade controls, there remains some degree of risk that improper conduct could occur, thereby exposing our company to potential liability and the costs associated with investigating potential misconduct.

Our business has been, and could in the future, be adversely affected by a pandemic.

Pandemics and related mitigation measures have adversely affected our business and operating results in the past, particularly when countries in which we operate had imposed travel restrictions as they did with the COVID-19 pandemic, which reduced demand for our products and services. Although some pandemic-related impacts on our business have abated, they may re-emerge or intensify again given the uncertain course of the pandemic and its effects. To the extent a pandemic adversely affects our business, results of operations, financial position and cash flows, it may also have the effect of heightening the other risk factors described in this Annual Report on Form 10-K.

Risks that Relate to Certain Financial Matters

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

Our businesses are highly leveraged. At December 31, 2022, the outstanding principal amount of our debt, together with our finance lease obligations, aggregated \$7,975 million, including \$227 million that is classified as current in our consolidated balance sheet and \$6,868 million that is not due until 2027 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 are predominantly 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, and, 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, if related to borrowings under a borrowing group's (i.e., C&W, Liberty Costa Rica, and Liberty Puerto Rico) debt agreements or other instruments, other debt agreements or instruments that contain cross-default or cross-acceleration provisions with respect to other indebtedness of that particular borrowing group may become payable on demand and the affected borrowing group may not have sufficient funds to repay all



of its debts; and if related to borrowings in an amount above a certain threshold of a "significant subsidiary" (as defined in Regulation S-X under the Securities Act) of Liberty Latin America Ltd., the Convertible Notes may become payable on demand under the cross-default provision in the indenture governing the Convertible Notes. If related to the Convertible Notes, Liberty Latin America Ltd.'s (excluding its subsidiaries) other debt agreements or instruments (if any) that contain crossdefault or cross-acceleration provisions with respect to Latin America Ltd.'s other indebtedness may become payable on demand and it may not have sufficient funds to repay all of its 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 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.

The phasing out of LIBOR 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.

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 having been 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. 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 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 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. 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.

The current macroeconomic environment has also 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 with the onset of the COVID-19 pandemic. The duration and severity of the economic impacts stemming from the COVID-19 pandemic, competition, economic, regulatory or other factors, including macro-economic and demographic trends, are unknown and may be prolonged. In particular, any recession, depression, inflationary pressures, or other sustained adverse market event may result in high levels of unemployment and associated loss of personal income, decreased consumer confidence, and lower discretionary spending, which could materially and adversely affect our business, results of operations, financial position and cash flows.

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, and 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, 2022, our exposure to counterparty credit risk included (i) cash and cash equivalents and restricted cash balances of \$789 million and (ii) aggregate undrawn debt facilities of \$899 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, 2022, we had goodwill of \$3,421 million, which represented approximately 25% 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 July 1 and whenever facts and circumstances indicate that their carrying amounts may not be recoverable. As further described in note 7 to our consolidated financial statements, during the years ended December 31, 2022, 2021 and 2020, we incurred significant goodwill impairments. If, among other factors, (i) our equity values were to decline significantly or (ii) the adverse impacts stemming from COVID-19, 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 segment or our C&W Panama segment. Any such impairment charges could be significant.

Factors Relating to Climate Change

We may face increased costs, limitations of our operations and other adverse impacts from international climate change treaties and accords or national climate-change regulation and legislation.

Federal, state and local governments in our operating markets may adopt international climate change treaties or accords or adopt local climate change legislation or regulation that impair our ability to construct certain facilities and infrastructure necessary to operate our business in certain locations or may impose additional costs of construction, operation or disposal of products used in our operations. As a result of the adoption of international climate treaties or accords or local climate change legislation or regulation outside of our operating markets, we may face shortages of components necessary to our business or face increased costs for the acquisition or disposition of certain products necessary to our business.

We may face the loss of certain market, customers or significant financial loss due to the physical impacts of climate change.

Given the location of our operations in the Caribbean and in Latin America, we may face the loss of certain markets or customers or the availability of labor due to impacts caused by sea level rise, distortion of historical rainfall patterns, fire or other adverse impacts of climate change. Additionally, we may face higher losses of property, plant and equipment, customers and revenue, disruptions in our operations and supply chain, and incur additional costs, which may not be covered by insurance, as the result of damage caused in our markets by severe weather phenomena or natural disasters, such as floods, fires and earthquakes. The impact of any one or all of the foregoing factors may adversely affect our financial condition and results of operations.

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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 our split-off from Liberty Global in December 2017, 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 or equity awards. As a result of these multiple fiduciary duties and financial interests, these directors and executive officers of 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 officers 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 of the disinterested independent directors 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 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 approximately 75% of such outstanding shares as of December 31, 2022 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 Markets, they are sparsely traded and do not have an active trading market. The OTC Markets provide an inter-dealer automated quotation system for equity securities that is not a national securities exchange. As a result, trading in the OTC 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 Markets as opposed to a national exchange. 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, 2022, John C. Malone beneficially owned a number of our common shares representing approximately 27% 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 byelaws 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 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, 2022, we did not maintain effective 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, 2022. 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, 2022, we leased our corporate office in Denver, Colorado, U.S. and our operations center in Panama City, Panama. Additionally, through our C&W Networks & LatAm 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

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. 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. For additional information, see note 19 to our consolidated financial statements in Part II of this Annual Report on Form 10-K.

Item 4. MINE SAFETY DISCLOSURES

Not applicable.

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PART II

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

General

See the Glossary of defined terms at the beginning of this Annual Report on Form 10-K. 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 "LILAA" and "LILAK," respectively. Our Class B common shares are eligible to be traded on the OTC 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.

	Cla	iss B	
	 High		Low
Year ended December 31, 2022			
First quarter	\$ 9.00	\$	8.06
Second quarter	\$ 9.00	\$	7.50
Third quarter	\$ 9.69	\$	6.00
Fourth quarter	\$ 9.50	\$	6.20
Year ended December 31, 2021			
First quarter (a)	\$ 17.00	\$	17.00
Second quarter (a)	\$ 17.00	\$	17.00
Third quarter	\$ 10.25	\$	10.25
Fourth quarter	\$ 10.80	\$	10.30

(a) During the first two quarters of 2021, no trades occurred. As such, the high and low prices shown for these periods relate to the last actual trade, which was during the second quarter of 2020.

Holders

As of January 31, 2023, we had the following number of holders of record of our common stock: 10,798 Class A; 22 Class B; and 24,814 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 9 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 2023 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.

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Issuer Purchase of Equity Securities

On February 22, 2022, our Directors approved the 2022 Share Repurchase Program. This program authorizes us to repurchase from time to time up to an additional \$200 million of our Class A common shares and/or Class C common shares through December 2024 in open market purchases at prevailing market prices, in privately negotiated transactions, in block trades, derivative transactions and/or through other legally permissible means. The 2022 Share Repurchase Program does not obligate us to repurchase any of our Class A or C common shares.

The following table sets forth information concerning our company's purchase of its own equity securities during the three months ended December 31, 2022:

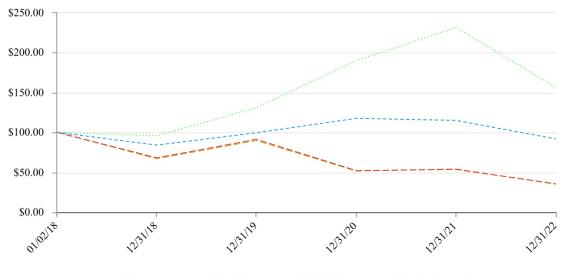
Period	Total number of shares purchased	J	erage price paid per share (a)	Total number of shares purchased as part of publicly announced plans or programs	Approximate dollar value of shares that may yet be purchased under the plans or programs
October 1, 2022 through October 31, 2022:					
Class A	510,400	\$	7.35	510,400	(b)
Class C	351,100	\$	7.12	351,100	
November 1, 2022 through November 30, 2022:					
Class A	384,400	\$	7.80	384,400	(b)
Class C	95,400	\$	7.86	95,400	
December 1, 2022 through December 31, 2022:					
Class A	941,300	\$	7.22	941,300	(b)
Class C	29,200	\$	6.98	29,200	
Total — October 1, 2022 through December 31, 2022:					
Class A	1,836,100	\$	7.38	1,836,100	(b)
Class C	475,700	\$	7.26	475,700	

(a) Average price paid per share includes direct acquisition costs.

(b) At December 31, 2022, the remaining amount authorized for repurchases of Liberty Latin America Shares was \$57 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 to December 31, 2022, 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.



---- Class A ---- Class C ----- MSCI EM Nasdaq Composite

	 January 2, December 31,											
	2018		2018 2019			2020			2021		2022	
Liberty Latin America Shares - Class A	\$ 100.00	\$	67.10	\$	89.43	\$	51.58	\$	54.03	\$	34.89	
Liberty Latin America Shares - Class C	\$ 100.00	\$	68.12	\$	90.98	\$	51.85	\$	53.30	\$	35.53	
MSCI Emerging Markets NTR Index	\$ 100.00	\$	84.00	\$	99.48	\$	117.73	\$	114.70	\$	91.66	
Nasdaq Composite TR Index	\$ 100.00	\$	95.72	\$	130.84	\$	189.61	\$	231.66	\$	156.29	

Item 6. [Reserved]

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

See the Glossary of defined terms at the beginning of this Annual Report on Form 10-K.

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, 2022 and 2021.
- 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, operational data (including subscriber statistics) is presented as of December 31, 2022.

A discussion regarding our financial condition and results of operations for the year ended December 31, 2021 compared with the year ended December 31, 2020 can be found under captions entitled "*Results of Operations*" and "*Liquidity and Capital Resources*" in the section entitled "*Item 7 - Management's Discussion and Analysis of Financial Condition and Results of Operations*" of our annual report on Form 10-K for the year ended December 31, 2021 filed with the SEC on March 1, 2022, which is available free of charge through the SEC's website at www.sec.gov or the Company's website, https://investors.lla.com/financials/sec-filings. The Company's website and the information contained therein, or incorporated therein, are not intended to be incorporated into this Annual Report on Form 10-K.

Overview

General

We are an international provider of fixed, mobile and subsea telecommunications services. We provide,

- A. 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 C&W Panama;
 - ii. Puerto Rico, through our reportable segment Liberty Puerto Rico;
 - iii. Costa Rica, through our reportable segment Liberty Costa Rica;
 - iv. Chile, through our reportable segment VTR through September 30, 2022; and
- B. through our reportable segment C&W Networks & LatAm, (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 approximately 40 markets in that region.

At December 31, 2022, we (i) owned and operated fixed networks that passed 4,327,000 homes and served 3,819,500 RGUs comprising 1,734,100 broadband internet subscribers, 958,700 video subscribers and 1,126,700 fixed-line telephony subscribers, and (ii) served 8,169,500 mobile subscribers.

During 2022, we completed an organizational change with respect to our C&W operations whereby management of certain subsidiaries of C&W, which primarily operate our subsea and fiber optic cable networks, now report directly to the chief operating decision maker of Liberty Latin America and no longer report to the former C&W Caribbean and Networks segment decision maker. As a result, the aforementioned subsidiaries of C&W are now a separate operating and reportable segment, herein referred to as the C&W Networks & LatAm segment. In connection with this change, we have restated our segment presentation for all periods to separately present (i) C&W Caribbean and (ii) C&W Networks & LatAm.



Transactions

Claro Panama Acquisition. On September 14, 2021, we entered into a definitive agreement to acquire América Móvil's operations in Panama in an all-cash transaction based upon an enterprise value of \$200 million on a cash- and debt-free basis. On July 1, 2022, we completed the acquisition of Claro Panama, which was financed through a combination of debt and existing cash.

Chile JV. On September 29, 2021, we entered into an agreement with América Móvil to contribute the Chile JV Entities to América Móvil's Chilean operations to form the Chile JV that will be owned 50:50 by Liberty Latin America and América Móvil. In October 2022, we completed the formation of the Chile JV and made a balancing payment to América Móvil totaling \$76 million. The transaction did not trigger a change of control under VTR's debt agreements, and was not subject to Liberty Latin America or América Móvil shareholder approvals. Beginning in October, we have accounted for our 50% interest in the Chile JV as an equity method investment.

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 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 or business by increasing the penetration of our video, broadband internet, fixed-line telephony and mobile services with existing customers through product bundling and up-selling.

For information regarding our expectation with regard to property and equipment additions as a percent of revenue during 2023, 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 ARPU in a number of our markets. 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 2022 and 2021 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 impacts on the operating results of the periods under comparison that are attributable to acquisitions and disposals. We (i) acquired (a) América Móvil's operations in Panama in July 2022, (b) 96% of Broadband VI, LLC's operations in the USVI effective December 2021, (c) Telefónica's operations in Costa Rica in August 2021, and (ii) disposed of the Chile JV Entities in October 2022 in connection with the formation of the Chile JV. 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 sentent 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, Liberty Costa Rica and certain entities within C&W have functional currencies other than the U.S. dollar. Our primary exposure to FX risk, prior to the formation of the Chile JV, was to the Chilean peso, as a significant portion of our revenue was derived from VTR. For example, the average FX rate (utilized to translate our consolidated statements of operations) for the U.S. dollar per one Chilean peso depreciated by 17% for the nine months ended September 30, 2022, the period prior to the formation of the Chile JV in October 2022, as compared with the corresponding period in 2021. 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, see Item 1A. Risk Factors 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. The noncontrolling owners' interests in the operating results of (i) certain subsidiaries of C&W and (ii) Liberty Costa Rica are reflected in net earnings or loss attributable to noncontrolling interests in our consolidated statements of operations.

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, 2022 as Compared with Year Ended December 31, 2021

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 determine how to allocate resources to segments. 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 or loss.

A reconciliation of total operating income, the nearest U.S. GAAP measure, to Adjusted OIBDA on a consolidated basis, is presented below for the periods indicated.

	Year ended	Decemb	er 31,
	 2022		2021
	 in m	illions	
Operating income	\$ 94.1	\$	67.3
Share-based compensation expense	93.5		118.1
Depreciation and amortization	910.7		964.7
Impairment, restructuring and other operating items, net	619.2		665.0
Consolidated Adjusted OIBDA	\$ 1,717.5	\$	1,815.1

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

	C&W aribbean	C&W Panama	N	C&W Networks & LatAm	Р	Liberty Puerto Rico	Rico Costa Rica VTR Corporate elimination						Intersegment eliminations	С	onsolidated	
Adjusted OIBDA for the twelve months ending:								in millio	ns							
December 31, 2021	\$ 482.9	\$ 200.1	\$	264.3	\$	580.9	\$	80.2	\$	259.6	\$	(52.9)	\$	_ 5	\$	1,815.1
Organic changes related to:																
Revenue	55.1	5.0		28.0		(4.1)		17.5		(89.7)		0.6		(7.0)		5.4
Programming and other direct costs	(8.1)	(2.8)		(6.1)		(19.6)		(0.9)		15.0		_		6.1		(16.4)
Other operating costs and expenses	8.0	(15.1)		(7.8)		(33.9)		(7.5)		4.4		(19.2)		0.9		(70.2)
Non-organic increases (decreases):																
FX	(2.7)	—		(2.1)		_		(1.6)		(18.4)		_		_		(24.8)
Acquisitions/disposition, net		1.6		_	_	15.1		47.0		(55.3)				_		8.4
December 31, 2022	\$ 535.2	\$ 188.8	\$	276.3	\$	538.4	\$	134.7	\$	115.6	\$	(71.5)	\$		\$	1,717.5

Adjusted OIBDA Margin

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

	Year ended De	cember 31,
	2022	2021
	%	
C&W Caribbean	37.2	34.7
C&W Panama	29.4	35.2
C&W Networks & LatAm	61.3	61.2
Liberty Puerto Rico	36.6	40.1
Liberty Costa Rica	30.5	31.0
VTR (a)	25.7	33.0

(a) During October 2022, we contributed the Chile JV Entities into the Chile JV. As such, subsequent to September 30, 2022, VTR is no longer included in our consolidated results of operations and is no longer a reportable segment.

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 Adjusted OIBDA margin for C&W Panama is due in part from the inclusion of Claro Panama operations following the Claro Panama Acquisition, which generates a lower Adjusted OIBDA margin compared to legacy operations. We incurred in aggregate \$26 million of integration costs during the year ended December 31, 2022 in our Liberty Puerto Rico, Liberty Costa Rica and C&W Panama segments. During the year ended December 31, 2021, we incurred \$16 million in our Liberty Puerto Rico and Liberty Costa Rica segments. The decrease in the Adjusted OIBDA margin for VTR is primarily related to a decline in revenue, RGUs and ARPU resulting from significant competition in Chile.

Revenue

Most of our segments derive their revenue primarily from (i) residential fixed services, including video, broadband internet and fixed-line telephony, (ii) mobile services and (iii) B2B services. C&W Networks & LatAm 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.

The following tables set forth the organic and non-organic changes in revenue by reportable segment.

	1	ear ended	mber 31,			_		Increase (decrease) from	n:		
	2022		2021	Increase (decrease)			FX	Acquisitions (disposition), net		Organic	
						in millions	s, ex	cept percentages	1		
C&W Caribbean	\$	1,436.8	\$	1,389.9	\$	46.9	\$	(8.2)	\$ _	\$	55.1
C&W Panama		642.7		568.1		74.6		_	69.6		5.0
C&W Networks & LatAm		450.8		431.9		18.9		(9.1)	_		28.0
Liberty Puerto Rico		1,470.1		1,449.7		20.4		—	24.5		(4.1)
Liberty Costa Rica		441.3		258.5		182.8		(4.3)	169.6		17.5
VTR		450.6		787.5		(336.9)		(72.4)	(174.8)		(89.7)
Corporate		22.2		21.6		0.6		—	—		0.6
Intersegment eliminations		(99.4)		(92.4)		(7.0)		—	—		(7.0)
Total	\$	4,815.1	\$	4,814.8	\$	0.3	\$	(94.0)	\$ 88.9	\$	5.4

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

Year ended December 31,				crease)		
	2022		2021		\$	%
		in	millions, exc	ept pei	rcentages	
\$	484.3	\$	473.4	\$	10.9	2.3
	32.6		34.6		(2.0)	(5.8)
	516.9		508.0		8.9	1.8
	314.5		300.2		14.3	4.8
	67.9		63.9		4.0	6.3
	382.4		364.1		18.3	5.0
	899.3		872.1		27.2	3.1
	537.5		517.8		19.7	3.8
\$	1,436.8	\$	1,389.9	\$	46.9	3.4
	\$ 	2022 \$ 484.3 32.6 516.9 314.5 67.9 382.4 899.3 537.5	2022 in \$ 484.3 \$ 32.6 516.9 314.5 67.9 382.4 899.3 537.5	2022 2021 in millions, exc \$ 484.3 \$ 473.4 32.6 34.6 516.9 508.0 314.5 300.2 67.9 63.9 382.4 364.1 899.3 872.1 537.5 517.8	2022 2021 in millions, except per \$ 484.3 \$ 473.4 \$ 32.6 34.6 \$ 516.9 508.0 \$ 314.5 300.2 \$ 67.9 63.9 \$ 382.4 364.1 \$ 899.3 872.1 \$ 537.5 517.8 \$	2022 2021 \$ in millions, except percentages \$ 484.3 \$ 473.4 \$ 10.9 32.6 34.6 (2.0) \$ \$ 314.5 300.2 14.3 67.9 63.9 4.0 \$ 382.4 364.1 18.3 899.3 872.1 27.2 \$ 537.5 \$17.8 19.7



The details of the changes in C&W Caribbean's revenue during 2022, as compared to 2021, are set forth below (in millions):

Increase (decrease) in residential fixed subscription revenue due to change in:	
Average number of RGUs (a)	\$ 16.9
ARPU (b)	(3.6)
Decrease in residential fixed non-subscription revenue	(1.7)
Total increase in residential fixed revenue	11.6
Increase in residential mobile service revenue (c)	16.2
Increase in residential mobile interconnect, inbound roaming, equipment sales and other (d)	4.0
Increase in B2B revenue (e)	23.3
Total organic increase	 55.1
Impact of FX	(8.2)
Total	\$ 46.9

(a) The increases are primarily attributable to higher average broadband internet RGUs.

(b) The decrease is primarily due to lower ARPU from broadband internet and video services, partially offset by higher ARPU from fixed-line telephony service.

- (c) The increase is attributable to the net effect of (i) higher average numbers of mobile subscribers, mostly due to growth from fixed-mobile convergence efforts and increases in sales initiatives, and (ii) declines in ARPU as a result of certain pricing strategies.
- (d) The increase is primarily attributable to higher inbound roaming traffic.
- (e) The increase is attributable to higher revenues from (i) fixed and managed services, primarily due to broadband internet services-related growth, (ii) mobile services, driven by higher average numbers of subscribers, and (iii) certain non-recurring B2B contracts.

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

	Year ended December 31,					Increase (decrease)			
		2022		2021		\$	%		
			in n	nillions, exc	ept pe	rcentages			
Residential revenue:									
Residential fixed revenue:									
Subscription revenue	\$	102.8	\$	87.9	\$	14.9	17.0		
Non-subscription revenue		7.3		9.5		(2.2)	(23.2)		
Total residential fixed revenue		110.1		97.4		12.7	13.0		
Residential mobile revenue:									
Service revenue		218.6		176.4		42.2	23.9		
Interconnect, inbound roaming, equipment sales and other		49.5		44.5		5.0	11.2		
Total residential mobile revenue		268.1		220.9		47.2	21.4		
Total residential revenue		378.2		318.3		59.9	18.8		
B2B service revenue		264.5		249.8		14.7	5.9		
Total	\$	642.7	\$	568.1	\$	74.6	13.1		

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The details of the changes in C&W Panama's revenue during 2022, as compared to 2021, are set forth below (in millions):

Increase (decrease) in residential fixed subscription revenue due to change in:	
Average number of RGUs (a)	\$ 13.5
ARPU (b)	(3.2)
Decrease in residential fixed non-subscription revenue	(2.5)
Total increase in residential fixed revenue	 7.8
Decrease in residential mobile service revenue (c)	(0.7)
Decrease in residential mobile interconnect, inbound roaming, equipment sales and other revenue (d)	(5.2)
Increase in B2B revenue (e)	 3.1
Total organic increase	 5.0
Impact of an acquisition	 69.6
Total	\$ 74.6

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

- (b) The decrease is primarily due to lower ARPU from (i) fixed-line telephony services, as customers shift to lower priced plans and (ii) video services, mainly due to customer discounts.
- (c) The decrease is primarily due to the net effect of (i) lower ARPU from prepaid mobile services, mainly attributable to lower recharging activity, and (ii) higher average numbers of postpaid mobile subscribers.
- (d) The decrease is primarily attributable to lower interconnect revenue due to lower call volume.
- (e) The increase is primarily due to increases in the volume of certain projects.

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

	Year ended December 31,				Increase		
	2022		2021		\$	%	
		in	millions, exc	ept per	centages		
B2B revenue:							
Service revenue	\$ 113.7	\$	109.0	\$	4.7	4.3	
Subsea network revenue	337.1		322.9		14.2	4.4	
Total	\$ 450.8	\$	431.9	\$	18.9	4.4	

The details of the changes in C&W Networks & LatAm's revenue during 2022, as compared to 2021, are set forth below (in millions):

Increase in B2B service revenue (a)	\$ 9.7
Increase in B2B subsea network revenue (b)	18.3
Total organic increase	 28.0
Impact of FX	(9.1)
Total	\$ 18.9

(a) The increase is primarily attributable to (i) higher B2B connectivity revenue and (ii) growth in managed services.

(b) The increase is primarily due to (i) an increase associated with revenue recognized on a cash basis for services provided to a significant customer, (ii) higher affiliate revenue, (iii) the net negative impact of (a) lower amortized prepaid capacity and operating and maintenance revenue driven by the cancellation of prepaid capacity contracts in prior periods, and (b) higher revenue associated with the recognition of deferred revenue and penalties upon the termination of prepaid capacity contracts, and (iv) a net increase in lease capacity revenue, resulting from customer growth, partially offset by service disconnections and lower revenue from existing customers due to price erosion.

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

	Year ended December 31,				Increase (decrease)		
	 2022 2021		\$		%		
		in millions, except percentages					
Residential fixed revenue:							
Subscription revenue	\$ 457.3	\$	438.2	\$	19.1	4.4	
Non-subscription revenue	 22.1		19.3		2.8	14.5	
Total residential fixed revenue	479.4		457.5		21.9	4.8	
Residential mobile revenue:							
Service revenue	448.0		480.8		(32.8)	(6.8)	
Interconnect, inbound roaming, equipment sales and other	268.4		253.5		14.9	5.9	
Total residential mobile revenue	716.4		734.3		(17.9)	(2.4)	
Total residential revenue	 1,195.8		1,191.8		4.0	0.3	
B2B revenue	 220.6		220.4		0.2	0.1	
Other revenue	53.7		37.5		16.2	43.2	
Total	\$ 1,470.1	\$	1,449.7	\$	20.4	1.4	

The details of the changes in Liberty Puerto Rico's revenue during 2022, as compared to 2021, are set forth below (in millions):

Increase (decrease) in residential fixed subscription revenue due to change in:

Average number of RGUs (a)	\$ 23.3
ARPU (b)	(13.9)
Increase in residential fixed non-subscription revenue	 0.6
Total increase in residential fixed revenue	10.0
Decrease in residential mobile service revenue (c)	(32.8)
Increase in residential mobile interconnect, inbound roaming, equipment sales and other (d)	14.9
Increase in B2B revenue (e)	0.2
Increase in other revenue	 3.6
Total organic decrease	 (4.1)
Impact of an acquisition (f)	 24.5
Total	\$ 20.4

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

- (b) The decrease is primarily attributable to lower ARPU from broadband internet and video services, which includes the impact of credits issued to customers during 2022 as a result of Hurricane Fiona.
- (c) The decrease is primarily due to (i) lower ARPU from mobile services, primarily resulting from higher contract asset amortization driven by increases in handset sales and subsidy levels, and (ii) a decline in the average number of prepaid mobile subscribers.

(d) The increase is primarily due to higher volumes of handset sales.

(e) The increase is primarily due to the net effect of (i) higher revenue associated with data services, and (ii) lower revenue from equipment sales.

(f) The impact of an acquisition includes FCC revenue related to the BBVI Acquisition.

Liberty Costa Rica. Liberty Costa Rica's revenue by major category is set forth below:

	Year ended December 31,				Increase (decrease)			
		2022	2021		\$		%	
		in millions, except percentages						
Residential revenue:								
Residential fixed revenue:								
Subscription revenue	\$	137.6	\$	138.5	\$	(0.9)	(0.6)	
Non-subscription revenue		5.1	_	6.2		(1.1)	(17.7)	
Total residential fixed revenue		142.7		144.7		(2.0)	(1.4)	
Residential mobile revenue:								
Service revenue		195.1		72.7		122.4	168.4	
Interconnect, inbound roaming, equipment sales and other		64.8		27.1		37.7	139.1	
Total residential mobile revenue		259.9		99.8		160.1	160.4	
Total residential revenue		402.6		244.5		158.1	64.7	
B2B service revenue		38.7		14.0		24.7	176.4	
Total	\$	441.3	\$	258.5	\$	182.8	70.7	

The details of the changes in Liberty Costa Rica's revenue during 2022, as compared to 2021, are set forth below (in millions):

Increase (decrease) in residential fixed subscription revenue due to change in:	
Average number of RGUs (a)	\$ 14.6
ARPU (b)	(10.4)
Decrease in residential fixed non-subscription revenue (c)	 (1.0)
Total increase in residential fixed revenue	 3.2
Increase in residential mobile service revenue (d)	11.2
Increase in residential mobile interconnect, inbound roaming, equipment sales and other	0.1
Increase in B2B revenue (e)	 3.0
Total organic increase	17.5
Impact of an acquisition	169.6
Impact of FX	(4.3)
Total	\$ 182.8

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

(b) The decrease is primarily due to (i) lower ARPU from video services and fixed-line telephony and (ii) the impact of product mix.

(c) The decrease is primarily due to a discontinued Costa Rica government-sponsored assistance program that provided computer equipment to low-income households offset by an increase in sales of inventory to employees and third-parties.

(d) The increase is primarily attributable to higher postpaid average mobile subscribers.

(e) The increase is primarily due to higher average broadband service revenue.

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

	Year ended l	Decembe	r 31,	Decrease			
	2022	2		\$	%		
		in m	illions, exc	ept p	ercentages		
Residential revenue:							
Residential fixed revenue:							
Subscription revenue	\$ 392.3	\$	685.1	\$	(292.8)	(42.7)	
Non-subscription revenue	 8.9		14.9		(6.0)	(40.3)	
Total residential fixed revenue	401.2		700.0		(298.8)	(42.7)	
Residential mobile revenue:							
Service revenue	25.8		48.0		(22.2)	(46.3)	
Interconnect, inbound roaming, equipment sales and other	 2.9		7.3		(4.4)	(60.3)	
Total residential mobile revenue	 28.7		55.3		(26.6)	(48.1)	
Total residential revenue	429.9		755.3		(325.4)	(43.1)	
B2B revenue	 20.7		32.2		(11.5)	(35.7)	
Total (a)	\$ 450.6	\$	787.5	\$	(336.9)	(42.8)	

(a) The amounts for the 2022 period reflect the revenue of VTR for the period from January 1, 2022 through the October closing of the Chile JV.

The details of the changes in VTR's revenue during 2022, as compared to 2021, are set forth below (in millions):

Decrease in residential fixed subscription revenue due to change in:	
Average number of RGUs (a)	\$ (22.2)
ARPU (b)	(55.5)
Decrease in residential fixed non-subscription revenue	(0.9)
Total decrease in residential fixed revenue	 (78.6)
Decrease in residential mobile service revenue (c)	(7.8)
Decrease in residential mobile interconnect, inbound roaming, equipment sales and other revenue	(2.5)
Decrease in B2B service revenue	 (0.8)
Total organic decrease	(89.7)
Impact of disposition	(174.8)
Impact of FX	 (72.4)
Total	\$ (336.9)

(a) The decrease is primarily attributable to lower average broadband internet and video RGUs.

- (b) The decrease is primarily due to lower ARPU from broadband internet services, mainly associated with (i) increased competition that generally resulted in (a) the churn of higher-ARPU customers and (b) the addition of lower-ARPU customers, and (ii) strategic initiatives implemented during 2022. Higher discounts and lower-ARPU customers related to video and telephony services also contributed to the decline in ARPU.
- (c) The decrease is primarily due to (i) lower ARPU from mobile services, mainly associated with strategic initiatives implemented during 2022, and (ii) lower average numbers of mobile subscribers.

Programming and other direct costs of services

Programming and other direct costs of services include programming and copyright costs, interconnect and access costs, equipment costs, which primarily relate to 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.

Consolidated. The following tables set forth the organic and non-organic changes in programming and other direct costs of services on a consolidated basis.

						Iı			
	 Year ended l	Dece		Increase			Acquisitions		<u> </u>
	 2022		2021	(decrease)	illion	FX	(disposition), net		Organic
Programming and copyright	\$ 360.3	\$	441.4	\$ (81.1)	\$	(20.2)	\$ (42.8)	\$	(18.1)
Interconnect	350.3		347.2	3.1		(5.7)	20.8		(12.0)
Equipment and other	 499.9		425.8	 74.1		(1.7)	29.3		46.5
Total programming and other direct costs of services	\$ 1,210.5	\$	1,214.4	\$ (3.9)	\$	(27.6)	\$ 7.3	\$	16.4

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

		Year ended December 31,				-	Increase (decrease) from:				
	2022			2021	Inci	rease (decrease)	FX	(Organic		
Programming and copyright	\$	85.9	\$	92.8	\$	(6.9)	\$ (0.6)	\$	(6.3)		
Interconnect		119.8		118.5		1.3	(1.6)		2.9		
Equipment and other		84.9		73.8		11.1	(0.4)		11.5		
Total programming and other direct costs of services	\$	290.6	\$	285.1	\$	5.5	\$ (2.6)	\$	8.1		

• **Programming and copyright:** The organic decrease is primarily due to the (i) the expiration of certain programming content during the first half of 2022, and (ii) the positive impact associated with the reassessment of a content-related accrual during 2022.

• Equipment and other: The organic increase is primarily due to (i) higher capacity fees incurred in connection with the purchase of wholesale services from C&W Networks & LatAm, (ii) higher costs associated with certain non-recurring B2B contracts and (iii) higher volumes of handset sales to B2B customers.

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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.

					 Increase (dec	creas	se) from:
	 Year ended	Decen	nber 31,				
	2022		2021	Increase	An acquisition		Organic
				in millions			
Programming and copyright	\$ 18.5	\$	14.9	\$ 3.6	\$ 1.0	\$	2.6
Interconnect	63.8		60.3	3.5	7.6		(4.1)
Equipment and other	125.1		111.6	13.5	9.2		4.3
Total programming and other direct costs of services	\$ 207.4	\$	186.8	\$ 20.6	\$ 17.8	\$	2.8

Programming and copyright: The organic increase is primarily due to RGU growth.

- Interconnect: The organic decrease is primarily due to lower call volumes.
- Equipment and other: The organic increase is primarily due to (i) higher volumes and unit costs of handset sales and (ii) higher costs associated with certain non-recurring B2B contracts.

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

	Year ended December 31,			ıber 31,				Increase (decrease) from:			
		2022		2021		Increase		FX		Organic	
						in millions					
Interconnect	\$	45.6	\$	45.4	\$	0.2	\$	(0.8)	\$	1.0	
Equipment and other		14.4		10.3		4.1		(1.0)		5.1	
Total programming and other direct costs of services	\$	60.0	\$	55.7	\$	4.3	\$	(1.8)	\$	6.1	

• Equipment and other: The organic increase is primarily due to lower amounts of capitalizable costs associated with licenses, as part of a migration into contracts with shorter terms and more cloud-based arrangements.

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.

						 Increase (decr	ease	from:
	 Year ended I	Decem	ıber 31,					
	2022		2021	Inc	rease (decrease)	An Acquisition		Organic
					in millions			
Programming and copyright	\$ 109.7	\$	109.0	\$	0.7	\$ —	\$	0.7
Interconnect	84.3		97.2		(12.9)	2.7		(15.6)
Equipment and other	248.4		213.2		35.2	0.7		34.5
Total programming and other direct costs of services	\$ 442.4	\$	419.4	\$	23.0	\$ 3.4	\$	19.6

• Interconnect: The organic decrease primarily relates to lower roaming expense due in part to (i) lower rates and (ii) the positive impact from the renegotiation of a certain roaming agreement during the fourth quarter of 2021.

• Equipment and other: The organic increase is primarily associated with (i) higher sales volume, (ii) an increase related to lower of cost or market adjustments on equipment-related inventory, and (iii) equipment-related integration costs.

Liberty Costa Rica. The following table sets forth the organic and non-organic changes in programming and other direct costs of services for our Liberty Costa Rica segment.

						Ir	ncrease (decrease) fi	om:	
	 Year ended	Decer	nber 31,	Increase					
	 2022		2021	(decrease)		FX	An acquisition		Organic
				in 1	nillions				
Programming and copyright	\$ 33.9	\$	35.9	\$ (2.0)	\$	(1.5)	\$	- \$	(0.5)
Interconnect	32.8		14.5	18.3		0.2	17.4		0.7
Equipment and other	39.9		17.4	22.5		0.3	21.5		0.7
Total programming and other direct costs of services	\$ 106.6	\$	67.8	\$ 38.8	\$	(1.0)	\$ 38.9	\$	0.9

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

	 Year ended l	Decer	mber 31,			In	crease (decrease) fro	om:	
	2022		2021	Decrease	_	FX	A disposition		Organic
				in n	nillions				
Programming and copyright	\$ 113.5	\$	188.8	\$ (75.3)	\$	(18.1)	\$ (43.8)	\$	(13.4)
Interconnect	21.9		28.7	(6.8)		(3.5)	(6.9)		3.6
Equipment and other	3.2		11.1	(7.9)		(0.6)	(2.1)		(5.2)
Total programming and other direct costs of services	\$ 138.6	\$	228.6	\$ (90.0)	\$	(22.2)	\$ (52.8)	\$	(15.0)

• Programming and copyright: The organic decrease is primarily due to the net effect of (i) lower average subscribers, (ii) lower content rates, (iii) the positive impacts associated with the renegotiation of certain content agreements, (iv) the positive impact associated with the reassessment of an accrual associated with video-on-demand content-related costs during 2022, and (v) an increase related to a settlement associated with a programming contract during 2022.

- Interconnect: The organic increase is primarily due to (i) higher rates and (ii) higher national leased capacity.
- Equipment and other: The organic decrease is due to lower volumes of equipment sales.

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, vehicle-related, travel and entertainment and other operating-related costs; and
- Share-based compensation expense that relates to (i) equity awards issued to our employees and Directors and (ii) certain bonus-related expenses that are 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 l	Decer	,	Increase				Acquisitions			
	 2022		2021		(decrease)		FX	(disposit	tion), net		Organic
					in mi	illions					
Personnel and contract labor	\$ 597.7	\$	575.1	\$	22.6	\$	(10.9)	\$	1.4	\$	32.1
Network-related	311.4		324.2		(12.8)		(11.4)		1.7		(3.1)
Service-related	209.7		196.5		13.2		(4.5)		4.1		13.6
Commercial	226.0		229.4		(3.4)		(8.9)		18.9		(13.4)
Facility, provision, franchise and other	542.3		460.1		82.2		(5.9)		47.1		41.0
Share-based compensation expense	93.5		118.1		(24.6)		(1.3)		(2.0)		(21.3)
Total other operating costs and expenses	\$ 1,980.6	\$	1,903.4	\$	77.2	\$	(42.9)	\$	71.2	\$	48.9

For additional information regarding our share-based compensation, see Results of Operations (below Adjusted OIBDA) discussion and analysis below.

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

	Year ended De			mber 31,				Increase (dec	ereas	e) from:
		2022		2021	Inc	crease (decrease)		FX		Organic
						in millions				
Personnel and contract labor	\$	204.6	\$	206.7	\$	(2.1)	\$	(0.9)	\$	(1.2)
Network-related		142.4		155.5		(13.1)		(1.0)		(12.1)
Service-related		72.7		66.5		6.2		(0.1)		6.3
Commercial		45.7		48.8		(3.1)		(0.5)		(2.6)
Facility, provision, franchise and other		145.6		144.4		1.2		(0.4)		1.6
Share-based compensation expense		20.1		28.2		(8.1)		(0.1)		(8.0)
Total other operating costs and expenses	\$	631.1	\$	650.1	\$	(19.0)	\$	(3.0)	\$	(16.0)

- Personnel and contract labor: The organic decrease is primarily due to the net effect of (i) a decrease resulting form lower bonus-related achievement levels and (ii) an increase as certain employee bonuses that were granted on a cash-basis in 2022 and recognized as personnel costs, as compared to grants of share-based awards for certain employee bonuses in 2021 that were recognized as share-based compensation.
- Network-related: The organic decrease is primarily due to the net effect of (i) lower network-related maintenance costs, mainly driven by the renegotiation and cancellation of certain vendor contracts as well as lower overall spending, (ii) lower capacity charges associated with the use of C&W Networks & LatAm's subsea network and (iii) higher utility costs.
- Service-related: The organic increase is primarily due to professional services and IT-related expense.
- Commercial: The organic decrease is primarily due to (i) lower call center volumes and (ii) lower marketing and sales costs.

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

					Increase (decrease) from:				
	 Year ended	Decem	ıber 31,						
	2022 2021				Increase		An Acquisition		Organic
					in millions				
Personnel and contract labor	\$ 77.6	\$	69.8	\$	7.8	\$	6.0	\$	1.8
Network-related	47.8		37.6		10.2		9.0		1.2
Service-related	15.1		14.8		0.3		1.4		(1.1)
Commercial	27.2		19.6		7.6		9.8		(2.2)
Facility, provision, franchise and other	78.8		39.4		39.4		24.0		15.4
Share-based compensation expense	4.3		4.0		0.3				0.3
Total other operating costs and expenses	\$ 250.8	\$	185.2	\$	65.6	\$	50.2	\$	15.4

• Facility, provision, franchise and other: The organic increase is primarily driven by higher bad debt expense, primarily driven by a factoring arrangement and an increase in underlying rates used to compute the expected credit loss.

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

	Year ended			nber 31,				Increase (deci	rease) from:	
	2022			2021		Increase (decrease)		FX	Organic	
						in millions				
Personnel and contract labor	\$	43.6	\$	44.3	\$	(0.7)	\$	(2.6)	\$	1.9
Network-related		43.3		45.8		(2.5)		(1.1)	(1	1.4)
Service-related		4.5		3.7		0.8		_	(0.8
Commercial		1.4		1.0		0.4		—	(0.4
Facility, provision, franchise and other		21.7		17.1		4.6		(1.5)	(6.1
Share-based compensation expense		3.4		4.6		(1.2)		—	(1	1.2)
Total other operating costs and expenses	\$	117.9	\$	116.5	\$	1.4	\$	(5.2)	\$	6.6

• Facility, provision, franchise and other: The organic increase is primarily due to higher bad debt provisions and travel-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.

		_					se) from:			
		Year ended December 31,								
		2022		2022 2021 Increas		crease (decrease)	Ar	n acquisition	Organic	
						in millions				
Personnel and contract labor	\$	162.2	\$	142.1	\$	20.1	\$	1.9	\$	18.2
Network-related		51.7		47.8		3.9		0.2		3.7
Service-related		45.0		41.6		3.4		1.4		2.0
Commercial		46.5		52.5		(6.0)				(6.0)
Facility, provision, franchise and other		183.9		165.4		18.5		2.5		16.0
Share-based compensation expense		7.3		6.4		0.9		—		0.9
Total other operating costs and expenses	\$	496.6	\$	455.8	\$	40.8	\$	6.0	\$	34.8

- Personnel and contract labor: The organic increase is primarily due to the net effect of (i) higher salaries and other personnel costs, including the impact of
 higher amortization of deferred commissions associated with certain accounting in connection with the AT&T Acquisition, (ii) an increase in charges
 allocated from our Corporate operations, and (iii) lower bonus-related expenses.
- Network-related: The organic increase is primarily due to the net effect of (i) incremental expenses incurred in operating the network as a result of the impacts from Hurricane Fiona, (ii) lower costs related to the termination of the transition services agreement entered into with AT&T associated with network maintenance and licenses, and (iii) an increase in network-related integration costs associated with the AT&T Acquisition.
- Service-related: The organic increase is primarily due to the net effect of (i) an increase in charges allocated from our Corporate operations and (ii) lower costs associated with the termination of the transition services agreement entered into with AT&T associated with commissions and software licenses. Service-related integration costs associated with the AT&T Acquisition are expected to continue to grow in future periods.
- **Commercial:** The organic decrease is primarily due to the net effect of (i) lower marketing costs, mainly driven by rebranding-related integration costs associated with the AT&T Acquisition incurred during 2021, (ii) higher amortization of deferred commissions associated with certain accounting in connection with the AT&T Acquisition, and (iii) lower call center costs driven by both volume and rates.
- Facility, provision, franchise and other: The organic increase was impacted by the net effect of (i) an increase in rent expense, driven by purchase accounting adjustments associated with the AT&T Acquisition that were recorded during 2021, (ii) an increase in bank-related fees associated with certain services being provided under a transaction service agreement, (iii) a decrease in bad debt expense resulting from lower expected credit loss rates established during 2022, (iv) higher facility-related costs, including security costs and maintenance costs resulting from the impacts of Hurricane Fiona, and (v) a decrease resulting from a payment made during the second quarter of 2021 to settle certain 2011 property tax claims.



Liberty Costa Rica. The following table sets forth the organic and non-organic changes in other operating costs and expenses for our Liberty Costa Rica segment.

					Increase (decrease) from:						
	Year ended l	Dece	mber 31,								
	 2022		2021	Increase		FX	A	n acquisition		Organic	
				in m	illions	6					
Personnel and contract labor	\$ 27.5	\$	19.9	\$ 7.6	\$	(0.6)	\$	7.8	\$	0.4	
Network-related	33.2		18.1	15.1		(0.4)		11.9		3.6	
Service-related	23.1		11.3	11.8		(0.4)		10.3		1.9	
Commercial	53.0		25.1	27.9		(0.2)		26.3		1.8	
Facility, provision, franchise and other	63.2		36.1	27.1		(0.1)		27.4		(0.2)	
Share-based compensation expense	2.2		1.1	1.1		—		0.8		0.3	
Total other operating costs and expenses	\$ 202.2	\$	111.6	\$ 90.6	\$	(1.7)	\$	84.5	\$	7.8	

- Network-related: The organic increase is primarily due to higher maintenance-related costs.
- Service-related: The organic increase is primarily due to higher information technology-related project costs.
- Commercial: The organic increase is primarily due to higher third-party sales commission costs.
- Facility, provision, franchise and other costs: The organic decrease is primarily due to the net effect of (i) higher bad debt provisions, (ii) lower rental expenses, (iii) lower telecommunications costs and (iv) higher collection-related fees.

Included in the increase from an acquisition in the table above are significant integration-related costs, associated with the Liberty Telecomunicaciones Acquisition.

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

	 Year ended l	Dece	ember 31,		Increase (decrease) from:				
	2022		2021	Decrease		FX	A	A disposition	Organic
				in m	illions	5			
Personnel and contract labor	\$ 41.8	\$	61.1	\$ (19.3)	\$	(6.8)	\$	(14.3) \$	1.8
Network-related	55.7		83.2	(27.5)		(9.1)		(19.4)	1.0
Service-related	24.0		37.0	(13.0)		(4.0)		(9.0)	
Commercial	52.2		82.4	(30.2)		(8.2)		(17.2)	(4.8)
Facility, provision, franchise and other	22.7		35.6	(12.9)		(3.7)		(6.8)	(2.4)
Share-based compensation expense	 7.6		10.9	 (3.3)		(1.2)		(2.8)	0.7
Total other operating costs and expenses	\$ 204.0	\$	310.2	\$ (106.2)	\$	(33.0)	\$	(69.5) \$	(3.7)

• Personnel and contract labor: The organic increase is primarily due to the net effect of (i) higher salaries and other personnel costs due to the effect of inflation and (ii) lower bonus-related expenses.

• Commercial: The organic decrease is due to the net effect of (i) lower sales commissions, (ii) lower call center activity and (iii) higher marketing and advertising costs, primarily related to a commitment to sponsor a music festival that was postponed during each of the past two years due to COVID-19.

• Facility, provision, franchise and other costs: The organic decrease is primarily due to the net effect of (i) lower operating lease rent expense as a result of ceasing the amortization of our right of use assets in connection with held



for sale accounting of the Chile JV Entities, as further described in note 8 to our consolidated financial statements, and (ii) higher bad debt provisions.

Corporate. The following table sets forth the organic and non-organic changes in other operating costs and expenses for our corporate operations.

	 Year ended E		
	2022	2021	Increase (decrease)
		in millions	
Personnel and contract labor	\$ 40.5	\$ 31.5	\$ 9.0
Network-related	0.7		0.7
Service-related	25.3	21.3	4.0
Facility, provision, franchise and other	27.6	22.1	5.5
Share-based compensation expense	48.6	62.9	(14.3)
Total other operating costs and expenses	\$ 142.7	\$ 137.8	\$ 4.9

• **Personnel and contract labor:** The organic increase is primarily attributable to (i) higher salaries and other personnel costs, mainly resulting from higher staffing levels in our operations center in Panama and (ii) the net impact of (a) an increase as certain employee bonuses that were granted on a cash-basis in 2022 and recognized as personnel costs, as compared to grants of share-based awards for certain employee bonuses in 2021 that were recognized as share-based compensation, and (b) a decrease resulting form lower bonus-related achievement levels.

- Service-related: The organic increase is primarily due to an increase in professional services related to centralization efforts.
- · Facility, provision, franchise and other: The organic increase is primarily due to an increase in travel-related costs.

Results of operations (below Adjusted OIBDA)-2022 compared to 2021

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

Share-based compensation expense decreased \$25 million during 2022, as compared to 2021, primarily due to (i) lower grant-date fair values driven by lower average share prices during 2022, and (ii) a change in the bonus structure, whereby certain employees whose bonuses were paid in the form of shares during 2021 were granted on a cash-basis during 2022.

For additional information regarding our share-based compensation, see note 15 to our consolidated financial statements.

Depreciation and amortization

Our depreciation and amortization expense decreased \$54 million or 6% during 2022, as compared to 2021, primarily due to the net effect of (i) declines of \$128 million at VTR, as we ceased recording depreciation expense during the third quarter of 2021 when we began accounting for the Chile JV Entities as held for sale, (ii) increases at Liberty Costa Rica and C&W Panama resulting from the Liberty Telecomunicaciones Acquisition and the Claro Panama Acquisition, respectively, and (iii) increases in property and equipment additions.

	Year ended December 31,					
	 2022	2021				
	 in mill	ions				
Impairment charges (a)	\$ 563.8	\$ 609.2				
Restructuring charges (b)	34.3	33.0				
Other operating items, net (c)	21.1	22.8				
Total	\$ 619.2	\$ 665.0				

(a) Amounts primarily consist of goodwill impairment charges associated with certain reporting units within the C&W Caribbean segment.

- (b) Amounts include employee severance and termination costs related to certain reorganization activities and contract termination and other related charges, primarily at (i) C&W Panama and C&W Caribbean during 2022 and (ii) VTR and C&W Caribbean during 2021.
- (c) The 2022 amount includes direct acquisition costs, primarily related to the Chile JV Transaction and the Claro Panama Acquisition. The 2021 amount includes direct acquisition costs, primarily related to the Liberty Telecomunicaciones Acquisition, and a gain on the disposition of certain B2B operations in our Liberty Puerto Rico segment that was completed in January 2021.

Interest expense

Our interest expense increased \$29 million during 2022, as compared to 2021. The increase is primarily attributable to the net effect of (i) the negative impact of FX, (ii) higher weighted-average interest rates and (iii) lower average outstanding debt balances, primarily as a result of the formation of the Chile JV in October 2022.

For additional information regarding our outstanding indebtedness, see note 9 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 gains or 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 gains on derivative instruments, net, are as follows:

	Year ended December 31,				
	 2022		2021		
	 in mi	llions			
Cross-currency and interest rate derivative contracts (a)	\$ 404.3	\$	565.4		
Foreign currency forward contracts	(13.5)		25.8		
Weather Derivatives (b)	 (31.4)		(27.1)		
Total	\$ 359.4	\$	564.1		

(a) The gains during 2022 and 2021 are primarily attributable to the net effect of (i) changes in FX rates, predominantly due to changes in the value of the Chilean peso, prior to the formation of the Chile JV, relative to the U.S. dollar, and (ii) changes in interest rates. These amounts include losses associated with changes in our credit risk valuation adjustments of \$4 million and \$41 million, respectively. Included in the 2021 credit risk valuation adjustment is a net loss of \$30 million related to the Chile JV Entities.



(b) Amounts represent the amortization of premiums associated with our Weather Derivatives.

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 or 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 losses, net, are as follows:

	 Year ended December 31,			
	2022		021	
	 in mil	llions		
U.S. dollar-denominated debt issued by a Chilean peso functional currency entity	\$ (181.1)	\$	(249.3)	
Intercompany payables and receivables denominated in a currency other than the entity's functional currency	(7.2)		(48.4)	
Other (a)	 (6.0)		(21.9)	
Total	\$ (194.3)	\$	(319.6)	

(a) Primarily includes (i) third-party receivables and payables denominated in a currency other than an entity's functional currency, (ii) U.S. dollar-denominated debt issued by a CRC functional currency entity and (iii) cash denominated in a currency other than an entity's functional currency.

Gains or losses on debt modification and extinguishment, net

Our gains or losses on debt modification and extinguishment generally include (i) premiums or discounts associated with redemptions and/or repurchases of debt, (ii) the write-off of unamortized deferred financing costs, premiums and/or discounts and/or (iii) breakage fees.

We recognized gains (losses) on debt extinguishment, net, of \$41 million and (\$57 million) during 2022 and 2021, respectively. The gains during 2022 are associated with the buyback of certain VTR debt at fair value prior to the formation of the Chile JV. The losses during 2021 are primarily associated with refinancing activity at C&W, Liberty Puerto Rico and VTR.

For additional information concerning our losses on debt modification and extinguishment, see note 9 to our consolidated financial statements.

Gain on Chile JV Transaction

In connection with the Chile JV Transaction, we recognized a pre-tax gain during 2022 of \$169 million. For additional information, see note 8 to our consolidated financial statements.

Other income or expense, net

We recognized other expense, net, of \$28 million and \$42 million during 2022 and 2021, respectively. The expense during each year primarily relates to impairment of a cost method investment.

Income tax benefit or expense

Liberty Latin America was formed as a corporation in Bermuda and, therefore, the "statutory" or "expected" tax rate for the 2022 and 2021 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 13 to our consolidated financial statements.

We recognized income tax expense of \$87 million and \$173 million during 2022 and 2021, respectively.

The income tax expense attributable to our loss before income taxes during 2022 differs from the amounts computed using the statutory tax rate, primarily due to the detrimental effects of (i) permanent tax differences, such as non deductible goodwill impairment and other non-deductible expenses, (ii) effect of rate changes (but which are nearly entirely offset by valuation allowance), (iii) changes in uncertain tax positions, (iv) inclusion of withholding taxes on cross-border payments, (v) expiration of deferred tax assets (which are entirely offset by valuation allowance), and (vi) tax effect of the enactment of a Barbados Pandemic Contribution Levy. These negative impacts to our effective tax rate were partially offset by the beneficial effects of (i) net decreases in valuation allowances, (ii) permanent tax differences, such as non-taxable income, (iii) jurisdictional rate differences, and (iv) effect of tax credits.

The income tax expense attributable to our earnings before income taxes during 2021 differs from the amounts computed using the statutory tax rate, primarily due to detrimental effects of (i) net increases in valuation allowances, (ii) permanent tax differences, such as non deductible goodwill impairment and other non-deductible expenses, (iii) expiration of deferred tax assets (which are entirely offset by valuation allowance), and (iv) inclusion of withholding taxes on cross-border payments. These negative impacts to our effective tax rate were partially offset by the beneficial effects of (i) jurisdictional rate differences, (ii) changes in enacted tax rates (but which are nearly entirely offset by valuation allowance), and (iii) permanent tax differences, such as non-taxable income.

Net earnings or loss

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

	 Year ended December 31,				
	2022		2021		
	in millions				
Operating income	\$ 94.1	\$	67.3		
Net non-operating expenses	\$ (209.5)	\$	(381.8)		
Income tax expense	\$ (86.5)	\$	(173.3)		
Net loss	\$ (201.9)	\$	(487.8)		

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.

Net earnings or loss attributable to noncontrolling interests

We reported net losses attributable to noncontrolling interests of \$26 million and \$50 million during 2022 and 2021, respectively.

Liquidity and Capital Resources

Sources and Uses of Cash

As of December 31, 2022, we have three primary "borrowing groups," which include the respective restricted parent and subsidiary entities of C&W, Liberty Puerto Rico and Liberty Costa Rica. Our borrowing groups, which typically generate cash from operating activities, held a significant portion of our consolidated cash and cash equivalents at December 31, 2022. 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. For details of the restrictions on our subsidiaries to make payments to us through dividends, loans or other distributions see note 9 to our consolidated financial statements.

Cash and cash equivalents

The details of the U.S. dollar equivalent balances of our cash and cash equivalents at December 31, 2022 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)	\$ 23.5
Unrestricted subsidiaries (b)	133.0
Total Liberty Latin America and unrestricted subsidiaries	 156.5
Borrowing groups (c):	
C&W (d)	536.2
Liberty Puerto Rico	72.3
Liberty Costa Rica	16.0
Total borrowing groups	624.5
Total cash and cash equivalents	\$ 781.0

(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.
- (d) Includes \$89 million and \$51 million of cash held by operations in C&W Panama and C&W Bahamas, respectively.

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 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.

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.

During 2022, the aggregate value of our share repurchases was \$169 million. For additional information regarding our Share Repurchase Programs, see note 17 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, 2022, see note 9 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 capital expenditures, 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 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. *Quantitative and Qualitative 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, where applicable, 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 and/or maintenance-based leverage covenants contained in the various debt instruments of our borrowing groups. For example, if the Covenant EBITDA of one of our borrowing groups were to decline, our ability to support or obtain additional debt in that borrowing group 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, 2022, 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, 2022, the outstanding principal amount of our debt, together with our finance lease obligations aggregated \$7,975 million, including \$227 million that is classified as current in our consolidated balance sheet and \$6,868 million that is not due until 2027 or thereafter. At December 31, 2022, \$7,571 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, 2022 is \$223 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 9 to our consolidated financial statements.

The weighted average interest rate in effect at December 31, 2022 for all borrowings outstanding pursuant to each debt instrument, including any applicable margin, was 6.4%. 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, 2022 was as follows:

Borrowing group	Decrease to borrowing costs
C&W	(1.30)%
Liberty Puerto Rico	(0.49)%
Liberty Costa Rica	(1.57)%
Liberty Latin America borrowing groups	(0.98)%

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 5.7% at December 31, 2022.

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—2022 compared to 2021

Summary. Our 2022 and 2021 consolidated statements of cash flows are summarized as follows:

	Year ended December 31,				
		2022		2021	Change
Net cash provided by operating activities	\$	868.8	\$	1,016.2	\$ (147.4)
Net cash used by investing activities		(1,122.6)		(1,268.6)	146.0
Net cash provided (used) by financing activities		(29.2)		426.6	(455.8)
Effect of exchange rate changes on cash, cash equivalents and restricted cash		(2.3)		(12.5)	 10.2
Net increase (decrease) in cash, cash equivalents and restricted cash	\$	(285.3)	\$	161.7	\$ (447.0)

Operating Activities. The decrease in cash provided by operating activities is primarily due to (i) a decrease resulting from an increase in cash paid for taxes and interest, (ii) an increase related to lower derivative-related payments, and (iii) a decrease associated with a decline in Adjusted OIBDA and related working capital change.

Investing Activities. Our cash used during 2022 primarily includes the net effect of (i) capital expenditures, net, as further discussed below, (ii) the Claro Panama Acquisition and BBVI Acquisition and (iii) cash outflow upon the disposition the Chile JV Entities. Our cash used during 2021 primarily includes (i) capital expenditures, as further discussed below, and (ii) the Liberty Telecomunicaciones Acquisition.

The capital expenditures, net, that we report in our consolidated statements of cash flows, which relates to cash paid for property and equipment, 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, net, as reported in our consolidated statements of cash flows, and (ii) our total property and equipment additions, which include our capital expenditures, net, 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, net, as reported in our consolidated statements of cash flows, is set forth below:

	Year ended D	er 31,	
	 2022		2021
	in mil	llions	
Property and equipment additions	\$ 816.3	\$	855.9
Assets acquired under capital-related vendor financing arrangements	(161.1)		(100.5)
Changes in current liabilities related to capital expenditures and other	 4.9		(19.1)
Capital expenditures, net	\$ 660.1	\$	736.3

The decrease in our property and equipment additions during the year ended December 31, 2022, as compared to 2021, is primarily due to decreases in CPErelated additions and product and enabler additions which were partially offset by baseline additions. During the year ended December 31, 2022 and 2021, our property and equipment additions represented 17.0% and 17.8% of revenue, respectively.

We expect the percentage of revenue represented by our aggregate 2023 property and equipment additions to be approximately 16%. The actual amount of the 2023 consolidated property and equipment additions may vary from expected amounts for a variety of reasons, including (i) changes in (a) the competitive or regulatory environment, (b) business plans, (c) our expected future operating results and (d) foreign currency exchange rates and, (ii) 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 the year ended December 31, 2022, we used \$29 million of cash from financing activities, primarily due to \$170 million associated with the repurchase of Liberty Latin America common shares, partially offset by (i) \$98 million of net cash received related to derivative instruments and (ii) \$61 million of net borrowings of debt, which include the impact of \$48 million of cash used to extinguish debt at VTR. During 2021, we generated \$427 million of cash from financing activities, primarily due to the net effect of (i) \$617 million of net borrowings of debt, (ii) \$75 million related to payments of financing costs and debt redemption premiums, (iii) \$63 million associated with the repurchase of Liberty Latin America common shares, (iv) \$48 million in payments related to distributions to noncontrolling interest owners, primarily in C&W Bahamas and C&W Panama, (v) \$47 million related to the contribution from a noncontrolling interest owner, as further described in note 17 of the consolidated financial statements, and (vi) \$43 million related to derivative payments.

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 debt and certain other contractual obligations and commitments as of December 31, 2022.

			Payr	nents due by perio	d		
	 Total	Less than 1 year		1-3 years		3-5 years	More than 5 years
				in millions			
Debt (excluding interest) (a)	\$ 7,966.1	\$ 226.0	\$	876.1	\$	2,877.1	\$ 3,986.9
Operating leases	702.6	104.5		183.7		146.5	267.9
Other (b)	60.2	45.8		7.8		2.8	3.8
Total (c)	\$ 8,728.9	\$ 376.3	\$	1,067.6	\$	3,026.4	\$ 4,258.6
Projected cash interest payments on debt and finance lease obligations (d)	\$ 2,590.0	\$ 510.7	\$	939.0	\$	918.3	\$ 222.0

(a) Subsequent to December 31, 2022, we refinanced certain debt of our Liberty Costa Rica borrowing group. For additional information, see note 9 to our consolidated financial statements.

- (b) Amounts primarily represent (i) guaranteed minimum commitments associated with (a) programming fees under multi-year contracts typically based on a rate per customer or stated annual fee and (b) our customer premise equipment and mobile handset device contractual obligations, and (ii) finance leases, excluding interest.
- (c) The commitments included in this table do not reflect any liabilities that are included in our December 31, 2022 consolidated balance sheet other than debt, finance lease obligations and operating lease obligations. Our liability for uncertain tax positions, including accrued interest, in the various jurisdictions in which we operate (\$51 million at December 31, 2022) 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 13 to our consolidated financial statements.
- (d) Amounts are based on interest rates, interest payment dates, commitment fees and contractual maturities in effect as of December 31, 2022. 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 9, 10 and 19, 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 2022, 2021 and 2020, see note 5 to our consolidated financial statements. For information regarding our defined benefit plans, see note 14 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); and
- Fair value measurements in acquisition 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 74% of our total assets at December 31, 2022.

When circumstances warrant, we review the carrying amounts of our property and equipment and our intangible assets (other than goodwill and other indefinitelived 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 July 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 an income-based approach (discounted cash flows) based on assumptions in our long-range business plans. 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.

During 2022 and 2021, we recorded \$555 million and \$605 million, respectively, of goodwill impairments related to C&W Caribbean. During 2020, we recorded goodwill impairments of \$174 million and \$99 million related to C&W Panama and C&W Caribbean, respectively. A hypothetical increase/(decrease) of 0.1% in the discount rate used in the goodwill impairment assessment that resulted in our 2022 goodwill impairment charges would have resulted in an increase/(decrease) of



approximately \$15 million in aggregate to the goodwill impairment. For additional information regarding certain impairments recorded during 2022, 2021 and 2020, see notes 6 and 7 to our consolidated financial statements.

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 7, respectively, 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.

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 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, 2022. 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 2022 was to the CLP as 12% of our reported revenue for the period prior to the formation of the Chile JV in October 2022 was derived from VTR, whose functional currency was the CLP. 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 the (i) CLP, JMD and CRC and (ii) the U.S. dollar, which is our reporting currency, is shown below, per one U.S. dollar:

	As of Decen	nber 31,
	2022	2021
Spot rates:		
CLP	N/A	852.00
CRC	591.80	642.21
JMD	151.92	153.96

	Year	Year ended December 31,							
	2022	2022 2021							
Average rates:									
CLP (a)	859.78	759.90	791.70						
CRC	647.44	622.03	585.79						
JMD	153.42	150.60	142.08						

(a) The CLP rate of 859.78 for 2022 represents the average rate for the period prior to the formation of the Chile JV.

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, Liberty Puerto Rico and Liberty Costa Rica. In July 2017, the U.K. Financial Conduct Authority (the authority that regulates LIBOR) announced that its intent 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 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.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 event 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, 2022, we paid a fixed or capped rate of interest on 95% of our total debt, which includes the impact of our interest rate derivative contracts. The final maturity dates of our various portfolios of interest rate derivative instruments generally match 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, 2022, the outstanding principal amount of our variable-rate indebtedness aggregated \$3,362 million, and the weighted average interest rate (including margin) on such variable-rate indebtedness was approximately 7.4%, 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 \$17 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, 2022, our exposure to counterparty credit risk included (i) cash and cash equivalent balances of \$781 million and (ii) aggregate undrawn credit facilities of \$899 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.

C&W Interest Rate Derivative Contracts

Holding all other factors constant, at December 31, 2022, 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 interest rate derivative contracts by approximately \$94 million (\$95 million).

Liberty Puerto Rico Interest Rate Derivative Contracts

Holding all other factors constant, at December 31, 2022, 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 \$28 million (\$26 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, 2022. 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.

		2023	2024	2025			2026	2027	Thereafter	Total
							in millions			
Projected derivative cash payments (receipts), net:										
Interest-related (a)	\$	(36.8)	\$ (64.3)	\$	(62.6)	\$	(62.6)	\$ (62.6)	\$ (53.4)	\$ (342.3)
Other (b)		12.2	_		_		_	_	_	12.2
Total	\$	(24.6)	\$ (64.3)	\$	(62.6)	\$	(62.6)	\$ (62.6)	\$ (53.4)	\$ (330.1)

(a) Includes the interest-related cash flows of our interest rate derivative contracts.

(b) 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 <u>II-39</u>. 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 design and effectiveness of our disclosure controls and procedures as of December 31, 2022. Based on that evaluation, the Executives concluded that our disclosure controls and procedures are not effective as of December 31, 2022 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 Rules 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, 2022, 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 Claro Panama Acquisition, which was acquired in 2022. The amount of total assets and revenue included in our consolidated financial statements as of and for the year ended December 31, 2022 that is attributable to the Claro Panama Acquisition was \$374 million and \$70 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, 2022:

- The Company did not have a sufficient number of resources with the appropriate skills and knowledge to adequately support the organization in the operation of internal controls over financial reporting.
- 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) have an effective IT risk assessment process that successfully identified and assessed risks associated with IT systems relevant to our financial reporting to ensure controls were designed and implemented to respond to those risks, ii) establish effective general information technology controls (GITCs), specifically program change controls and access controls, that support the consistent operation of the Company's IT operating systems, databases and IT applications, and end user computing over all financial reporting; and, iii) 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, 2022. 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, 2022.

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 <u>II-</u>39.

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 with appropriate skills and experience.
- 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.
- Complete our IT risk assessment process and design and implement GITCs, including program change controls and access controls, that support the consistent operation of the Company's IT operating systems, databases and IT applications, and end user computing over financial reporting, 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 2023; 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 2022 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

During the quarter, we made the following changes in our internal control over financial reporting:

- additional manual procedures and controls were designed and implemented to enhance our internal control process through a combination of preventative and detective controls,
- · key information technology resources were hired to design, implement, and monitor the execution of general IT controls,
- the central enterprise resource planning software was implemented for another one of our segments to standardize and enhance the related processes and controls,
- · the system development lifecycle process was executed for the central enterprise resource planning software implementation,
- · general IT controls for the implemented central enterprise resource planning software were executed; and,
- · trainings were held to reinforce control concepts and responsibilities for control performers.

Item 9B. OTHER INFORMATION

Not applicable.

Item 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

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, 2022, 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, 2022, 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, 2022 and 2021, the related consolidated statements of operations, comprehensive loss, equity, and cash flows for each of the years in the three-year period ended, and the related notes (collectively, the consolidated financial statements), and our report dated February 22, 2023 expressed an unqualified opinion on those consolidated financial statements.

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 material weaknesses described below have been identified and included in management's assessment.

- The Company did not have a sufficient number of resources with the appropriate skills and knowledge to adequately support the organization in the operation of internal controls over financial reporting.
- 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) have an effective IT risk assessment process that successfully identified and assessed risks associated with IT systems relevant to financial reporting to ensure controls were designed and implemented to respond to those risks, ii) establish effective general information technology controls (GITCs), specifically program change controls and access controls, that support the consistent operation of the Company's IT operating systems, databases and IT applications, and end user computing over all financial reporting, iii) 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.

The material weaknesses were considered in determining the nature, timing, and extent of audit tests applied in our audit of the 2022 consolidated financial statements, and this report does not affect our report on those consolidated financial statements.

The Company acquired Claro Panama, S.A. during 2022, and management excluded from its assessment of the effectiveness of the Company's internal control over financial reporting as of December 31, 2022, Claro Panama, S.A.'s internal control over financial reporting associated with total assets of \$374M and total revenues of \$70M included in the consolidated financial statements of the Company as of and for the year ended December 31, 2022. Our audit of internal control over financial reporting of the Company also excluded an evaluation of the internal control over financial reporting of Claro Panama, S.A.

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. 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 February 22, 2023

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, 2022 and 2021, 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, 2022, and the related notes (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, 2022 and 2021, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2022, 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, 2022, 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 February 22, 2023 expressed an adverse opinion on the effectiveness of the Company's internal control over financial reporting.

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.

Assessment of impairment of goodwill for certain reporting units

As discussed in Notes 6 and 7 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. The fair value of each reporting unit was measured using an income approach, utilizing a discounted cash flow. As of December 31, 2022, the goodwill balance was \$3,438 million and the Company recorded impairments totaling \$555 million.

We identified the assessment of impairment of goodwill for 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. Additionally, the audit effort associated with this estimate required specialized skills and knowledge.

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 Company's assessment of impairment of goodwill. These include controls over the:

- · development of assumptions over projected revenues, projected direct costs, projected operating expenses, projected capital expenditures, and
- selection of the discount rates and terminal growth rates assumptions used to develop the estimate.

We performed procedures to test the projected revenues, projected direct costs, projected operating expenses, and projected 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. 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.

/s/ KPMG LLP

We have served as the Company's auditor since 2016.

Denver, Colorado February 22, 2023

CONSOLIDATED BALANCE SHEETS

	Dece	nber 31,
	2022	2021
	in n	nillions
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 781.0	\$ 956.7
Trade receivables, net	603.3	526.6
Prepaid expenses	65.1	67.7
Current notes receivable, net	92.0	100.2
Current contract assets	107.3	78.2
Other current assets, net	430.2	322.5
Total current assets	2,078.9	2,051.9
Goodwill	3,421.3	3,948.0
Property and equipment, net	4,293.6	4,168.4
Intangible assets not subject to amortization	1,592.8	1,592.4
Intangible assets subject to amortization, net	688.1	788.6
Assets held for sale		1,568.7
Other assets, net	1,500.5	1,247.7
Total assets	\$ 13,575.2	\$ 15,365.7

The accompanying notes are an integral part of these consolidated financial statements.

CONSOLIDATED BALANCE SHEETS – (Continued)

		Decem	ber 31	,
		2022		2021
		in m	illions	
LIABILITIES AND EQUITY				
Current liabilities:				
Accounts payable	\$	525.1	\$	398.0
Current portion of deferred revenue		151.7		148.0
Current portion of debt and finance lease obligations		226.9		106.3
Accrued interest		118.2		113.0
Accrued payroll and employee benefits		82.1		100.5
Current operating lease liabilities		76.7		82.0
Other accrued and current liabilities		581.2		566.7
Total current liabilities		1,761.9		1,514.5
Long-term debt and finance lease obligations		7,653.8		7,459.6
Deferred tax liabilities		691.2		692.0
Deferred revenue		109.3		152.6
Liabilities associated with assets held for sale				1,854.1
Other long-term liabilities		792.9		795.5
Total liabilities		11,009.1		12,468.3
Equity: Liberty Latin America shareholders:				
Class A, \$0.01 par value; 500.0 million shares authorized; 51.8 million and 42.7 million shares issued and outstanding, respectively, at December 31, 2022; 50.1 million and 45.5 million shares issued and outstanding, respectively, at December 31, 2021		0.5		0.5
Class B, \$0.01 par value; 50.0 million shares authorized; 2.1 million shares issued and outstanding at December 31, 2022 and 1.9 million shares issued and outstanding at December 31, 2021		_		_
Class C, \$0.01 par value; 500.0 million shares authorized; 187.4 million and 171.3 million shares issued and outstanding, respectively, at December 31, 2022; 183.6 million and 182.3 million shares issued and outstanding, respectively, at December 31, 2021		1.9		1.8
Undesignated preference shares, \$0.01 par value; 50.0 million shares authorized; nil shares issued and outstanding at each period		_		_
Treasury shares, at cost; 25.3 million and 6.0 million shares, respectively		(243.4)		(74.0)
Additional paid-in capital		5,177.1		5,075.3
Accumulated deficit		(2,869.5)		(2,693.9)
Accumulated other comprehensive loss, net of taxes		(149.2)		(89.7)
Total Liberty Latin America shareholders		1,917.4		2,220.0
Noncontrolling interests		648.7		677.4
Total equity		2,566.1		2,897.4
Total liabilities and equity	\$	13,575.2	\$	15,365.7
	_			

The accompanying notes are an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENTS OF OPERATIONS

	Year ended December 31,										
		2022		2021		2020					
		in millio	ons, exce	pt per share	amour	its					
Revenue	\$	4,815.1	\$	4,814.8	\$	3,782.4					
Operating costs and expenses (exclusive of depreciation and amortization, shown separately below):											
Programming and other direct costs of services		1,210.5		1,214.4		860.4					
Other operating costs and expenses		1,980.6		1,903.4		1,541.3					
Depreciation and amortization		910.7		964.7		918.7					
Impairment, restructuring and other operating items, net		619.2		665.0		375.3					
		4,721.0	-	4,747.5		3,695.7					
Operating income		94.1		67.3		86.7					
Non-operating expense:											
Interest expense		(556.7)		(527.4)		(533.4)					
Realized and unrealized gains (losses) on derivative instruments, net		359.4		564.1		(352.7)					
Foreign currency transaction gains (losses), net		(194.3)		(319.6)		1.2					
Gains (losses) on debt modification and extinguishment, net		41.1		(57.2)		(45.1)					
Gain on disposal of the Chile JV Entities		169.4		_		_					
Other income (expense), net		(28.4)		(41.7)		5.1					
		(209.5)		(381.8)		(924.9)					
Loss before income taxes		(115.4)		(314.5)		(838.2)					
Income tax benefit (expense)		(86.5)		(173.3)		29.2					
Net loss		(201.9)		(487.8)		(809.0)					
Net loss attributable to noncontrolling interests		26.3		50.0		121.7					
Net loss attributable to Liberty Latin America shareholders	\$	(175.6)	\$	(437.8)	\$	(687.3)					
Basic and dilutive net loss per share attributable to Liberty Latin America shareholders	\$	(0.79)	\$	(1.88)	\$	(3.51)					
Easte and enable net loss per share autoutione to Enority Eastin America shareholders	-	()	-	(1.20)	-	(1.01)					

The accompanying notes are an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS

	Ye	ar ended December	31,
	2022	2021	2020
		in millions	
Net loss	\$ (201.9)	\$ (487.8)	\$ (809.0)
Other comprehensive earnings (loss), net of taxes:			
Foreign currency translation adjustments	53.1	4.8	(119.0)
Reclassification adjustments included in net loss	(22.9)	(3.2)	0.6
Other, net	(90.2)	33.4	6.8
Other comprehensive earnings (loss)	 (60.0)	35.0	(111.6)
Comprehensive loss	 (261.9)	(452.8)	(920.6)
Comprehensive loss attributable to noncontrolling interests	26.8	50.9	122.5
Comprehensive loss attributable to Liberty Latin America shareholders	\$ (235.1)	\$ (401.9)	\$ (798.1)

The accompanying notes are an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENTS OF EQUITY

								Liberty	Lat	tin Americ	ea sh	areholders								
		Co	Common shares										Accumulated other omprehensive loss,	Total Liberty Latin America			Non- ntrolling	Total		
	Cl	ass A	Cl	ass B	Cl	ass C	Stock		capital		deficit			net of taxes	sh	areholders	interests		equity	
												in millions								
Balance at January 1, 2020	\$	0.5	\$		\$	1.3	\$		\$	4,569.9	\$	(1,568.6)	\$	(14.8)	\$	2,988.3	\$	870.1	\$ 3,858.4	
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		(1,568.8)		(14.8)		2,988.1		870.3	3,858.4	
Net loss				_		_				_		(687.3)		_		(687.3)		(121.7)	(809.0)	
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)	
Shared-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	\$	(2,256.1)	\$	(125.6)	\$	2,593.1	\$	729.0	\$ 3,322.1	

The accompanying notes are an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENTS OF EQUITY – (Continued)

								Liberty	La	tin Ameri	ca sh	areholders							
	Common shares Class A Class B Class C				Treasury paid-in A							cumulated deficit	Accumulated other omprehensive loss, net of taxes	Total Liberty			Non- itrolling	Total equity	
		40011	0.	400 10				Stock		cupitui		in millions		liet of tales					equity
Balance at January 1, 2021	\$	0.5	\$		\$	1.8	\$	(9.5)	\$	4,982.0	\$	(2,256.1)	\$	(125.6)	\$	2,593.1	\$	729.0	\$ 3,322.1
Net loss		—		_								(437.8)		_		(437.8)		(50.0)	(487.8)
Other comprehensive earnings												_		35.9		35.9		(0.9)	35.0
Repurchase of Liberty Latin America common shares		_		_		_		(64.5)		_		_		_		(64.5)		_	(64.5)
Distributions to noncontrolling interest owners		_		_		_		_		_		_		_		_		(47.6)	(47.6)
Contributions to noncontrolling interest owners		_		_				_		_		_		_		_		46.9	46.9
Share-based compensation		—		_		—				93.3						93.3			93.3
Balance at December 31, 2021	\$	0.5	\$	_	\$	1.8	\$	(74.0)	\$	5,075.3	\$	(2,693.9)	\$	(89.7)	\$	2,220.0	\$	677.4	\$ 2,897.4

The accompanying notes are an integral part of these consolidated financial statements.

LIBERTY LATIN AMERICA LTD.

CONSOLIDATED STATEMENTS OF EQUITY – (Continued)

							Liberty	La	tin Americ	ca sl	nareholders							
				on sha		C	easury		dditional paid-in	A	ccumulated	c	Accumulated other omprehensive loss,		tal Liberty Latin America		Non- ntrolling	Total
	C	ass A	C	ass B	Ci	ass C	Stock		capital		deficit in millions		net of taxes	sn	areholders	11	iterests	equity
Balance at January 1, 2022	\$	0.5	\$	—	\$	1.8	\$ (74.0)	\$	5,075.3	\$	(2,693.9)	\$	(89.7)	\$	2,220.0	\$	677.4	\$ 2,897.4
Net loss		—		—		—	—		—		(175.6)				(175.6)		(26.3)	(201.9)
Other comprehensive earnings				—		—					—		(59.5)		(59.5)		(0.5)	(60.0)
Repurchase of Liberty Latin America common shares		_		_		_	(169.4)		_		_		_		(169.4)		_	(169.4)
Distributions to noncontrolling interest owners		_		_		_	_		_		_		_		_		(1.9)	(1.9)
Share-based compensation		—		—		0.1			101.8		—				101.9		—	101.9
Balance at December 31, 2022	\$	0.5	\$	_	\$	1.9	\$ (243.4)	\$	5,177.1	\$	(2,869.5)	\$	(149.2)	\$	1,917.4	\$	648.7	\$ 2,566.1

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,				
		2022	2021	2020	
			in millions		
Cash flows from operating activities:					
Net loss	\$	(201.9)	\$ (487.8)	\$ (809.0)	
Adjustments to reconcile net loss to net cash provided by operating activities:					
Share-based compensation expense		93.5	118.1	97.5	
Depreciation and amortization		910.7	964.7	918.7	
Impairments and other non-cash charges		593.1	645.1	283.8	
Amortization of debt financing costs, premiums and discounts, net		36.6	33.5	30.4	
Realized and unrealized losses (gains) on derivative instruments, net		(359.4)	(564.1)	352.7	
Foreign currency transaction losses (gains), net		194.3	319.6	(1.2)	
Losses (gains) on debt modification and extinguishment, net		(41.1)	57.2	45.1	
Gain on disposal of the Chile JV Entities		(169.4)	_		
Deferred income tax expense (benefit)		(6.7)	87.8	(65.1)	
Changes in operating assets and liabilities, net of the effect of acquisitions and dispositions:					
Receivables and other operating assets		(85.0)	(48.5)	(127.6)	
Payables and accruals		(95.9)	(109.4)	(85.2)	
Net cash provided by operating activities		868.8	1,016.2	640.1	
Cash flows from investing activities:					
Capital expenditures, net		(660.1)	(736.3)	(565.8)	
Cash paid in connection with acquisitions, net of cash acquired		(230.8)	(520.6)	(1,886.1)	
Cash outflow upon disposal of the Chile JV Entities		(188.8)	_	_	
Other investing activities, net		(42.9)	(11.7)	1.1	
Net cash used by investing activities	\$	(1,122.6)	\$ (1,268.6)	\$ (2,450.8)	

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,				
	2022	2021		2020	
		in millions			
Cash flows from financing activities:					
Borrowings of debt	\$ 337.6	\$ 1,249.4	\$	1,319.0	
Payments of principal amounts of debt and finance lease obligations	(276.7)	(632.5)		(1,439.4)	
Repurchase of Liberty Latin America common shares	(170.4)	(63.0)		(9.5)	
Net cash received (paid) related to derivative instruments	97.6	(43.0)		182.5	
Distributions to noncontrolling interest owners	(1.9)	(47.6)		(18.8)	
Payment of financing costs and debt redemption premiums	(7.8)	(74.8)		(99.0)	
Issuance of Liberty Latin America common shares, net	_	_		347.0	
Capital contribution from noncontrolling interest owner	_	46.9		—	
Other financing activities, net	 (7.6)	(8.8)		(10.7)	
Net cash provided (used) by financing activities	 (29.2)	426.6		271.1	
Effect of exchange rate changes on cash, cash equivalents and restricted cash	 (2.3)	(12.5)		(4.9)	
Net increase (decrease) in cash, cash equivalents and restricted cash	(285.3)	161.7		(1,544.5)	
Cash, cash equivalents and restricted cash:					
Beginning of year	1,074.2	912.5		2,457.0	
End of year	\$ 788.9	\$ 1,074.2	\$	912.5	
Cash paid for interest	\$ 506.4	\$ 463.3	\$	484.3	
Net cash paid for taxes	\$ 115.6	\$ 44.3	\$	81.6	

The accompanying notes are an integral part of these consolidated financial statements.

(1) **Basis of Presentation**

See the Glossary of defined terms at the beginning of this Annual Report on Form 10-K for terms used throughout the consolidated financial statements.

General

Liberty Latin America Ltd. is a registered company in Bermuda that primarily includes: (i) C&W; (ii) Liberty Communications PR; (iii) LBT CT Communications, S.A. (a less than wholly-owned entity) and its subsidiaries, which include Liberty Servicios and, as of August 9, 2021 and as further described in note 4, Liberty Telecomunicaciones; and (iv) prior to the closing of the formation of the Chile JV, VTR. C&W owns less than 100% of certain of its consolidated subsidiaries, including C&W Bahamas, C&W Jamaica and CWP.

We are an international provider of fixed, mobile and subsea telecommunications services. We provide:

- A. 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 C&W Panama;
 - ii. Puerto Rico, through our reportable segment Liberty Puerto Rico;
 - iii. Costa Rica, through our reportable segment Liberty Costa Rica; and
 - iv. Chile, through our reportable segment VTR through September 30, 2022; and
- B. through our reportable segment C&W Networks & LatAm, (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 approximately 40 markets in that region.

The accompanying consolidated financial statements have been prepared in accordance with U.S. GAAP.

Effective September 29, 2021, in connection with the pending formation of the Chile JV, as further described in note 8, we began accounting for the Chile JV Entities as "held for sale." Accordingly, the assets and liabilities of the Chile JV Entities, excluding certain cash balances, are included in assets held for sale and liabilities associated with assets held for sale, respectively, on our December 31, 2021 consolidated balance sheet. Consistent with the applicable guidance, we have not reflected similar reclassifications to exclude the Chile JV Entities from continuing operations in our consolidated statements of operations or cash flows and related footnote disclosures during the period of time they were accounted for as held for sale. In October 2022, we contributed the Chile JV Entities to the Chile JV and began accounting for our 50% interest in the Chile JV as an equity method investment. For additional information, see notes — and 8.

Correction of Immaterial Errors

During the third quarter of 2022, we identified certain errors in our previously reported consolidated financial statements, primarily related to revenue, programming and other direct costs of services, trade receivables, note receivables, and other assets. We have completed a quantitative and qualitative evaluation of the errors and concluded that they are immaterial to the previously issued consolidated financial statements. Notwithstanding this evaluation, we have revised (i) our December 31, 2021 consolidated balance sheet, and (ii) our consolidated statements of operations, comprehensive loss, equity and cash flows for the years ended December 31, 2021 and 2020 for these errors.

The tables below set forth the adjustments to the primary consolidated financial statement line items resulting from these adjustments:

	 Year e	ndeo	d December 31, 2	2021	1	Year ended December 31, 2020						
	s Previously Reported		Adjustments		As Adjusted		As Previously Reported		Adjustments		As Adjusted	
					in m	illioı	15					
Revenue	\$ 4,799.0	\$	15.8	\$	4,814.8	\$	3,764.6	\$	17.8	\$	3,782.4	
Operating income	\$ 81.2	\$	(13.9)	\$	67.3	\$	93.2	\$	(6.5)	\$	86.7	
Loss before income taxes	\$ (300.6)	\$	(13.9)	\$	(314.5)	\$	(831.7)	\$	(6.5)	\$	(838.2)	
Net loss	\$ (490.1)	\$	2.3	\$	(487.8)	\$	(803.9)	\$	(5.1)	\$	(809.0	
Net loss attributable to LLA shareholders	\$ (440.1)	\$	2.3	\$	(437.8)	\$	(682.2)	\$	(5.1)	\$	(687.3)	

		D	ecember 31, 2021	
	As Previously Reported		Adjustments	As Adjusted
			in millions	
Current assets	\$ 2,066.2	\$	(14.3) \$	2,051.9
Total assets	\$ 15,386.0	\$	(20.3) \$	15,365.7
Total liabilities	\$ 12,472.6	\$	(4.3) \$	12,468.3
Total equity	\$ 2,913.4	\$	(16.0) \$	2,897.4

(2) Accounting Changes and Recent Accounting Pronouncements

Accounting Changes

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. We adopted ASU 2020-06 effective January 1, 2022 and it did not have a material impact on our consolidated financial statements.

Recent Accounting Pronouncements

ASU 2022-04

In September 2022, the FASB issued ASU No. 2022-04, *Liabilities—Supplier Finance Programs* (ASU 2022-04), which requires that a buyer in a supplier finance program disclose certain information about the program to allow financial statement users to understand the nature of the program, activity during the period and changes to the program from period to period. The disclosure requirements include (i) the key terms of the program, including payments terms, (ii) the amount and location in the balance sheet of obligations outstanding with the finance provider or intermediary, and (iii) a rollforward of the obligations during the annual period. With the exception of the rollforward disclosure requirements, ASU 2022-04 is effective for fiscal years beginning after December 15, 2022, including interim periods within those fiscal years. The rollforward information is effective for fiscal years beginning after December 15, 2023. We are currently evaluating the impact ASU 2022-04 will have to our consolidated financial statement disclosures.

ASU 2020-04, ASU 2021-01 and ASU 2022-06

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 LIBOR. 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 Topic 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 was initially not intended to be available after December 31, 2022, other than for certain hedging relationships entered into before December 31, 2022. In December 2022, the FASB issued ASU No. 2022-06, *Reference Rate Reform (Topic 848)*: *Deferral of the Sunset Date of Topic 848* (ASU 2022-06), which defers the expiration date of Topic 848 from December 31, 2022, to December 31, 2024, and permits companies to apply the guidance in Topic 848 through the expected cessation date of USD LIBOR. We do not currently expect that the phase out of LIBOR 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, expected 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.

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 and Cash Equivalents

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.

Receivables

We have trade and notes receivables that are each reported net of an allowance for expected credit losses.

Our notes receivable consist of EIP receivables due from customers under contracts that range between a period of 12 to 36 months, depending on the market. The long-term portion of our notes receivable, net of allowances for expected credit losses, is included in other assets, net, in our consolidated balance sheets. From time to time, we may sell our trade or notes receivables to third parties. During 2022, we generated approximately \$48 million from the sale of receivables to third parties that is reflected in cash provided by operating activities in our consolidated statement of cash flows.



Concentration of credit risk with respect to trade and notes receivables is limited due to the large number of customers and their dispersion across many different countries, with the exception of \$81 million and \$85 million at December 31, 2022 and 2021, respectively, due from a single government.

The allowances on each of our trade and notes receivables 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 aggregate changes in our allowance for expected credit losses and associated with trade receivables, and current and long-term note receivables are set forth below:

	Y	ear ended December	31,	
	2022	2021		2020
		in millions		
Beginning balance	\$ 112.6	\$ 116.2	\$	87.3
Provision for expected losses	78.4	71.4		63.9
Write-offs	(79.1)	(59.5)		(60.3)
Reclassification to assets held for sale		(10.0)		
Foreign currency translation adjustments and other	(10.8)	(5.5)	1	25.3
Ending balance	\$ 101.1	\$ 112.6	\$	116.2

Investments

From time to time, we may hold investments in (i) equity method investments; (ii) cost method investments, and (iii) available-for-sale method investments.

We apply the equity method to investments when we have the ability to exercise significant influence over the operating and financial policies of the investee. Under the equity method, investments are originally recorded at cost and are adjusted to recognize our share of net earnings or losses of the affiliates as they occur with our recognition of losses generally limited to the extent of our investment in, and advances and commitments to, the investee. Our share of the investee's net earnings or losses is included in other income (expense), net, in our consolidated statements of operations.

We are required to hold security against the value of certain pension liabilities in the U.K.. The security is in the form of U.K. Government Gilts, which we account for using the available-for-sale method. Available-for-sale securities are measured at fair value with changes 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. Our investment in U.K. Government Gilts falls under Level 1 of the fair value hierarchy. At December 31, 2022 and 2021, the carrying values of our investment in U.K. Government Gilts were \$30 million and \$39 million, respectively, which are included in other assets, net, in our consolidated balance sheets.

We hold an equity security 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.

We continually review our equity method investments, available-for-sale debt securities and cost-basis investments to determine whether a decline in fair value below the cost basis is other-than-temporary. If it has been determined that an investment has sustained an other-than-temporary decline in value, 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.

For additional information regarding our fair value measurements, see note 6.

Financial Instruments

Due to the short maturities of cash and cash equivalents, trade and other receivables, notes receivable, 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 9, 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 Derivatives, as discussed below, are recorded in 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.

As of December 31, 2022, we do not apply hedge accounting to any of 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 operating expenditures: the net cash paid or received is classified as an operating activity;
- foreign currency forward contracts that are used to hedge capital expenditures: the net cash paid or received is reflected in capital expenditures, net, 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; and
- 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.

Inventories

Inventories consist primarily of mobile handset devices and accessories and are valued at the lower of cost or net realizable value. We maintain inventory valuation reserves for obsolete and slow-moving inventory based on analysis of recent historical sales activity and current retail, stand-alone selling prices. We record sales of inventories under the average cost method.

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 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 7.

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 \$55 million and \$46 million at December 31, 2022 and 2021, respectively, are included in other long-term liabilities in our consolidated balance sheets.

Intangible Assets

Our primary intangible assets relate to goodwill, customer relationships, spectrum licenses and cable television franchise rights. Goodwill represents the excess purchase price over the fair value of the identifiable net assets acquired in a business combination. Customer relationships, spectrum licenses and cable television franchise rights 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 that have indefinite lives.

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 10 years or less), 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 most of our spectrum licenses, and therefore while spectrum licenses in certain markets are amortized over a finite period, we generally treat these spectrum licenses as indefinite-lived intangible assets. We believe we will be able to meet all requirements necessary to secure renewal of such spectrum licenses.

For additional information regarding the useful lives of our intangible assets, see note 7.

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 indefinitelived 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 for impairment at least annually on July 1, which we changed from October 1 during 2022, 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 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 7.

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. The long-term portion of contract assets are \$107 million and \$86 million as of December 31, 2022 and 2021, respectively, and are included in other assets, net, 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 aggregate deferred contract costs were \$56 million and \$31 million as of December 31, 2022 and 2021, 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, 2022 and 2021 was \$261 million and \$301 million, respectively. The decrease in our current and long-term deferred revenue balances during 2022, primarily relates to amortization of long-term capacity contracts, which were partially offset by new contracts entered into during the year.

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 10.

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 straightline 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 and non-current operating lease liabilities are included in other assets, net, 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 by firstly constructing a credit curve which is based on the implied credit spread between the risk free rate (generally U.S. dollar denominated U.S. Treasuries) and a credit curve constructed using an index of observable U.S. dollar denominated fixed rate corporate bonds issued by U.S. telecommunications companies with the same rating as the respective borrowing group. Next, we apply a linear fixed spread to this credit curve reflecting the difference between the observable price on the longest tradable debt instrument in each borrowing group and the credit curve at the maturity date of the observed debt instrument. Lastly, we make adjustments for all tenors to correct for the collateralized interest rate spread by comparing unsecured debt to asset-backed securities (secured debt) trades, this adjustment is based on the difference between the index of observable U.S. dollar denominated fixed rate corporate bonds issued by U.S. telecommunications companies with the same rating as the borrowing group and a similar index for companies rated one-class higher on the rating-code scale.

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 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, 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 13.

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 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 20. 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 prepaid 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.

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, 2022, we have approximately \$355 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 five years.

Government Funding Revenue. From time to time, we receive funds from the FCC, primarily in Puerto Rico, where funds were established in an effort to restore, expand and upgrade fixed and mobile networks in Puerto Rico and the U.S. Virgin Islands. We recognize funds granted from the FCC as other revenue in the period in which we are entitled to receive the funds, as the FCC does not meet the definition of a "customer."

Sales, Use and Other 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 SARs and PSARs are estimated using the Black-Scholes-Merton valuation model, and the grant-date fair values for RSUs and 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 situations, 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" as we do not have sufficient historical exercise data. 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 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 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 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 15.

Litigation Costs

Legal fees and related litigation costs are expensed as incurred.

(4) Acquisitions

2022 Acquisition

Claro Panama Acquisition. On September 14, 2021, we entered into a definitive agreement to acquire América Móvil's operations in Panama in an all-cash transaction based upon an enterprise value of \$200 million on a cash- and debt-free basis. On July 1, 2022, we completed the acquisition of Claro Panama, which was financed through a combination of debt and existing cash.

The following table sets forth a reconciliation of the stated purchase price to the net cash paid (in millions):

Stated purchase price	\$ 200.0
Preliminary working capital adjustments	9.3
Total purchase price	 209.3
Opening balance sheet cash	(1.2)
Net cash paid for the Claro Panama Acquisition	\$ 208.1

We have accounted for the Claro Panama 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 Claro Panama based on assessments of their respective fair values. The preliminary opening balance sheet is subject to adjustment based on our final assessment of the fair values of the acquired identifiable net assets and liabilities. The items with the highest likelihood to change upon finalization of the valuation process include property and equipment, intangible assets, leases and income taxes. A summary of the purchase price and the preliminary opening balance sheet of Claro Panama at the July 1, 2022 acquisition date is presented in the following table (in millions):

Current assets	\$ 42.8
Property and equipment	136.4
Intangible assets subject to amortization (a)	47.9
Other assets (b)	180.9
Current liabilities	(64.9)
Long-term liabilities (c)	(133.8)
Total purchase price	\$ 209.3

(a) At July 1, 2022, the preliminary assessment of the weighted average useful life of the spectrum intangible assets was approximately 6 years.

(b) Primarily consists of operating lease right-of-use assets.

(c) Primarily consists of the non-current portion of operating lease obligations.

Our consolidated statements of operations for the year ended December 31, 2022 includes third-party revenue and a net loss of \$70 million and \$14 million, respectively, attributable to Claro Panama.

2021 Acquisitions

Liberty Telecomunicaciones Acquisition. On July 30, 2020, we entered into the Telefónica Acquisition 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. On August 9, 2021, we completed the acquisition of all of the outstanding shares of Liberty Telecomunicaciones. The Liberty Telecomunicaciones Acquisition was financed through a combination of debt, existing cash and a \$47 million equity contribution from the noncontrolling interest owner of our Liberty Servicios entity, as further described in note 17.

During 2022, we finalized the purchase price for the Liberty Telecomunicaciones Acquisition, which resulted in a reduction in total consideration paid of \$12 million. The proceeds received from the final purchase price adjustments have been reflected as an investing activity in our condensed consolidated statement of cash flows.

Stated Telefónica Acquisition Agreement purchase price	\$ 500.0
Working capital adjustments	25.1
Total purchase price	525.1
Opening balance sheet cash	 (17.0)
Net cash paid for the Liberty Telecomunicaciones Acquisition	\$ 508.1

We have accounted for the Liberty Telecomunicaciones 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 Liberty Telecomunicaciones 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 the opening balance sheet of Liberty Telecomunicaciones at the August 9, 2021 acquisition date is presented in the following table. The opening balance sheet presented below reflects our final purchase price allocation (in millions):

Current assets (a)	\$ 74.7
Goodwill (b)	256.7
Property and equipment	150.6
Intangible assets subject to amortization (c)	139.9
Other assets (d)	145.7
Current liabilities (e)	(74.2)
Long-term liabilities (f)	 (168.3)
Total purchase price (g)	\$ 525.1

(a) Primarily consists of trade receivables, notes receivables related to EIP receivables, and cash.

- (b) The goodwill recognized in connection with the Liberty Telecomunicaciones Acquisition is primarily attributable to (i) the ability to take advantage of Liberty Telecomunicaciones's existing mobile network to gain immediate access to potential customers, and (ii) synergies that are expected to be achieved through the integration of Liberty Telecomunicaciones with Liberty Latin America's existing business in Costa Rica, Liberty Servicios. Due to the nature of the Liberty Telecomunicaciones Acquisition, no tax deductions related to goodwill are expected.
- (c) At August 9, 2021, the weighted average useful lives of the acquired customer relationship intangible assets and spectrum intangible assets were approximately 7 years and 25 years, respectively.
- (d) Primarily consists of operating lease right-of-use assets and the long-term portion of note receivables related to EIP receivables.
- (e) Primarily consists of accounts payable and current operating lease obligations.
- (f) Primarily consists of the non-current portion of operating lease obligations and deferred tax liabilities.
- (g) Amount excludes \$9 million of direct acquisition costs incurred during 2021. Direct acquisition costs are included in impairment, restructuring and other operating items, net, in our consolidated statement of operations.

Our consolidated statement of operations for the year ended December 31, 2021 includes revenue and net earnings of \$112 million and \$5 million, respectively, attributable to Liberty Telecomunicaciones.

BBVI Acquisition. Effective December 31, 2021, we acquired 96% of the outstanding shares of Broadband VI, LLC for \$33 million, the payment of which occurred in January 2022, subject to certain post-closing adjustments. Broadband VI, LLC provides fixed services to residential and business customers in the U.S. Virgin Islands and is included in our Liberty Puerto Rico reportable segment.

2020 Acquisition

AT&T Acquisition. On October 31, 2020, we acquired from AT&T all of the outstanding shares of the AT&T Acquired Entities, which following the closing of the AT&T Acquisition are referred to as Liberty Mobile and its subsidiaries. The operations acquired in the AT&T Acquisition provide consumer mobile and B2B services in Puerto Rico and the U.S. Virgin Islands.

As a condition of approval of the AT&T Acquisition, the United States Department of Justice required us to divest certain B2B operations that were a part of our then-existing operations in Puerto Rico. We satisfied this condition in January 2021 by divesting those B2B operations for a stated sales price of \$22 million. In connection with this divestiture, we recognized a gain on sale of \$9 million, which is included in impairment, restructuring and other operating items, net, in our consolidated statement of operations.

AT&T is providing ongoing support to the AT&T Acquired Entities under the AT&T TSA for a period up to 36 months following the closing of the AT&T Acquisition. Services under the AT&T 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 AT&T TSA upon sixty business days' notice to AT&T in accordance with the terms and conditions of the AT&T 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:	
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)	46.4
Accounting Purchase Price	\$ 1,932.4

- (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 and reflected the amount allocated to the purchase of prepaid roaming, \$73 million, in net cash provided by operating activities in our consolidated statement of cash flows.
- (b) Represents 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) borrowings in our Liberty Puerto Rico segment during 2019 of \$1,353 million, 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.



We have accounted for the AT&T 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 the AT&T Acquired Entities based on assessments of their respective fair values, and the excess of the total purchase price over the fair values of these identifiable net assets was allocated to goodwill. A summary of the purchase price and the opening balance sheet of the AT&T Acquired Entities at the October 31, 2020 acquisition date is presented in the following table. The opening balance sheet presented below reflects our final purchase price allocation (in millions):

Current assets (a) (b)	\$ 155.6
Goodwill (c)	196.9
Property and equipment	768.6
Intangible assets subject to amortization (d)	85.6
Intangible assets not subject to amortization (e)	1,043.0
Other assets (b) (g)	272.8
Current liabilities (f) (g)	(67.9)
Long-term debt and finance lease obligations	(10.6)
Non-current deferred tax liabilities	(344.3)
Other long-term liabilities (g)	(167.3)
Total purchase price (h)	\$ 1,932.4

(a) Current assets consists of trade receivables, prepaid expenses and other current assets.

- (b) Current assets and other assets include \$67 million and \$39 million, respectively, in EIP receivables.
- (c) 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 have been taken.
- (d) 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.
- (e) Amount represents the estimated fair value of spectrum licenses.
- (f) Current liabilities include accounts payable, current portion of debt and finance lease obligations and other accrued and current liabilities.
- (g) Other assets, current liabilities and other long-term liabilities include \$182 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.
- (h) Amount excludes \$51 million of direct acquisition costs, incurred during 2020.

Our consolidated statement of operations for the year ended year ended December 31, 2020 includes revenue of \$170 million and a net loss of \$88 million attributable to the AT&T Acquired Entities.



Supplemental Pro Forma Information

The pro forma financial information set forth in the tables 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 these acquisitions occurred on the date indicated nor should it be considered representative of our future financial condition or results of operations. The pro forma information set forth in the tables below include, as applicable, tax-effected pro forma adjustments primarily related to:

- i. the impact of estimated costs associated with the AT&T TSA that replaced parent-company allocations included in the historical financial statements of the AT&T Acquired Entities;
- ii. the impact of estimated costs associated with the transition services agreement entered into in connection with the Liberty Telecomunicaciones Acquisition;
- iii. the impact of new rate agreements associated with roaming, subsea and ethernet services stemming from the AT&T Acquisition;
- iv. the alignment of accounting policies;
- v. interest expense related to additional borrowings in conjunction with the Claro Panama Acquisition, the Liberty Telecomunicaciones Acquisition and the AT&T Acquisition;
- vi. depreciation expense related to acquired tangible assets;
- vii. amortization expense related to acquired intangible assets; and
- viii. the elimination of direct acquisition costs.

The following unaudited pro forma consolidated operating results give effect to (i) the Claro Panama Acquisition, as if it had been completed as of January 1, 2021, (ii) the Liberty Telecomunicaciones Acquisition, as if it had been completed as of January 1, 2020, and (iii) the AT&T Acquisition, as if it had occurred on January 1, 2019:

	 Y	ear o	ended December 3	81,	
	 2022		2021		2020
			in millions		
Revenue	\$ 4,879.6	\$	5,119.6	\$	4,785.3
Net loss attributable to Liberty Latin America shareholders	\$ (186.1)	\$	(464.7)	\$	(568.0)

(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.



			cember 31, 2022		December 31, 2021							
		Current (a)	Long-term (a)			Total		Current (a)	Long-term (a)			Total
						in mill	ions					
Assets (b):												
Cross-currency and interest rate derivative contracts (c)	\$	91.3	\$	224.2	\$	315.5	\$	15.1	\$	25.3	\$	40.4
Foreign currency forward contracts								0.1				0.1
Total	\$	91.3	\$	224.2	\$	315.5	\$	15.2	\$	25.3	\$	40.5
Liabilities (b):	_						_					
Cross-currency and interest rate derivative contracts (c)	\$	30.4	\$	_	\$	30.4	\$	33.3	\$	62.1	\$	95.4
Foreign currency forward contracts		11.9				11.9		5.8				5.8
Total	\$	42.3	\$		\$	42.3	\$	39.1	\$	62.1	\$	101.2

The following table provides details of the fair values of our derivative instrument assets and liabilities:

(a) Our current derivative assets, long-term derivative assets, current derivative liabilities and long-term derivative liabilities are included in other current assets, net, other assets, net, other accrued and current liabilities and other long-term liabilities, respectively, in our consolidated balance sheets.

(b) Effective with the agreement to form the Chile JV, the derivative assets and liabilities associated with the Chile JV Entities are included in assets held for sale and liabilities associated with assets held for sale, respectively, on our December 31, 2021 consolidated balance sheet. For information regarding the formation of the Chile JV and the held-for-sale presentation of the Chile JV Entities as of December 31, 2021, see note 8.

(c) 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 9) and are recorded in realized and unrealized gains or 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:

		Y	ear er	nded December 3	31,	
	202	22		2021		2020
				in millions		
Cross-currency and interest rate derivative contracts (a) (b)	\$	404.3	\$	565.4	\$	(328.6)
Foreign currency forward contracts		(13.5)		25.8		(7.8)
Weather Derivatives		(31.4)		(27.1)		(16.3)
Total	\$	359.4	\$	564.1	\$	(352.7)

(a) Changes in the credit risk valuation adjustments associated with our cross-currency and interest rate derivative contracts resulted in net gains (losses) of (\$4 million), (\$41 million) and \$47 million during 2022, 2021 and 2020, respectively. Included in the 2021 credit risk valuation adjustment is a net loss of \$30 million related to the Chile JV Entities. These amounts are included in realized and unrealized gains (losses) on derivative instruments, net, in our consolidated statements of operations.

(b) The losses for 2020 include a realized gain of \$71 million associated with the settlement of certain cross-currency 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 9.

The following table sets forth the classification of the net cash inflows (outflows) of our derivative instruments:

	Ye	ar ended	December 3	1,	
	2022	2	021		2020
		in n	nillions		
Operating activities	\$ (20.5)	\$	(94.5)	\$	(50.1)
Investing activities	(7.4)		(1.2)		7.4
Financing activities (a)	 97.6		(43.0)		182.5
Total	\$ 69.7	\$	(138.7)	\$	139.8

(a) The 2022 amount is primarily related to the settlement of certain cross currency swaps at VTR prior to the formation of the Chile JV. The 2021 amount is primarily related to (i) \$11 million associated with the settlement of interest rate swaps at VTR in connection with the refinancing of the VTR Credit Facilities and (ii) \$32 million associated with the settlement of interest rate swaps at Liberty Puerto Rico in connection with the refinancing of the LPR Credit Facilities. The 2020 amount is primarily related to the settlement of certain cross-currency interest rate swaps at VTR. For additional information regarding our debt refinancing activity, see note 9.

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, 2022, our exposure to counterparty credit risk resulting from our net derivative position was \$282 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.



Details of our Derivative Instruments

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, 2022:

Borrowing group	onal amount due m counterparty	Weighted average remaining life
	 in millions	in years
C&W (a)	\$ 2,690.0	4.4
Liberty Puerto Rico	\$ 500.0	5.8
Costa Rica (b)	\$ 276.7	1.0

(a) Includes forward-starting derivative instruments and, on certain interest rate swaps, an embedded floor of 0%.

(b) Includes an embedded floor of 0.75%.

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, 2022:

Borrowing group	from	nal amount due counterparty	Weighted average remaining life		
	i	n millions	in years		
C&W	\$	2,100.0	0.5		
Liberty Puerto Rico	\$	620.0	0.5		

Foreign Currency Forwards Contracts

We enter into foreign currency forward contracts with respect to non-functional currency exposure. At December 31, 2022, our foreign currency forward contracts had total notional amounts due from and to counterparties of \$150 million and CRC 96 billion, respectively, with a weighted average remaining contractual life of 0.5 years.

Interest Rate Floors

Interest rate floors provide protection against interest rates falling below a pre-set level. During 2021, we entered into interest rate floors at Liberty Puerto Rico related to certain financing activity associated with the LPR Credit Facilities, as described in note 9. At December 31, 2022, the total notional amount of our interest rate floors was \$620 million with a weighted average remaining contractual life of 5.8 years.

Interest Rate Caps

Interest rate caps provide protection against interest rates rising above a pre-set level. During 2021, we entered into interest rate caps at Liberty Puerto Rico associated with the 2028 LPR Term Loan, as described in note 9. At December 31, 2022, the total notional amount of our interest rate caps was \$120 million with a remaining contractual life of 5.8 years.

(6) Fair Value Measurements

General

We use the fair value method to account for most of our derivative instruments. The reported fair values of our derivative instruments 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 generally occurs 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. As we would not expect changes in our or our counterparties' credit spreads to have a significant impact on the valuations of these instruments, we have determined that these valuations 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.

Non-recurring Fair Value Measurements

Fair value measurements may also be used for purposes of non-recurring valuations performed in connection with our acquisition accounting, impairment assessments and the initial valuation related to our equity method investment in the Chile JV. For information concerning our investment in the Chile JV, including the initial fair value assessment, see note 8.

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 intangible assets, as further described below:

- Property and equipment. The valuation of property and equipment may use either 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 third quarter of 2022, we performed certain nonrecurring valuations related to the preliminary acquisition accounting for the Claro Panama Acquisition. For information related to the status of valuation work associated with assets acquired in connection with the Claro Panama Acquisition, see note 4.

During 2021, we performed a nonrecurring valuation related to the preliminary acquisition accounting for the Liberty Telecomunicaciones Acquisition using an 11% weighted average discount rate for the valuation of the customer relationships acquired. During 2022, we finalized our acquisition accounting for the Liberty Telecomunicaciones Acquisition, which did not result in any material changes to our opening balance sheet. Also during 2021, we finalized our acquisition accounting for the AT&T Acquisition. The weighted average discount rates used in the valuation of the customer relationships and spectrum licenses acquired in the AT&T Acquisition was approximately 10% and 8%, respectively.

For additional information relating to our acquisitions, see note 4.

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.

Goodwill

During the second quarter of 2022, primarily due to significant increases in interest rates, we performed goodwill impairment analyses of all of our reporting units. 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 an appropriate discount rate. 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 and estimated discount rates. Based upon the results of the aforementioned analysis, we recognized impairment charges associated with certain reporting units of our C&W Caribbean segment. For additional information regarding goodwill impairment charges resulting from these impairment analyses, see note 7.



As part of our annual goodwill impairment assessment in the fourth quarter of 2021, we performed goodwill impairment analyses of several reporting units within the C&W Caribbean 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 and estimated discount rates.

For additional information regarding goodwill impairment charges resulting from these impairment analyses, see note 7.

(7) Long-lived Assets

Impairment Charges

The following table sets forth the details of our impairment charges:

	C	C&W aribbean	C&W Panama	N	C&W Networks & LatAm	Р	Liberty Puerto Rico	VTR (a)	Li	berty Costa Rica	Total
						iı	n millions				
Year ended December 31, 2022:											
Goodwill (b)	\$	555.3	\$ _	\$	_	\$	_	\$ _	\$	_	\$ 555.3
Property and equipment and other		3.1	—		1.0		3.6	0.1		0.7	8.5
Total impairment charges	\$	558.4	\$ _	\$	1.0	\$	3.6	\$ 0.1	\$	0.7	\$ 563.8
Year ended December 31, 2021:											
Goodwill	\$	605.1	\$ _	\$	_	\$		\$ _	\$	_	\$ 605.1
Property and equipment and other		2.6	 —		—		0.2	 1.3		—	 4.1
Total impairment charges	\$	607.7	\$ 	\$	_	\$	0.2	\$ 1.3	\$	_	\$ 609.2
Year ended December 31, 2020:											
Goodwill	\$	99.0	\$ 173.6	\$	_	\$	_	\$ _	\$	_	\$ 272.6
Property and equipment and other		1.9	 _		_		1.5	 1.6		0.1	 5.1
Total impairment charges	\$	100.9	\$ 173.6	\$	_	\$	1.5	\$ 1.6	\$	0.1	\$ 277.7

(a) During October 2022, we contributed the Chile JV Entities into the Chile JV. As such, subsequent to September 30, 2022, VTR is no longer included in our consolidated results of operations.

(b) During 2022, we recorded a \$555 million impairment of goodwill within certain reporting units of our C&W Caribbean segment. This impairment was driven primarily by macroeconomic factors, including higher interest rates, that drove an increase in the discount rates used to value these reporting units. After recording these impairments, the associated reporting units have \$498 million of goodwill remaining at December 31, 2022. If, among other factors, (i) our equity values were to decline significantly, (ii) we experience additional adverse impacts associated with macroeconomic factors, including increases in our estimated weighted average cost of capital, or (iii) the adverse impacts stemming from competition, economic, regulatory or other factors were to cause our results of operations or cash flows to be worse than currently anticipated, we could conclude in future periods that additional impairment charges of certain reporting units are required in order to reduce the carrying values of goodwill. Any such impairment charges could be significant.

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 2022 are set forth below:

	January	1, 2022	Acquisitions and related adjustments	oreign currency translation adjustments and other	Impairments	D	ecember 31, 2022
				in millions			
C&W Caribbean	\$	1,787.1	\$ (16.5)	\$ 5.1	\$ (555.3)	\$	1,220.4
C&W Panama		617.1	_				617.1
C&W Networks & LatAm		646.8	11.5	(4.3)	_		654.0
Liberty Puerto Rico		498.3	2.8				501.1
Liberty Costa Rica		398.7	(3.8)	33.8	_		428.7
Total	\$	3,948.0	\$ (6.0)	\$ 34.6	\$ (555.3)	\$	3,421.3

Changes in the carrying amount of our goodwill during 2021 are set forth below:

	Jan	uary 1, 2021				eclassification to ets held for sale (a)		Foreign currency translation adjustments and other	Impairments	December 31, 2021
						in mi	illio	ns		
C&W Caribbean	\$	2,459.3	\$	_	\$	_	\$	(67.1)	\$ (605.1)	\$ 1,787.1
C&W Panama		617.1								617.1
C&W Networks & LatAm		652.7		—		_		(5.9)	—	646.8
Liberty Puerto Rico		629.9		(131.6)		_		—		498.3
Liberty Costa Rica		151.9		262.0		_		(15.2)	_	398.7
VTR		374.6				(313.0)		(61.6)	 —	 _
Total	\$	4,885.5	\$	130.4	\$	(313.0)	\$	(149.8)	\$ (605.1)	\$ 3,948.0

(a) In connection with the then pending formation of the Chile JV, the goodwill associated with the Chile JV Entities was included in assets held for sale on our December 31, 2021 consolidated balance sheet. For information regarding the formation of the Chile JV and the held-for-sale presentation of the Chile JV Entities, see notes 8 and 8.

At December 31, 2022 and 2021, our accumulated goodwill impairments were \$2,784 million and \$2,229 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, 2022 3 to 25 years 3 to 40 years		Decem	ıber 31,	,
		_	2022		2021
			in m	illions	
Distribution systems	3 to 25 years	\$	4,419.1	\$	4,208.8
Support equipment, buildings, land and CIP	3 to 40 years		2,232.7		1,641.6
CPE	3 to 5 years		919.0		893.7
			7,570.8		6,744.1
Accumulated depreciation			(3,277.2)		(2,575.7)
Total		\$	4,293.6	\$	4,168.4

Depreciation expense related to our property and equipment was \$726 million, \$771 million and \$730 million during 2022, 2021 and 2020, respectively.

We recorded non-cash increases to our property and equipment related to vendor financing arrangements of \$161 million \$101 million and \$99 million during 2022, 2021 and 2020, 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 25 years at December 31, 2022, are set forth below:

	December 31,				
	2022	2021			
	 in m	illions			
Customer relationships	\$ 1,464.4	\$	1,527.6		
Licenses and other (a)	278.9		220.2		
	1,743.3		1,747.8		
Accumulated amortization	(1,055.2)		(959.2)		
Total	\$ 688.1	\$	788.6		

(a) The 2022 amount includes \$50 million of spectrum licenses attributable to the Claro Panama Acquisition. For additional information regarding the assets acquired as part of the Claro Panama Acquisition, see note 4.

Amortization expense related to intangible assets with finite useful lives was \$185 million, \$193 million and \$189 million during 2022, 2021 and 2020, respectively.



Based on our amortizable intangible assets balance at December 31, 2022, we expect that amortization expense will be as follows for the next five years and thereafter (in millions):

2023	\$ 170.6
2024	133.2
2025	90.3
2026	64.8
2027	54.5
Thereafter	174.7
Total	\$ 688.1

Intangible Assets Not Subject to Amortization

The details of our intangible assets not subject to amortization are set forth below:

	 December 31,				
	 2022	2021			
	 in millions				
Spectrum licenses	\$ 1,051.0	\$	1,050.9		
Cable television franchise rights and other	541.8		541.5		
Total intangible assets not subject to amortization	\$ 1,592.8	\$	1,592.4		

(8) Assets Held for Sale

On September 29, 2021, we entered into an agreement with América Móvil to contribute the Chile JV Entities to América Móvil's Chilean operations to form the Chile JV. During October 2022, we completed the formation of the Chile JV, which is owned 50:50 by Liberty Latin America and América Móvil.

Effective with the agreement to form the Chile JV, we began accounting for the Chile JV Entities as held for sale. Accordingly, we ceased to depreciate the longlived assets and amortization of the right of use assets of the Chile JV Entities. The Chile JV Entities were not presented as a discontinued operation, as this transaction did not represent a strategic shift that will have a major effect on our financial results or operations. The carrying amounts of the major classes of assets and liabilities that are classified as held for sale on our December 31, 2021 consolidated balance sheet are summarized below (in millions):

Assets:	
Cash and cash equivalents	\$ 109.7
Other current assets, net	132.6
Property and equipment, net	686.0
Goodwill	313.0
Other assets, net	327.4
Total assets	\$ 1,568.7
Liabilities:	
Current portion of debt	\$ 82.2
Other accrued and current liabilities	294.2
Long-term debt	1,416.8
Other long-term liabilities	60.9
Total liabilities	\$ 1,854.1

Our consolidated statements of operations include earnings (losses) before income taxes attributable to the Chile JV Entities of (\$26 million), \$271 million, and (\$118 million) for the years ended December 31, 2022, 2021 and 2020, respectively.

During October 2022, and in connection with the closing on the formation of the Chile JV, we made a balancing payment to América Móvil totaling \$76 million. The transaction did not trigger a change of control under VTR's debt agreements, and was not subject to Liberty Latin America or América Móvil shareholder approvals. Beginning in October 2022, we account for our 50% interest in the Chile JV as an equity method investment.



The carrying amounts of the major classes of assets and liabilities associated with the Chile JV Entities, which were contributed to the Chile JV, are summarized below (in millions):

Assets:	
Cash and cash equivalents	\$ 63.0
Other current assets, net	104.4
Property and equipment, net	697.5
Goodwill	275.6
Other assets, net	 259.1
Total assets	\$ 1,399.6
Liabilities:	
Current portion of debt	\$ 72.4
Other accrued and current liabilities	210.1
Long-term debt	1,330.9
Other long-term liabilities	55.1
Total liabilities	\$ 1,668.5

In connection with the formation of the Chile JV, we recognized a pre-tax gain of \$169 million, which is net of the recognition of a cumulative foreign currency translation loss of \$17 million. The gain is a result of a minimal preliminary estimated fair value of our investment in the Chile JV at formation and the negative net carrying value of the Chile JV Entities at the time of closing, and is net of a \$50 million contribution that was provided to the Chile JV near the time of closing for working capital purposes. In determining our preliminary value, we considered the limited qualitative and quantitative information we have available, including negative cash flows of the Chile JV and the significant discount in the fair value of the Chile JV's debt in relation to its par value. Our investment balance in the Chile JV was subsequently reduced to zero by December 31, 2022 after taking our share of the net losses of the Chile JV during the fourth quarter of 2022.

(9) Debt and Finance Lease Obligations

The U.S. dollar equivalents of the components of our debt are as follows:

		December 31, 2022														
	Weighted	1	Unused borrowin Borrowing currency		wing capacity (b)		Estimated fair value (c)				Principal amount					
	average interest				US \$ equivalent		_		Decem	December 31,			Decem	nber 31,		
	rate (a)						2022 2021			2022		2021				
							in mi	illio	ns							
Convertible Notes (d)	2.00 %	\$	_	\$	_	\$	357.4	\$	396.5	\$	402.5	\$	402.5			
C&W Notes	6.55 %						1,591.6		1,774.3		1,715.0		1,715.0			
C&W Credit Facilities	6.32 %		(e)		719.2		2,505.0		2,422.7		2,605.2		2,451.3			
LPR Senior Secured Notes	6.08 %				_		1,772.7		2,058.1		1,981.0		1,981.0			
LPR Credit Facilities	8.07 %	\$	172.5		172.5		613.8		623.1		620.0		620.0			
LCR Credit Facilities (f)	10.32 %	\$	7.0		7.0		382.9		407.1		419.3		408.7			
Vendor financing and other (g)	6.04 %		—				223.1		99.8		223.1		99.8			
Total debt before premiums, discounts and deferred financing costs	6.43 %			\$	898.7	\$	7,446.5	\$	7,781.6	\$	7,966.1	\$	7,678.3			

The following table provides a reconciliation of total debt before premiums, discounts and deferred financing costs to total debt and finance lease obligations:

	Decem	,	
	 2022		2021
	 in mi	illions	
Total debt before premiums, discounts and deferred financing costs	\$ 7,966.1	\$	7,678.3
Premiums, discounts and deferred financing costs, net (d)	 (94.0)		(120.0)
Total carrying amount of debt	7,872.1		7,558.3
Finance lease obligations	8.6		7.6
Total debt and finance lease obligations	 7,880.7		7,565.9
Less: Current maturities of debt and finance lease obligations	(226.9)		(106.3)
Long-term debt and finance lease obligations	\$ 7,653.8	\$	7,459.6

- (a) Represents the weighted average interest rate in effect at December 31, 2022 for all borrowings outstanding (excluding those of the Chile JV Entities) 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, 2022 without regard to covenant compliance calculations or other conditions precedent to borrowing. At December 31, 2022, 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, 2022 compliance reporting requirements. At December 31, 2022, 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 applicable bid prices (mostly Level 1 of the fair value hierarchy) or from quoted prices for similar instruments in active markets adjusted for the estimated credit spreads of the applicable entity, to the extent available, and other relevant factors (Level 2 of the fair value hierarchy). 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 a 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, Trinidad & Tobago dollar and JMD revolving credit facilities. For further information, see C&W Credit Facilities below.
- (f) The LCR Credit Facilities comprise certain CRC and U.S. dollar term loans and a U.S. dollar revolving credit facility. For further information, see *LCR Credit Facilities* below.
- (g) 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 were paid on our behalf by the vendor. Our operating expenses include \$149 million, \$110 million and \$108 million for 2022, 2021 and 2020, respectively, that were financed by an intermediary and are reflected on the borrowing date as a cash outflow within net cash provided by operating activities and a cash inflow within net cash provided (used) 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, 2022, all of our outstanding debt had been incurred by one of our three primary "borrowing groups": C&W, Liberty Puerto Rico and Liberty Costa Rica, except for our Convertible Notes (as described below).

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 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 the Convertible Notes. 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, 2022, 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. 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 the Rights Offering, as further described in note 17, 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 is being 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, 2022, the carrying value of the Convertible Notes was \$375 million and the unamortized debt discount on the Convertible Notes was \$27 million.

Redemption Rights. 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 Convertible 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.

Borrowing Group - Outstanding Debt Instruments

C&W Notes

The details of the outstanding C&W Notes as of December 31, 2022 are summarized in the following table:

			Outst principa	_			
C&W Notes	Maturity	Interest rate	Borrowing currency				Carrying value (a)
				iı	n millions		
2027 C&W Senior Secured Notes	September 7, 2027	5.750 %	\$ 495.0	\$	495.0	\$	494.2
2027 C&W Senior Notes	September 15, 2027	6.875 %	\$ 1,220.0		1,220.0		1,218.0
Total				\$	1,715.0	\$	1,712.2

(a) Amounts are inclusive or net of original issue premiums and deferred financing costs, as applicable.



Redemption Rights. The C&W Notes are subject to certain redemption rights (as specified in the applicable indenture). Some or all of the 2027 C&W Senior Notes and 2027 C&W Senior Secured Notes may be redeemed 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:

	Redemp	tion Price
	2027 C&W Senior Notes	2027 C&W Senior Secured Notes
12-month period commencing:	September 15	September 7
2023	101.719%	101.438%
2024	100.859%	100.000%
2025 and thereafter	100.000%	100.000%

C&W Credit Facilities

The details of our borrowings under the C&W Credit Facilities as of December 31, 2022 are summarized in the following table:

			Unused borrowing capacity			g capacity	Outstanding principal amount				
C&W Credit Facilities			Borrowing currency		US \$ equivalent	Borrowing currency		US \$ equivalent		Carrying value (a)	
							iı	n millions			
CWP Revolving Credit Facility											
(b)	January 18, 2027	SOFR + 3.75%	\$	20.0		20.0	\$	_	\$	_	\$ _
C&W Revolving Credit Facility											
(c)	January 30, 2027	LIBOR + 3.25%	\$	630.0	\$	630.0	\$	—		—	—
C&W Term Loan B-5 Facility	January 31, 2028	LIBOR + 2.25% (d)	\$			_	\$	1,510.0		1,510.0	1,497.2
C&W Term Loan B-6 Facility	October 15, 2029	LIBOR + 3.0% (d)	\$	—		—	\$	590.0		590.0	581.1
2028 CWP Term Loan (e)	January 18, 2028	4.25%	\$	—		—	\$	435.0		435.0	429.9
C&W Regional Facilities	various dates ranging from 2023 to 2038	5.35% (f)		(g)		69.2		(h)		70.2	68.2
Total					\$	719.2			\$	2,605.2	\$ 2,576.4

(a) Amounts are net of discounts and deferred financing costs, as applicable.

(b) The CWP Revolving Credit Facility has a fee on unused commitments of 0.5% per year.

(c) The C&W Revolving Credit Facility (i) includes \$50 million that matures on June 30, 2023 and (ii) has a fee on unused commitments of 0.5% per year.

(d) Subject to a LIBOR floor of 0 basis points.

(e) Certain proceeds of the 2028 CWP Term Loan were used to fund a portion of the Claro Panama Acquisition.

(f) Represents a weighted average rate for all C&W Regional Facilities.

(g) The unused borrowing capacity on the C&W Regional Facilities comprise certain U.S. dollar, Trinidad & Tobago dollar and JMD denominated revolving credit facilities.



(h) The outstanding principal amount on the C&W Regional Facilities comprise certain JMD, U.S. dollar, East Caribbean dollar denominated credit facilities.

LPR Senior Secured Notes

The details of the outstanding LPR Senior Secured Notes as of December 31, 2022 are summarized in the following table:

				Outst principa			
LPR Senior Secured Notes			Borrowing U.S. \$ currency equivalent			Carrying value (a)	
						in millions	
2027 LPR Senior Secured Notes	October 15, 2027	6.750%	\$	1,161.0	\$	1,161.0	\$ 1,146.3
2029 LPR Senior Secured Notes	July 15, 2029	5.125%	\$	820.0		820.0	810.5
Total					\$	1,981.0	\$ 1,956.8

(a) Amounts are inclusive or net of original issue premiums and deferred financing costs, as applicable.

Redemption Rights. The LPR Senior Secured Notes are subject to certain redemption rights (as specified in the applicable indenture). LCPR Senior Secured Financing may redeem some or all of the 2027 LPR Senior Secured Notes and 2029 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 applicable indenture), if any, to the applicable redemption date:

	Redempt	tion Price
	2027 LPR Senior Secured Notes	2029 LPR Senior Secured Notes
12-month period commencing:	October 15	July 15
2023	101.688%	N.A.
2024	100.000%	102.563%
2025	100.000%	101.281%
2026 and thereafter	100.000%	100.000%

LPR Credit Facilities

The details of our borrowings under the LPR Credit Facilities as of December 31, 2022 are summarized in the following table:

LPR Credit Facilities	Maturity	Interest rate	b	Unused borrowing Outstanding capacity principal amount								Carrying value
					i	n millions						
LPR Revolving Credit Facility (a)	March 15, 2027	LIBOR + 3.50%	\$	172.5	\$	_	\$					
2028 LPR Term Loan	October 15, 2028	LIBOR + 3.75%		_		620.0		615.6				
Total			\$	172.5	\$	620.0	\$	615.6				

(a) The LPR Revolving Credit Facility has a fee on unused commitments of 0.5% per year.

LCR Credit Facilities

The details of the LCR Credit Facilities as of December 31, 2022 are summarized in the following table:

			Unused borrowing capacity				Outstanding principal					
Costa Rica Credit Facilities	Maturity	Interest rate	Borrowing currency		U.S. \$ equivaler	nt	Borrowing	g currency	U.S. \$ equivalent		Car	rying value (a)
							in millio	ons				
LCR Term Loan B-1 Facility	(b)	LIBOR + 5.50% (c)	\$	_	\$	_	\$	276.7	\$	276.7	\$	270.5
LCR Term Loan B-2 Facility	(b)	TBP + 6.75%	CRC	_		_	CRC	79,635.2		134.6		135.5
LCR Revolving Credit Facility (d)	August 1, 2024	LIBOR + 4.25%	\$	7.0		7.0	\$	8.0		8.0		8.0
Total					\$	7.0			\$	419.3	\$	414.0

(a) Amounts are net of deferred financing costs.

(b) Under the terms of the credit agreement, Liberty Servicios was obligated to repay 50% of the outstanding aggregate principal amounts of the LCR Term Loan B-1 Facility and the LCR Term Loan B-2 Facility on February 1, 2024, with the remaining respective principal amounts due on August 1, 2024, which represented the ultimate maturity date of each facility.

The LCR Term Loan B-1 Facility and LCR Term Loan B-2 Facility were refinanced subsequent to December 31, 2022, as further described below.

- (c) Subject to a LIBOR floor of 75 basis points.
- (d) The LCR Revolving Credit Facility had a fee on unused commitments of 1.70% per year. Subsequent to December 31, 2022, the LCR Revolving Credit Facility was amended and restated. The amended and restated \$60 million LCR Revolving Credit Facility bears interest at SOFR plus a margin of 4.25%, matures on January 15, 2028 and has a fee on unused commitments of 0.5% per year.

In January 2023, Liberty Costa Rica entered into the 2031 LCR Term Loan A and the 2031 LCR Term Loan B, both issued at par. At any time prior to the maturity dates, the 2031 LCR Term Loan A and 2031 LCR Term Loan B outstanding principal amounts, in whole or in part, may be redeemed or repaid, as applicable, along with (i) any accrued and unpaid interest and (ii) as applicable, any prepayment fee or prepayment premium or applicable premium (each as defined in the applicable credit agreement). The proceeds from the 2031 LCR Term Loan A and 2031 LCR Term Loan B were primarily used to repay the LCR Term Loan B-1 Facility and LCR Term Loan B-2 Facility.

Financing and Refinancing Activity

Borrowings related to significant notes we issued and credit facilities drew down, entered into or amended during 2022, 2021 and 2020 are included in the tables below. Non-cash activity relates to cash borrowed that did not pass through our bank accounts, as financing proceeds from the issuance of debt were used to directly repay some or all of the outstanding debt instruments within the same borrowing group.

Borrowings during 2022 are as follows:

			Borrowing				
Borrowing group	Instrument	Issued at	Borrowing currency USD equivalent		Non-cash component		
			in millions				
C&W	2028 CWP Term Loan	100%	\$	435.0	435.0	\$	272.9

Borrowings during 2021, including activity related to the Chile JV Entities, are as follows:

	Borrowing							
Borrowing group	Instrument	Issued at	Borrowin	g currency) equivalent		lon-cash omponent
					in r	nillions		
C&W	C&W Term Loan B-6 Facility	99.25%	\$	590.0	\$	590.0	\$	555.0
C&W	C&W Revolving Credit Facility	N/A			(a)		\$	—
Liberty Puerto Rico	2029 LPR Senior Secured Notes	100%	\$	820.0	\$	820.0	\$	500.0
Liberty Puerto Rico	2028 LPR Term Loan	100%	\$	620.0	\$	620.0	\$	500.0
Liberty Puerto Rico	LPR Revolving Credit Facility	N/A		((b)		\$	_
VTR	2029 VTR Senior Secured Notes	100%	\$	410.0	\$	410.0	\$	60.0
VTR	VTR RCF – A	N/A	\$	_	\$	_	\$	—
Liberty Costa Rica (c)	LCR Term Loan B-1 Facility	100%	\$	227.5	\$	227.5	\$	
Liberty Costa Rica (c)	LCR Term Loan B-2 Facility	100%	CRC	36,457.9	\$	58.8 N	/A \$	—

(a) In September 2021, the C&W Revolving Credit Facility was amended to extend the maturity of \$580 million in underlying commitments from January 30, 2026 to January 30, 2027.

(b) Total commitments under the LPR Revolving Credit Facility were increased by \$48 million during 2021.

(c) Borrowings under the LCR Term Loan B-1 Facility and LCR Term Loan B-2 Facility were used to fund a portion of the Liberty Telecomunicaciones Acquisition.

Borrowings during 2020, including activity related to the Chile JV Entities, are as follows:

Borrowing group	Instrument	Issued at	Borrowing	g currency	D equivalent illions		Non-cash omponent
C&W	C&W Term Loan B-5 Facility	N/A	\$	1,510.0	\$ 1,510.0	\$	1,510.0
C&W	2027 C&W Senior Secured Notes Add-on	106%	\$	150.0	150.0	\$	130.0
C&W	C&W Revolving Credit Facility	N/A	\$	312.5	\$ 312.5	\$	—
VTR	2028 VTR Senior Secured Notes	100%	\$	600.0	\$ 600.0	\$	
VTR	2028 VTR Senior Notes	100%	\$	550.0	\$ 550.0	\$	550.0
VTR	VTR RCF – B	N/A	\$	92.0	\$ 92.0	\$	—
Liberty Puerto Rico	2027 LPR Senior Secured Notes Add-on	102.5%	\$	90.0	\$ 90.0	\$	
Liberty Puerto Rico	LPR Revolving Credit Facility	N/A	\$	62.5	\$ 62.5	\$	_

During 2022, we made certain repurchases or repayments on the following debt instruments, including repayments related to the Chile JV Entities:

			Amount paid				
Borrowing group	Instrument	Redemption price	Borrowing	currency	USD	equivalent (a)	lon-cash mponent
					in mi	illions	
C&W	C&W Regional Facilities	100%	\$	272.9	\$	272.9	\$ 272.9
VTR	2029 VTR Senior Secured Notes	(b)	\$	12.2	\$	12.2	\$
VTR	2028 VTR Senior Secured Notes	(b)	\$	4.3	\$	4.3	\$ —
VTR	2028 VTR Senior Notes	(b)	\$	31.6	\$	31.6	\$

(a) Translated at the transaction date, if applicable.

(b) During the third quarter of 2022, in aggregate we repurchased and cancelled approximately \$91 million original principal amount of certain of the outstanding senior secured notes and senior notes of the Chile JV Entities.

During 2021, we made repayments on the following debt instruments, including repayments related to the Chile JV Entities:

	Instrument							
Borrowing group		Redemption price	Borrowing currency			D equivalent (a)		Non-cash omponent
					in n	nillions		
C&W	2026 C&W Senior Notes	103.75%	\$	500.0	\$	500.0	\$	500.0
C&W	2027 C&W Senior Secured Notes	103%	\$	55.0	\$	55.0	\$	55.0
Liberty Puerto Rico	2026 SPV Credit Facility	100%	\$	1,000.0	\$	1,000.0	\$	1,000.0
Liberty Puerto Rico	2027 LPR Senior Secured Notes	103%	\$	129.0	\$	129.0	\$	
VTR	2028 VTR Senior Secured Notes	103%	\$	120.0	\$	120.0	\$	60.0
VTR	VTR TLB-1 Facility	100%	CLP	140,900.0	\$	196.4	\$	_
VTR	VTR TLB-2 Facility	100%	CLP	33,100.0	\$	46.1	\$	

(a) Translated at the transaction date, if applicable.

During 2020, we made repayments on the following debt instruments, including repayments related to the Chile JV Entities:

Borrowing group	Instrument	Redemption price	Borrowing	currency	USI	D equivalent (a)		Non-cash omponent
					in n	nillions		
C&W	C&W Term Loan B-4 Facility	100%	\$	1,640.0	\$	1,640.0	\$	1,640.0
C&W	C&W Revolving Credit Facility	N/A	\$	312.5	\$	312.5	\$	—
VTR	VTR Finance Senior Notes	100%	\$	1,260.0	\$	1,260.0	\$	550.0
VTR	VTR RCF – B	N/A	\$	92.0	\$	92.0	\$	
Liberty Puerto Rico	LPR Revolving Credit Facility	N/A	\$	62.5	\$	62.5	\$	—

(a) Translated at the transaction date, if applicable.

Maturities of Debt

Maturities of our debt as of December 31, 2022 are presented below. Amounts presented below represent U.S. dollar equivalents based on December 31, 2022 exchange rates.

	 C&W	Liberty Puerto Rico		Liberty Costa Rica	Liberty Latin America (a)	Consolidated
				in millions		
Years ending December 31:						
2023	\$ 203.6	\$ 16.7	\$	5.2	\$ 0.5	\$ 226.0
2024	49.8	—		420.2	402.9	872.9
2025	3.2	_		_	_	3.2
2026	0.6	—		—	—	0.6
2027	1,715.5	1,161.0		—	—	2,876.5
Thereafter	2,546.9	1,440.0		—	—	3,986.9
Total debt maturities	4,519.6	2,617.7	_	425.4	 403.4	7,966.1
Premiums, discounts and deferred financing costs, net	(31.6)	(28.6)		(5.8)	(28.0)	(94.0)
Total debt	\$ 4,488.0	\$ 2,589.1	\$	419.6	\$ 375.4	\$ 7,872.1
Current portion	\$ 203.6	\$ 16.7	\$	5.2	\$ 0.5	\$ 226.0
Noncurrent portion	\$ 4,284.4	\$ 2,572.4	\$	414.4	\$ 374.9	\$ 7,646.1

(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.

(10) <u>Operating Leases</u>

The following table provides details of our operating lease expense:

	 Year ended December 31,							
	2022		2021		2020			
	 in millions							
Operating lease expense:								
Operating lease cost	\$ 118.8	\$	93.1	\$	52.8			
Short-term lease cost	24.6		21.0		13.5			
Total operating lease expense	\$ 143.4	\$	114.1	\$	66.3			

Our operating lease expense is included in facility, provision, franchise and other expense, in other operating costs and expenses, in our consolidated statements of operations.



Certain other details of our operating leases are set forth in the tables below.

		Decen	ber 31		
		2022		2021	
		in m	illions		
Operating lease right-of-use assets	\$	550.8	\$	441.0	
Operating lease liabilities:					
Current	\$	76.7	\$	82.0	
Noncurrent		438.5		371.0	
Total operating lease liabilities	\$	515.2	\$	453.0	
Weighted-average remaining lease term		8.2 years		7.5 years	
Weighted-average discount rate		7.5 %		6.2 %	
	Y				

	 Year ended December 31,						
	 2022 2021			2020			
	 in millions						
Operating cash flows from operating leases	\$ 120.4	\$	93.1	\$	47.0		
Right-of-use assets obtained in exchange for new operating lease liabilities (a)	\$ 237.4	\$	211.8	\$	230.5		

(a) Represents non-cash transactions associated with operating leases entered into during the year, including amounts related to acquisitions, as further described in note 4.

Maturities of Operating Leases

Maturities of our operating lease liabilities as of December 31, 2022 are presented below. Amounts presented below represent U.S. dollar equivalents (in millions) based on December 31, 2022 exchange rates.

Years of	ending	Decem	ber 31	:

2023	\$ 104.5
2024	95.8
2025	87.9
2026	79.7
2027	66.8
Thereafter	267.9
Total operating lease liabilities on an undiscounted basis	702.6
Present value discount	(187.4)
Present value of operating lease liabilities	\$ 515.2



(11) <u>Programming and Other Direct Costs of Services</u>

Programming and other direct costs of services include programming and copyright costs, interconnect and access costs, equipment costs, which primarily relate to 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,							
	2022		2021		2020			
	 in millions							
Programming and copyright	\$ 360.3	\$	441.4	\$	389.3			
Interconnect	350.3		347.2		270.1			
Equipment and other (a)	499.9		425.8		201.0			
Total programming and other direct costs	\$ 1,210.5	\$	1,214.4	\$	860.4			

(a) Amounts for 2022, 2021, and 2020 include \$370 million, \$309 million, and \$118 million, respectively, related to equipment cost of goods sold.

(12) 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, vehicle-related, travel and entertainment and other operating-related costs; and
- Share-based compensation expense that relates to (i) equity awards issued to our employees and Directors and (ii) certain bonus-related expenses that are paid in the form of equity.

Our other operating costs and expenses by major category are set forth below:

	 Year ended December 31,					
	2022		2021		2020	
		in	millions			
Personnel and contract labor	\$ 597.7	\$	575.1	\$	483.6	
Network-related	311.4		324.2		271.3	
Service-related	209.7		196.5		161.7	
Commercial	226.0		229.4		168.1	
Facility, provision, franchise and other	542.3		460.1		359.1	
Share-based compensation expense	93.5		118.1		97.5	
Total other operating costs and expenses	\$ 1,980.6	\$	1,903.4	\$	1,541.3	

(13) 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.

The components of our loss before income taxes are as follows:

	 Year ended December 31,					
	 2022 2021		2021		2020	
	 in millions					
Domestic (a)	\$ (97.6)	\$	(85.7)	\$	(67.3)	
Foreign (b) (c)	 (17.8)		(228.8)		(770.9)	
Total	\$ (115.4)	\$	(314.5)	\$	(838.2)	

(a) Liberty Latin America is considered a stand-alone Bermuda entity.

- (b) Amounts for the year ended December 31, 2022, include a goodwill impairment charge of \$555 million and a \$13 million impairment associated with a cost method investment, both of which occurred at our C&W Caribbean segment. Amounts for the year ended December 31, 2021, include a goodwill impairment charge of \$605 million and a \$41 million impairment associated with a cost method investment, both of which occurred at our C&W Caribbean segment. Amounts for the year ended December 31, 2020, include goodwill impairment charges of \$177 million and \$99 million at our C&W Panama and C&W Caribbean reporting units.
- (c) For the year ended December 31, 2022, significant jurisdictions that comprise the "foreign" component of our loss before income taxes include Bahamas, Barbados, British Virgin Islands, Chile, Colombia, Costa Rica, Curacao, Jamaica, the Netherlands, Panama, Puerto Rico, Spain, Trinidad, U.S. Virgin Islands, the U.K. and the U.S. For the year ended December 31, 2021, significant jurisdictions that comprise the "foreign" component of our loss before income taxes include Bahamas, Barbados, British Virgin Islands, Chile, Costa Rica, Curacao, Jamaica, the Netherlands, Panama, Puerto Rico, Trinidad, U.S. Virgin Islands, the U.K. and the U.S. For the year ended December 31, 2020, significant jurisdictions that comprise the "foreign" component of our loss before income taxes include Bahamas, Barbados, British Virgin Islands, Chile, Costa Rica, Curacao, Jamaica, the Netherlands, Panama, Puerto Rico, Trinidad, U.S. Virgin Islands, the U.K. and the U.S. For the year ended December 31, 2020, significant 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.S.

Income tax benefit (expense) consists of:

	Current		Deferred	Total
			in millions	
Year ended December 31, 2022:				
Domestic	\$	—	\$ —	\$ _
Foreign		(93.2)	6.7	 (86.5)
Total	\$	(93.2)	\$ 6.7	\$ (86.5)
Year ended December 31, 2021:				
Domestic	\$	—	\$ —	\$ _
Foreign		(85.5)	(87.8)	 (173.3)
Total	\$	(85.5)	\$ (87.8)	\$ (173.3)
Year ended December 31, 2020:				
Domestic	\$	—	\$ —	\$ —
Foreign		(35.9)	65.1	 29.2
Total	\$	(35.9)	\$ 65.1	\$ 29.2

Income tax benefit (expense) attributable to our 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,			1,
		2022 2021		2020
			in millions	
Computed expected tax benefit (a)	\$		\$ —	\$
Permanent differences (b)		46.8	(13.6)	(17.7)
Basis and other differences in the treatment of items associated with investments in Liberty Latin America entities		(1.2)	1.4	0.5
(Increases) Decreases in valuation allowances		188.8	(321.6)	(223.0)
Expiration of deferred tax assets with full valuation allowance		(12.7)	(129.5)	_
International rate differences (a) (c)		49.9	82.2	180.7
Changes in uncertain tax positions		(24.5)	(1.0)	33.4
Enacted tax law and rate changes (d) (e) (f)		(162.2)	393.7	149.4
Effect of non-deductible goodwill impairments		(174.3)	(201.2)	(70.3)
Effect of tax credits		15.9	38.7	_
Withholding tax		(13.3)	(23.4)	(40.0)
Other, net		0.3	1.0	16.2
Total income tax benefit (expense)	\$	(86.5)	\$ (173.3)	\$ 29.2

(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 2022, 2021, and 2020. 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 Caribbean Community (CARICOM) treaty income, limitations on deductible management fees, or executive compensation, among others.

- (c) The 2022 corporate tax rates applicable to our primary material jurisdictions are as follows: Bahamas, 0%; Barbados, 1% to 5.5%; British Virgin Islands, 0%; Chile, 27%; Colombia, 35%; Costa Rica, 30%; Curacao, 22%; Jamaica, 33.33%; the Netherlands, 25.8%; Panama, 25%; Puerto Rico, 37.5%; Spain, 25%; Trinidad, 30%; U.S. Virgin Islands, 23.10%; the U.K. 19% and the U.S., 21%.
- (d) On June 10, 2021, the United Kingdom Finance Bill of 2021 enacted an increase in the main corporate tax rate to 25%, with effect from April 1, 2023. While deferred tax assets were re-valued as of enactment, 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) On September 14, 2021, legislation was enacted in Colombia. Changes include an increase in the corporate income tax to 35% from January 1, 2022. Substantially all of the impact of this rate change on our deferred tax balances was recorded during the third quarter of 2021 when the change in law was enacted.
- (f) On December 27, 2021, the Netherlands enacted legislation increasing the top corporate income tax rate to 25.8%. with effect from January 1, 2022. 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 Netherlands.

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,			
	2022		2021		
		in millions			
eferred tax assets	\$	31.0 \$	\$ 25.1		
ferred tax liabilities	(6	91.2)	(692.0)		
Net deferred tax liability	\$ (6	60.2) 5	\$ (666.9)		

The tax effects of temporary differences that give rise to significant portions of the deferred tax assets and deferred tax liabilities are presented below:

	Decem	ıber 31,	,
	2022		2021
	 in mi	illions	
Deferred tax assets:			
Net operating losses, credits and other carryforwards	\$ 2,276.4	\$	2,439.1
Deferred revenue	13.7		19.3
Unrealized gains and losses	16.0		9.9
Accrued expenses	32.6		4.1
Other future deductible amounts	1.0		0.2
Deferred tax assets	 2,339.7		2,472.6
Valuation allowance	(1,780.4)		(1,940.3)
Deferred tax assets, net of valuation allowance	559.3		532.3
Deferred tax liabilities:			
Investments	(255.4)		(221.5)
Intangible assets	(663.5)		(690.7)
Property and equipment, net	(298.5)		(286.2)
Un-remitted foreign earnings	<u>(2.1)</u>		(0.8)
Deferred tax liabilities	(1,219.5)		(1,199.2)
Net deferred tax liability	\$ (660.2)	\$	(666.9)

The changes in our valuation allowances are summarized below:

	Year ended December 31,						
	2022		2021	021			
	in millions						
Balance at January 1	\$ 1,940.3	\$	1,630.9	\$	1,402.8		
Net tax expense (benefit) related to operations	(188.8)		321.6		223.0		
Translation adjustments	(6.2)		(9.1)		0.3		
Business acquisitions and other	35.1		(3.1)		4.8		
Balance at December 31	\$ 1,780.4	\$	1,940.3	\$	1,630.9		

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, 2022 are as follows:

Country	Tax loss carryforward		Related tax asset	Expiration date				
	in mill	ions						
U.K.:								
Amount attributable to capital losses	\$ 4,459.6	\$	1,114.9	Indefinite				
Amount attributable to net operating losses	1,343.4	1,343.4 335.9		Indefinite				
Barbados	925.2	2 23.5		23.5		925.2 23.5		2023 - 2029
Jamaica	405.7		135.1	Indefinite				
Curacao	177.0		41.6	2023 - 2032				
Puerto Rico	275.4		85.2	2024 - 2030				
U.S.	101.7		23.1	2025-Indefinite				
Panama	64.0		16.0	2023 - 2027				
U.S. Virgin Islands	41.3		9.6	2033-Indefinite				
Colombia	17.6		6.2	Indefinite				
Other	32.6		8.9	Various				
Total	\$ 7,843.5	\$	1,800.0					

As of December 31, 2022, a valuation allowance of \$1,672 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 2022 and 2021, we have foreign tax credit carryforwards of \$13 million and \$13 million, respectively, which are available in the U.S. Substantially all credits not utilized will expire at the end of 2032.

In 2022 and 2021, we have alternative minimum tax credit carryforwards in the amounts of \$47 million and \$52 million, respectively, attributable to our operations in Puerto Rico for which the current tax law provides no period of expiration.

In 2022, we have research and development credit carryforwards of \$19 million and \$6 million available in Puerto Rico and the U.S., respectively. With respect to such credits in Puerto Rico, current law provides no period of expiration. In the U.S., substantially all credits not utilized will expire at the end of 2041.

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 Colombia and 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,				
	2	2022	2021	2020		
		millions				
Balance at January 1	\$	12.0 \$	32.0 \$	64.1		
Additions for tax positions of prior years		12.7	1.0	2.6		
Effects of business acquisitions		—				
Additions based on tax positions related to the current year		14.5	—	1.6		
Lapse of statute of limitations		(1.7)	(3.4)	(16.7)		
Foreign currency translation		0.1	(2.4)	(0.8)		
Decrease for settlement with tax authorities			(3.9)	—		
Reductions for tax positions of prior years		_	_	(18.8)		
Reclassification to liabilities associated with assets held for sale			(11.3)			
Balance at December 31	\$	37.6 \$	12.0 \$	32.0		

No assurance can be given that any of these unrecognized tax benefits will be recognized or realized.

As of December 31, 2022, all of our unrecognized tax benefits would have a favorable impact on our effective income tax rate if ultimately recognized.

During 2023, 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, 2022. 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 2023. No assurance can be given as to the nature or impact of any changes in our unrecognized tax positions during 2023.

During 2022, 2021 and 2020, our income tax benefit (expense) includes interest income (expense) of (\$0.2 million), (\$1 million) and \$2 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 \$13 million at December 31, 2022 and 2021, respectively.

(14) Defined Benefit Plans

We maintain various funded defined benefit plans for certain current and past employees, including (i) the CWSF, which is C&W's largest defined benefit plan, (ii) plans in the Bahamas, Jamaica, Barbados, Curacao and Puerto Rico and (iii) certain other defined benefit arrangements in the U.K., which are governed by individual trust deeds. These defined benefit plans are closed to new entrants, and existing participants do not accrue any additional benefits.

Defined benefit plan amounts included in our consolidated balance sheets are as follows:

	December 31,			
	 2022		2021	
	 in millions			
Other assets, net	\$ 119.4	\$	218.8	
Other long-term liabilities	 (146.6)		(216.4)	
Net pension asset (liability)	\$ (27.2)	\$	2.4	

The table below provides summary information for our defined benefit plans:

	December 31,			
	2022		2021	
	in millions			
Projected benefit obligations (a)	\$ (1,54	3.7) \$	(2,289.5)	
Fair value of plan assets (b)	1,51	6.5	2,291.9	
Net pension asset (liability)	\$ (2	7.2) \$	2.4	

(a) The weighted average discount rate used in determining our benefit obligations was 6.0% and 2.8% at December 31, 2022 and 2021, respectively. A 1.0% increase or decrease in the weighted average discount rate would have a (\$64 million) or \$91 million impact, respectively, on the projected benefit obligations, net of the annuity insurance policies (as described further below).

(b) Our plan assets primarily comprise investments in debt securities, equity securities and insurance contracts. The fair value of plan assets at December 31, 2022 includes \$659 million, \$116 million and \$742 million of assets that are valued based on Level 1, Level 2 and Level 3 inputs, respectively, of the fair value hierarchy (as further described in note 6). The fair value of plan assets at December 31, 2021 includes \$952 million, \$209 million and \$1,131 million of assets that are valued based on Level 1, Level 2 and Level 3 inputs, respectively.

At December 31, 2022, approximately 67% of the CWSF's liabilities, 53% of the Jamaican plan's liabilities and 100% of the UTS liabilities are covered through the purchase of insurance annuity 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.

(15) Share-based Compensation

Equity Incentive Plans

In 2017, we adopted the Employee Incentive Plan and the Nonemployee Director Incentive Plan, under which options, SARs, RSUs, cash awards, performance awards or any combination of the foregoing may be granted. 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 75 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 six-month anniversary of the grant date and then vested at a rate of 6.25% each quarter thereafter over a four year term. SARs granted under the Employee Incentive Plan prior to 2020 expire seven years after the grant date. Awards granted during or after 2020 generally vest 33.3% on the anniversary of the grant date over a three year vesting term. SARs granted under the Employee Incentive Plan during or subsequent to 2020 expire ten years after the grant date. SARs issued under the Employee Incentive Plan 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.

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 share-based incentive awards granted:

	Year ended December 31,									
Assumptions used to estimate fair value of SARs and PSARs:		2022		2021		2020				
Risk-free interest rate	2.0	2.0 - 3.7%		0.8 - 1.4%		0.8 - 1.4%		0.8 - 1.4%		0.2 - 0.9%
Expected life	6.0 - 1	6.0 - 10.0 years		6.0 - 10.0 years		6.0 - 10.0 years		4.5 - 7.0 years		
Expected volatility	40.2	40.2 - 49.8%		36.9 - 46.8%		36.9 - 46.8%		36.9 - 46.8% 48.1		48.1 - 90.6%
Expected dividend yield	1	none		none		none		none		
Weighted average grant-date fair value per share of awards granted:										
SARs	\$	4.91	\$	6.43	\$	5.39				
PSARs	\$	5.92	\$	6.88	\$	—				
RSUs	\$	9.49	\$	13.96	\$	10.07				
PSUs	\$	6.11	\$	11.57	\$	_				

As of December 31, 2022, we have \$102 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 years.

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.

PSUs

In early 2020, our compensation committee approved the 2020 PSUs, which represent the right to receive one Liberty Latin America Class A or Class C common share, as applicable, subject to performance and vesting. Because of the COVID-19 pandemic, and the difficulty in providing clarity on our then expected results over a two-year performance period for the 2020 PSUs, the compensation committee delayed setting performance targets for the 2020 PSUs until February 2021. During February 2021, the compensation committee formally communicated the financial and operational targets for earning the 2020 PSUs thereby establishing a grant date for the 2020 PSUs. The performance criteria was based upon the achievement of an Adjusted OIBDA CAGR during the period from January 1, 2021 through December 31, 2021. The earned 2020 PSUs vested 50% on each of March 15, 2022 and September 15, 2022.

During 2022, we granted a total of 0.3 million Class B PSUs, 0.1 million of which vested immediately and the remainder of which will vest in March 2023 based upon the achievement of certain 2022 performance objectives.

PSARs

2021 PSARs. During 2021 and 2022, certain key employees received the 2021 PSARs. Each award represents the right to receive a payment in shares or, if the compensation committee so determines, cash or a combination of cash and shares, equal to the excess of the fair market value of the common shares on the day of exercise over the exercise price, subject to performance and vesting. The 2021 PSARs, have a term of ten years, a performance period from January 1, 2021 and ending December 31, 2023 and will vest on March 16, 2024 based on the continued employment of the recipient through this date. The 2021 PSARs include performance conditions based on the achievement of individual qualitative objectives during the performance period. As of December 31, 2022 and 2021, we had 2.8 million Class A PSARs and 5.7 million Class C PSARs, and 2.7 million Class A PSARs and 5.5 million Class C PSARs outstanding, respectively.

Share-based Incentive Awards

The following tables summarize the share-based incentive award activity during 2022 with respect to Liberty Latin America awards held by our employees and our Directors.

	Weighted Number of average shares base price		Weighted average remaining contractual term	Aggre	gate intrinsic value	
SARs – Class A shares	in millions			in years	in	millions
Outstanding at January 1, 2022	6.4	\$	16.21			
Granted	3.2	\$	9.67			
Forfeited	(0.5)	\$	16.46			
Outstanding at December 31, 2022	9.1	\$	13.91	6.1	\$	
Exercisable at December 31, 2022	4.2	\$	17.32	3.6	\$	

	Number of shares	Weighted average base price	Weighted average remaining contractual term	Aggregate intrinsic value	
SARs – Class C shares	in millions		in years		in millions
Outstanding at January 1, 2022	12.8	\$ 16.27			
Granted	6.4	\$ 9.61			
Forfeited	(0.9)	\$ 16.53			
Outstanding at December 31, 2022	18.3	\$ 13.92	6.1	\$	0.1
Exercisable at December 31, 2022	8.4	\$ 17.35	3.6	\$	_

	Number of shares	Weighted average rant-date fair llue per share	Weighted average remaining contractual term
RSUs – Class A shares	in millions		in years
Outstanding at January 1, 2022	1.1	\$ 13.40	
Granted	2.6	\$ 9.66	
Forfeited	(0.1)	\$ 11.53	
Released from restrictions	(1.5)	\$ 10.82	
Outstanding at December 31, 2022	2.1	\$ 10.74	2.1



	ave Number of grant-d		Weighted average ınt-date fair ue per share	Weighted average remaining contractual term
RSUs – Class C shares	in millions			in years
Outstanding at January 1, 2022	2.3	\$	13.54	
Granted	5.5	\$	9.49	
Forfeited	(0.2)	\$	11.57	
Released from restrictions	(3.3)	\$	10.14	
Outstanding at December 31, 2022	4.3	\$	11.04	2.1

(16) Accumulated Other Comprehensive Loss

Accumulated other comprehensive loss included in our consolidated balance sheets and statements of equity reflects 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:

	Liber	ty Latin America sha			
	Foreign currency translation adjustments	Pension- Accumulated related other adjustments and comprehensive other loss		Non-controlling interests	Total accumulated other comprehensive loss
			in millions		
Balance at January 1, 2020	\$ (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)
Other comprehensive earnings	5.7	30.2	35.9	(0.9)	35.0
Balance at December 31, 2021	(137.5)	47.8	(89.7)	(10.5)	(100.2)
Other comprehensive loss	53.8	(113.3)	(59.5)	(0.5)	(60.0)
Balance at December 31, 2022	\$ (83.7)	\$ (65.5)	\$ (149.2)	\$ (11.0)	\$ (160.2)



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) in millions		Net-of-tax amount	
Year ended December 31, 2022:						
Foreign currency translation adjustments	\$	53.1	\$		\$	53.1
Pension-related adjustments and other		(114.0)		0.9		(113.1)
Other comprehensive loss		(60.9)		0.9		(60.0)
Other comprehensive loss attributable to noncontrolling interests (a)		0.5				0.5
Other comprehensive loss attributable to Liberty Latin America shareholders	\$	(60.4)	\$	0.9	\$	(59.5)
Year ended December 31, 2021:						
Foreign currency translation adjustments	\$	4.8	\$		\$	4.8
Pension-related adjustments and other		34.4		(4.2)		30.2
Other comprehensive earnings		39.2		(4.2)		35.0
Other comprehensive loss attributable to noncontrolling interests (a)		0.9		_		0.9
Other comprehensive earnings attributable to Liberty Latin America shareholders	\$	40.1	\$	(4.2)	\$	35.9
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)

(a) Amounts represent the noncontrolling interest owners' share of our foreign currency translation adjustments and pension-related adjustments.

(17) <u>Equity</u>

Share Capital

A summary of the changes in our share capital during 2022, 2021 and 2020 is set forth in the table below:

	Class A	Class B	Class C
		in millions	
Balance at January 1, 2020	48.8	1.9	131.2
Rights Offering	—	—	49.0
Repurchase of Liberty Latin America common shares	(0.3)	—	(0.7)
Issued in connection with share-based compensation plans and other	0.5	—	1.6
Balance at December 31, 2020	49.0	1.9	181.1
Balance at January 1, 2021	49.0	1.9	181.1
Repurchase of Liberty Latin America common shares	(4.3)	—	(0.7)
Issued in connection with share-based compensation plans and other	0.8	—	1.9
Balance at December 31, 2021	45.5	1.9	182.3
Balance at January 1, 2022	45.5	1.9	182.3
Repurchase of Liberty Latin America common shares	(4.5)	_	(14.8)
Issued in connection with share-based compensation plans and other	1.7	0.2	3.8
Balance at December 31, 2022	42.7	2.1	171.3

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.

Contribution from noncontrolling interest owners

During 2021, we received an equity contribution of \$47 million from the noncontrolling interest owner of Liberty Servicios, the proceeds of which were used to partially fund the Liberty Telecomunicaciones Acquisition. This contribution represented their pro-rata share of the equity portion of the purchase price for the Liberty Telecomunicaciones Acquisition, and has been reflected as a contribution from noncontrolling interest owners in our consolidated statement of equity, and as a financing activity in our consolidated statement of cash flows.

Share Repurchase Program

On March 16, 2020, our Directors approved the 2020 Share Repurchase Program, which authorize 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. On February 22, 2022, our Directors approved the 2022 Share Repurchase Program. This program authorizes us to repurchase from time to time up to an additional \$200 million of our Class A common shares and/or Class C common shares through December 2024. The 2022 Share Repurchase Program does not obligate us to repurchase any of our Class A or C common shares. Under the 2022 Share Repurchase Program, we may repurchase our common shares 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, 2022, the remaining amount authorized for share repurchases under the 2022 Share Repurchase Program was \$57 million.



Rights Offering

On August 5, 2020, our Directors authorized the Rights Distribution to holders of Class C Rights to acquire LILAK 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 of Liberty Latin America 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.

Capped Calls

In connection with the issuance of our Convertible Notes, we entered into the Capped Calls, which 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 have a current strike price of \$20.65 per Class C common share and the cap price per Class C common share ranges from \$28.00 to \$29.50, subject to anti-dilution adjustments substantially similar to those applicable to the conversion rate of the Convertible Notes, and expire on July 15, 2024. 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.

(18) Earnings (Loss) per Share

Basic EPS is computed by dividing net earnings (loss) attributable to Liberty Latin America shareholders by the weighted average number of Liberty Latin America Shares outstanding 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:

	Ye	Year ended December 31,				
	2022	2021	2020			
		in millions				
Weighted average shares outstanding – basic and dilutive	222.6	232.6	195.5			

We reported losses attributable to Liberty Latin America shareholders during 2022, 2021 and 2020. As a result, the potentially dilutive effect at December 31, 2022, 2021 and 2020 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 and PSARs, 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 in each of the years presented, (ii) the aggregate number of shares issuable pursuant to outstanding options, SARs and RSUs of approximately 35.4 million, 24.7 million and 19.1 million, respectively, and (iii) the aggregate number of shares potentially issuable under our Convertible Notes, the Capped Calls provide 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.



(19) Commitments and Contingencies

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.

Regulatory Issues. 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.

(20) Segment Reporting

Our reportable segments derive their revenue primarily from residential and B2B services, including video, broadband internet, fixed-line telephony and mobile services. Our corporate category includes our corporate operations, which derive revenue from mobile handset insurance services. We generally identify our reportable segments as those operating segments that represent 10% or more of our revenue, Adjusted OIBDA or total assets.

During 2022, we completed an organizational change with respect to our C&W operations whereby management of certain subsidiaries of C&W, which primarily operate our subsea and fiber optic cable networks, now report directly to the chief operating decision maker of Liberty Latin America and no longer report to the former C&W Caribbean and Networks segment decision maker. As a result, the aforementioned subsidiaries of C&W are now a separate operating and reportable segment, herein referred to as the C&W Networks & LatAm segment. In connection with this change, we have revised our segment presentation for all periods to separately present (i) C&W Caribbean and (ii) C&W Networks & LatAm. Accordingly, as of December 31, 2022, unless otherwise specified below, our reportable segments are as follows:

- C&W Caribbean;
- C&W Panama;
- C&W Networks & LatAm;
- Liberty Puerto Rico;
- · Liberty Costa Rica; and
- VTR (through September 30, 2022, see note 8).

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. We account for intersegment sales as if they were to third parties, that is, at current market prices.

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. 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 or loss and to earnings or 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 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. The noncontrolling owners' interests in the operating results of (i) certain subsidiaries of (a) C&W and (b) Liberty Puerto Rico, and (ii) Liberty Costa Rica are reflected in net earnings or loss attributable to noncontrolling interests in our consolidated statements of operations.

	Revenue					
	Year ended December 31,					
	2022 2021			2020		
			in millions			
C&W Caribbean	\$	1,436.8	\$ 1,389.9	\$ 1,354.1		
C&W Panama		642.7	568.1	522.5		
C&W Networks & LatAm		450.8	431.9	405.2		
Liberty Puerto Rico		1,470.1	1,449.7	619.6		
Liberty Costa Rica		441.3	258.5	140.0		
VTR		450.6	787.5	809.0		
Corporate		22.2	21.6	2.7		
Intersegment eliminations		(99.4)	(92.4)	(70.7)		
Total	\$	4,815.1	\$ 4,814.8	\$ 3,782.4		

		Adjusted OIBDA								
			Year ended December 31							
		2022		2021		2020				
	_			in millions						
C&W Caribbean	\$	535.2	\$	482.9	\$	473.4				
C&W Panama		188.8		200.1		177.2				
C&W Networks & LatAm		276.3		264.3		239.8				
Liberty Puerto Rico		538.4		580.9		270.4				
Liberty Costa Rica		134.7		80.2		54.9				
/TR		115.6		259.6		307.0				
Corporate		(71.5)		(52.9)		(44.5)				
Total	\$	1,717.5	\$	1,815.1	\$	1,478.2				

The following table provides a reconciliation of total Adjusted OIBDA to operating income and to loss before income taxes:

		Year ended December 31,				
		2022	2021	2020		
		in millions				
Total Adjusted OIBDA	\$	1,717.5 \$	1,815.1	\$ 1,478.2		
Share-based compensation expense		(93.5)	(118.1)	(97.5)		
Depreciation and amortization		(910.7)	(964.7)	(918.7)		
Impairment, restructuring and other operating items, net		(619.2)	(665.0)	(375.3)		
Operating income		94.1	67.3	86.7		
Interest expense		(556.7)	(527.4)	(533.4)		
Realized and unrealized gains (losses) on derivative instruments, net		359.4	564.1	(352.7)		
Foreign currency transaction gains (losses), net		(194.3)	(319.6)	1.2		
Gains (losses) on debt modification and extinguishment, net		41.1	(57.2)	(45.1)		
Gain on disposal of the Chile JV Entities		169.4	_	_		
Other income (expense), net		(28.4)	(41.7)	5.1		
Loss before income taxes	\$	(115.4) \$	(314.5)	\$ (838.2)		

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 expenditures, net, amounts included in our consolidated statements of cash flows. For additional information concerning capital additions financed under vendor financing, see note 7.

	Year ended December 31,						
	2	2022		2021		2020	
			ir	millions			
C&W Caribbean	\$	230.7	\$	222.9	\$	200.1	
C&W Panama		98.4		88.9		70.4	
C&W Networks & LatAm		40.2		45.3		46.7	
Liberty Puerto Rico		233.5		219.2		97.3	
Liberty Costa Rica		65.5		45.0		24.2	
VTR		107.3		199.1		172.2	
Corporate		40.7		35.5		20.2	
Total property and equipment additions		816.3		855.9		631.1	
Assets acquired under capital-related vendor financing arrangements		(161.1)		(100.5)		(99.1)	
Changes in current liabilities related to capital expenditures and other		4.9		(19.1)		33.8	
Total capital expenditures, net	\$	660.1	\$	736.3	\$	565.8	

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 is set forth in the tables below and includes the following categories:

- residential fixed subscription and residential mobile services revenue, which includes amounts received from subscribers for ongoing fixed and airtime services, respectively;
- · residential fixed non-subscription revenue, which primarily includes interconnect and advertising revenue;
- B2B service revenue, which 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, which 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 e	nde	d Decemb	er 3	31, 2022				
	С	C&W aribbean	C&W 'anama	N	C&W Networks & LatAm	P	Liberty uerto Rico		Liberty osta Rica		VTR	Co	rporate (a)	Intersegment Eliminations	Total
									in million	s					
Residential revenue:															
Residential fixed revenue:															
Subscription revenue	\$	484.3	\$ 102.8	\$	—	\$	457.3	\$	137.6	\$	392.3	\$	—	\$ —	\$ 1,574.3
Non-subscription revenue		32.6	7.3		_		22.1		5.1		8.9		_	—	76.0
Total residential fixed revenue		516.9	 110.1		_		479.4		142.7		401.2		_	 _	 1,650.3
Residential mobile revenue:															
Service revenue		314.5	218.6		_		448.0		195.1		25.8		_	—	1,202.0
Interconnect, inbound roaming, equipment sales and other (b)		67.9	49.5				268.4		64.8		2.9		22.2		475.7
Total residential mobile revenue		382.4	 268.1		_		716.4		259.9		28.7		22.2	_	 1,677.7
Total residential revenue		899.3	 378.2		_		1,195.8		402.6		429.9		22.2	_	 3,328.0
B2B revenue (c)		537.5	264.5		450.8		220.6		38.7		20.7		_	(99.4)	1,433.4
Other revenue (d)	-	_	_		_		53.7				_		_		53.7
Total	\$	1,436.8	\$ 642.7	\$	450.8	\$	1,470.1	\$	441.3	\$	450.6	\$	22.2	\$ (99.4)	\$ 4,815.1

(a) Amount relates to services we now provide for mobile handset insurance following the AT&T Acquisition.

(b) The total amount includes \$257 million of revenue from sales of mobile handsets and other devices.



- (c) The total amount includes \$26 million of revenue from sales of mobile handsets and other devices to B2B mobile customers.
- (d) Amount relates to revenue received from the FCC.

								Year e	nde	d Decemb	er :	31, 2021				
	C	C&W Caribbean]	C&W Panama	ľ	C&W Networks & LatAm	F	Liberty Puerto Rico		Liberty osta Rica		VTR	C	orporate (a)	Intersegment Eliminations	Total
										in million	S					
Residential revenue:																
Residential fixed revenue:																
Subscription revenue	\$	473.4	\$	87.9	\$	—	\$	438.2	\$	138.5	\$	685.1	\$	_	\$ —	\$ 1,823.1
Non-subscription revenue		34.6		9.5				19.3		6.2		14.9		_		84.5
Total residential fixed revenue		508.0		97.4		_		457.5		144.7		700.0		_	 _	 1,907.6
Residential mobile revenue:																
Service revenue		300.2		176.4		_		480.8		72.7		48.0		_	—	1,078.1
Interconnect, inbound roaming, equipment sales and other (b)		63.9		44.5				253.5		27.1		7.3		21.6	_	417.9
Total residential mobile revenue		364.1		220.9		_		734.3		99.8		55.3		21.6	 _	 1,496.0
Total residential revenue		872.1		318.3			_	1,191.8		244.5		755.3		21.6	_	3,403.6
B2B revenue (c)		517.8		249.8		431.9		220.4		14.0		32.2			 (92.4)	 1,373.7
Other revenue (d)					-			37.5	_		_				 	 37.5
Total	\$	1,389.9	\$	568.1	\$	431.9	\$	5 1,449.7	\$	258.5	\$	787.5	\$	21.6	\$ (92.4)	\$ 4,814.8

(a) Amount relates to services we now provide for mobile handset insurance following the AT&T Acquisition.

(b) The total amount includes \$219 million of revenue from sales of mobile handsets and other devices.

(c) The total amount includes \$33 million of revenue from sales of mobiles handsets and other devices to B2B mobile customers.

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

							Year	end	ed Decem	ber	31, 2020			
	C&W Caribbe		C&W Panama	C& Networ LatA	rks &		Liberty Puerto Rico		Liberty osta Rica		VTR	Corporate	ntersegment Eliminations	Total
									in millio	ns				
Residential revenue:														
Residential fixed revenue:														
Subscription revenue	\$ 46	7.0	\$ 85.6	\$	—	\$	377.4	\$	134.2	\$	696.3	\$ 	\$ —	\$ 1,760.5
Non-subscription revenue	4	2.2	11.8		—		17.7		5.8		18.5			96.0
Total residential fixed revenue	50	9.2	97.4		_		395.1		140.0		714.8	 _	_	 1,856.5
Residential mobile revenue:														
Service revenue	29	4.1	182.4		—		82.7		—		55.7	—	—	614.9
Interconnect, inbound roaming, equipment sales and other (a)		4.4	41.0		_		46.3		_		8.2	2.7		142.6
Total residential mobile revenue	33	8.5	223.4		_		129.0		_		63.9	2.7	_	757.5
Total residential revenue	84	7.7	320.8		_		524.1	_	140.0		778.7	2.7	_	 2,614.0
B2B revenue (b)	50	6.4	201.7		405.2	_	89.8		—		30.3	 _	 (70.7)	 1,162.7
Other revenue		_			_		5.7					_	_	5.7
Total	\$ 1,35	4.1	\$ 522.5	\$ 4	405.2	\$	619.6	\$	140.0	\$	809.0	\$ 2.7	\$ (70.7)	\$ 3,782.4

(a) The total amount includes \$64 million of revenue from sales of mobile handsets and other devices.

(b) The total amount includes \$18 million of revenue from sales of mobiles handsets and other devices to B2B mobile customers.

Geographic Markets

The revenue from third-party customers for each of our geographic markets is set forth in the table below.

	Y	ear ended December	· 31,	
	2022	2021		2020
		in millions		
Puerto Rico	\$ 1,419.5	\$ 1,395.5	\$	606.5
Panama	639.7	565.9		520.1
Chile	450.6	787.5		809.0
Costa Rica	440.8	258.2		139.9
Jamaica	428.8	402.0		375.5
Networks & Latam (a)	369.4	355.8		349.4
The Bahamas	194.7	189.9		181.1
Trinidad and Tobago	159.3	158.2		160.6
Barbados	148.0	141.6		139.2
Curacao	134.0	137.9		143.9
Other (b)	430.3	422.3		357.2
Total	\$ 4,815.1	\$ 4,814.8	\$	3,782.4

(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 Networks & LatAm'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:

	Decem	ber 31,	
	 2022		2021
	in mi	llions	
Puerto Rico	\$ 1,166.7	\$	1,165.3
Networks & LatAm	634.3		675.6
Panama	481.3		351.4
Jamaica	372.4		349.0
The Bahamas	312.0		323.9
Costa Rica	250.7		216.1
Trinidad and Tobago	221.0		220.3
Barbados	164.6		175.5
Curacao	141.8		152.6
Other (a)	548.8		538.7
Total	\$ 4,293.6	\$	4,168.4

(a) 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.

(21) <u>Parent Company Financial Information</u>

		Decem	,	
		2022		2021
		in mi	llions	
ASSETS Current assets:				
Cash and cash equivalents	\$	23.5	¢	72.5
Other receivables – related-party	φ	169.5	φ	138.2
Prepaid expenses		1.3		1.7
Other current assets		0.2		3.4
Total current assets		194.5		215.8
Investments in consolidated subsidiaries		2,192.0		2,434.4
Total assets	\$	2,386.5	\$	2,650.2
LA DU PUECAND CHADEHOLDEDCUEV				
LIABILITIES AND SHAREHOLDERS' EQUITY Current liabilities:				
Related-party liabilities	\$	87.6	\$	62.0
Accrued liabilities and other	Ψ	7.0	Ψ	10.5
Total current liabilities		94.6	·	72.5
Long-term debt and finance lease obligations, net	_	374.5		357.7
Total liabilities		469.1		430.2
Shareholders' equity:				
Class A, \$0.01 par value; 500.0 million shares authorized; 51.8 million and 42.7 million shares issued and outstanding, respectively, at December 31, 2022; 50.1 million and 45.5 million shares issued and outstanding, respectively, at December 31, 2021		0.5		0.5
Class B, \$0.01 par value; 50.0 million shares authorized; 2.1 million shares issued and outstanding at December 31, 2022 and 1.9 million shares issued and outstanding at December 31, 2021	d	_		_
Class C, \$0.01 par value; 500.0 million shares authorized; 187.4 million and 171.3 million shares issued and outstanding, respectively, at December 31, 2022; 183.6 million and 182.3 million shares issued and outstanding, respectively, at December 31, 2021		1.9		1.8
Treasury shares, at cost; 25.3 million and 6.0 million shares, respectively		(243.4)		(74.0)
Additional paid-in capital		5,177.1		5,075.3
Accumulated deficit		(2,869.5)		(2,693.9)
Accumulated other comprehensive loss, net of taxes		(149.2)		(89.7)
Total shareholders' equity		1,917.4		2,220.0
Total liabilities and shareholders' equity	\$	2,386.5	\$	2,650.2

	Year ended December 31,				
	 2022 2021			2	2020
		in million	5		
Dperating costs and expenses:					
Other operating costs and expenses	\$ 12.4	\$	11.2	\$	11.9
Related-party charges and other operating items, net	29.3	3	37.3		33.1
Operating loss	 (41.7)	(4	8.5)		(45.0)
Non-operating income (expense):	 				
Interest expense	(24.8)	(2	23.8)		(22.0)
Other income (loss), net	(9.6)		0.6		1.7
	 (34.4)	(2	23.2)		(20.3)
Loss before equity in losses of consolidated subsidiaries	(76.1)	(7	(1.7)		(65.3)
Equity in losses of consolidated subsidiaries, net	(99.5)	(36	6.1)		(622.0)
Net loss	\$ (175.6)	\$ (43	57.8)	\$	(687.3)

	 2022	2021	2020
		in millions	
Cash flows from operating activities:			
Net loss	\$ (175.6) \$	(437.8) \$	(687.3)
Adjustments to reconcile net loss to net cash used by operating activities:			
Equity in losses of consolidated subsidiaries, net	99.5	366.1	622.0
Share-based compensation expense	3.9	2.3	2.7
Amortization of debt financing costs	16.8	15.7	14.8
Changes in operating assets and liabilities	 92.4	124.6	(8.2)
Net cash provided (used) by operating activities	 37.0	70.9	(56.0)
Cash flows from investing activities:			
Distribution and repayments from (Investments in and advances to) consolidated subsidiaries, net	 53.5	(128.7)	(511.7)
Net cash provided (used) by investing activities	 53.5	(128.7)	(511.7)
Cash flows from financing activities:			
Repayments of related-party debt		—	(101.1)
Borrowings of related-party debt	30.0	_	_
Repurchase of Liberty Latin America Shares	(170.4)	(63.0)	(9.5)
Issuance of Liberty Latin America common shares, net	_	—	347.0
Other financing activities, net	 0.9		—
Net cash provided (used) by financing activities	 (139.5)	(63.0)	236.4
Net decrease in cash, cash equivalents and restricted cash	(49.0)	(120.8)	(331.3)
	. /		()
Cash, cash equivalents and restricted cash:			
Beginning of year	 72.5	193.3	524.6
End of year	\$ 23.5 \$	72.5 \$	193.3

PART III

The following required information is incorporated by reference to our definitive proxy statement for our 2023 Annual General Meeting of Shareholders, which we intend to hold during the second quarter of 2023.

- 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

Our independent registered public accounting firm is KPMG LLP, Denver CO Auditor Firm ID: 185

We intend to file our definitive proxy statement for our 2023 Annual General Meeting of Shareholders with the Securities and Exchange Commission on or before May 1, 2023.

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PART IV

Item 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) (1) FINANCIAL STATEMENTS

The financial statements required under this Item begin on page <u>II-39</u> of this Annual Report on Form 10-K.

(a) (2) FINANCIAL STATEMENT SCHEDULES

All financial statement schedules have been omitted, since the required information is not applicable or is not present in amounts sufficient to require submission of the schedule, or because the information required is included in the consolidated financial statements and accompanying notes included in this Annual Report on Form 10-K.

(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):

- 3.1 <u>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)).</u>
- 3.2 <u>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)).</u>
- 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 Registration Rights Agreement dated October 17, 2018, by and between Liberty Latin America, SCPV LEO, L.P., SC ALV LEO, L.P., Sc ALV 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)).
- 4.5 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)).
- 4.6 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)).***
- 4.7 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).
- 4.8 Indenture dated March 30, 2021, between LCPR Senior Secured Financing Designated Activity Company, BNY Mellon Corporate Trustee Services Limited, as Trustee, The Bank of New York Mellon, London Branch as Paying Agent, The Bank of New York Mellon, London Branch as Registrar and Transfer Agent, and The Bank of Nova Scotia as Security Trustee relating to LCPR's 5.125% senior secured notes due 2029 (incorporated by reference to Exhibit 4.1 to Liberty Latin America's Quarterly Report on Form 10-Q for the quarter ended March 31, 2021 filed on May 5, 2021 (File No. 001-38335) (the May 2021 10-Q)).

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 <u>Tax Sharing Agreement, dated as of December 29, 2017, between Liberty Global and Liberty Latin America (incorporated by</u> reference to Exhibit 10.1 to the January 2018 8-K).
- 10.4 <u>Sublease Agreement, dated as of December 29, 2017, between Liberty Global, Inc. and LiLAC Communications Inc.</u> (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 (Amended and Restated effective May 12, 2021) (incorporated by reference to Appendix A to Liberty Latin America's Definitive Proxy Statement on Schedule 14A filed on March 31, 2021 (File No. 001-38335)).+
- 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 guarter 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 Restricted Share Units Agreement under the Liberty Latin America 2018 Incentive Plan (incorporated by reference to Exhibit 10.2 to Liberty Latin America's Quarterly Report on Form 10-Q for the guarter ended June 30, 2022 filed on August 3, 2022 (File No. 001-38335) (the August 2022 10-Q)).+
- 10.18 Form of Share Appreciation Rights Agreement under the Liberty Latin America 2018 Incentive Plan (incorporated by reference to Exhibit 10.1 to the August 2022 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).***

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- 10.22 <u>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).***</u>
- 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)). +
- 10.26 Amended and Restated Credit Agreement dated March 22, 2021 and entered into between, among others, Liberty, Communications of Puerto Rico LLC and The Bank of Nova Scotia (incorporated by reference to Exhibit 10.1 to the May 2021 10-Q).
- 10.27 Additional Facility Joinder Agreement dated March 25, 2021 and entered into between, among others, LCPR Loan Financing LLC, LCPR Senior Secured Financing Designated Activity Company, and The Bank of Nova Scotia (incorporated by reference to Exhibit 10.2 to the May 2021 10-Q).
- 10.28 Form of Restricted Share Units Agreement under the Liberty Latin America 2018 Incentive Plan (Amended and Restated effective May 12, 2021) (incorporated by reference to Exhibit 10.2 to Liberty Latin America's Quarterly Report on Form 10-Q for the guarter ended June 30, 2021 filed on August 4, 2021 (File No. 001-38335) (the August 2021 10-Q)).+
- 10.29 Form of Performance Share Appreciation Rights Agreement (Phoenix) under the Liberty Latin America 2018 Incentive Plan (Amended and Restated effective May 12, 2021) (incorporated by reference to Exhibit 10.3 to the August 2021 10-Q)_+
- 10.30 Additional Facility Joinder Agreement, dated as of September 23, 2021, 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 10.30 to Liberty Latin America's Annual Report on Form 10-K for the year ended December 31, 2021 filed on February 23, 2022 (File No. 001-38335) (the 2021 10-K)).
- 10.31 Extension Amendment, dated as of September 23, 2021, 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 10.31 to the 2021 10-K).***

10.32

- Employment Agreement, effective as of July 16, 2021, between Liberty Latin America Ltd. and Rocio Lorenzo (incorporated by reference to Exhibit 10.1 to Liberty Latin America's Quarterly Report on Form 10-Q for the quarter ended March 31, 2022 filed on May 4, 2022 (File No. 001-38335)).+
- 10.33 Amended and Restated Employment Agreement, made and effective as of July 28, 2022, by and among Liberty Latin America Ltd., LiLAC Communications Inc. and Balan Nair (incorporated by reference to Exhibit 10.1 to Liberty Latin America's Quarterly. Report on Form 10-Q for the quarter ended September 30, 2022 filed on November 8, 2022 (File No. 001-38335) (the November 2022 10-Q)),+,***

10.34

2022 Unrestricted Share Award and Performance Share Unit Agreement, made as of July 28, 2022, by and between Liberty Latin America Ltd, and Balan Nair under the Liberty Latin America 2018 Incentive Plan (Amended and Restated effective May 12, 2021) (incorporated by reference to Exhibit 10.2 to the November 2022 10-Q).+

10.35 First Amendment to The Liberty Latin America Ltd. Director Deferred Compensation Plan,+*

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.SCH XBRL Inline Taxonomy Extension Schema Document.*

101.CAL XBRL Inline Taxonomy Extension Calculation Linkbase Document.*

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 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.
- + This document has been identified as a management contract or compensatory plan or arrangement.

Item 16. FORM 10-K SUMMARY

None.

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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: February 22, 2023

/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	Executive Chairman of the Board	February 22, 2023
Michael T. Fries		
/s/ BALAN NAIR	President, Chief Executive Officer and Director	February 22, 2023
Balan Nair	(Principal Executive Officer)	
/s/ ALFONSO DE ANGOITIA NORIEGA	Director	February 22, 2023
Alfonso de Angoitia Noriega		
/s/ CHARLES H.R. BRACKEN	Director	February 22, 2023
Charles H.R. Bracken		
/s/ MIRANDA CURTIS	Director	February 22, 2023
Miranda Curtis		
/s/ PAUL A. GOULD	Director	February 22, 2023
Paul A. Gould		
/s/ ROBERTA S. JACOBSON	Director	February 22, 2023
Roberta S. Jacobson		
/s/ BRENDAN PADDICK	Director	February 22, 2023
Brendan Paddick		
/s/ DANIEL SANCHEZ	Director	February 22, 2023
Daniel Sanchez		
/s/ ERIC L. ZINTERHOFER	Director	February 22, 2023
Eric L. Zinterhofer		
/s/ CHRISTOPHER NOYES	Senior Vice President and Chief Financial Officer	February 22, 2023
Christopher Noyes	(Principal Financial Officer)	
/s/ BRIAN ZOOK	Chief Accounting Officer	February 22, 2023
Brian Zook	(Principal Accounting Officer)	

FIRST AMENDMENT TO THE LIBERTY LATIN AMERICA LTD. DIRECTOR DEFERRED COMPENSATION PLAN (Effective as of March 1, 2020)

Liberty Latin America Ltd., an exempted Bermuda company limited by shares (the "*Company*"), having reserved the right under Section 10.1 of the Liberty Latin America Ltd. Non-Employee Director Deferred Compensation Plan, as effective as of March 1, 2020 (the "*Plan*"), to amend the Plan, does hereby amend the Plan, effective as of December 31, 2020, as follows:

- 1. The Plan is hereby renamed the "Liberty Latin America Ltd. Director Deferred Compensation Plan".
- 2. Section 1 of the Plan is hereby amended to read as follows:

"The Plan is unfunded and is maintained for the purpose of providing nonemployee directors and the Executive Chairman of the Board the opportunity to defer the receipt of certain compensation otherwise payable to such directors in accordance with the terms of the Plan."

3. Section 2.15 of the Plan is hereby amended to read as follows:

"<u>Eligible Director</u>' means a member of the Board who is a non-executive director or the Executive Chairman of the Board."

4. Section 2.18 of the Plan is hereby amended to read as follows:

"<u>Incentive Plan</u>' means, with respect to non-employee directors of the Board, the Liberty Latin America 2018 Nonemployee Director Incentive Plan and, with respect to the Executive Chairman of the Board, the Liberty Latin America 2018 Incentive Plan, as each may be amended from time to time, or such other incentive plan adopted by the Company and approved by the shareholders of the Company for the purpose of granting awards to such directors of the Company."

5. Section 2.23 of the Plan is hereby amended to read as follows:

"<u>Plan</u>' means the Liberty Latin America Ltd. Director Deferred Compensation Plan, as set forth herein, and as may be amended from time to time."

6. As amended hereby, the Plan is specifically ratified and reaffirmed.

IN WITNESS WHEREOF, Liberty Latin America Ltd. has approved and ratified and caused this First Amendment to the Liberty Latin America Ltd. Director Deferred Compensation Plan to be executed by its duly authorized officer in a number of copies, all of which shall constitute one and the same instrument, which may be sufficiently evidenced by any executed copy hereof, on this 9 day of December, 2020, to be effective as provided above.

LIBERTY LATIN AMERICA LTD.

By:<u>/s/ John Winter</u> Name: <u>John Winter</u> Title: <u>SVP, Chief Legal Officer</u>

Exhibit 21

Liberty Latin America Subsidiaries December 31, 2022

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
Cable & Wireless (Barbados) Limited	Barbados
C&W Networks (Greater Antilles) Inc.	Barbados
Cable Jamaica (Barbados) Limited	Barbados
Caribbean Premier Sports Ltd.	Barbados
CNL-CWC Networks Inc.	Barbados
Columbus Antilles (Barbados) Limited	Barbados
Columbus Capital (Barbados) Limited	Barbados
Columbus Curacao (Barbados) Inc.	Barbados
Columbus Eastern Caribbean (Barbados) Inc.	Barbados
Columbus Holdings (Barbados) SRL	Barbados
Columbus International Capital (Barbados) Inc.	Barbados
Columbus International Inc.	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
Karib Cable Inc.	Barbados
Liberty CWC Holdings Limited	Barbados
S.A.U.C.E. Holdings (Barbados) (I) Limited	Barbados
Cable and Wireless Network Services Limited	Bermuda
Liberty Latin America Ltd.	Bermuda
LiLAC Services Ltd.	Bermuda
New World Network International, Ltd	Bermuda
Columbus Networks (Bonaire), N.V.	Bonaire
United Telecommunications Services (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

Name	Country
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
Lion Insurance PIC Limited	Cayman Islands
LLA Chile SpA	Chile
Columbus Networks Zona Franca, Limitada	Colombia
Columbus Networks de Colombia, Limitada	Colombia
LLA Colombia S.A.S	Colombia
Liberty Servicios Fijos LY S.A	Costa Rica
Columbus Networks de Costa Rica S.R.L.	Costa Rica
Columbus Networks Wholesale (Costa Rica), Limitada	Costa Rica
LBT CT Communications S.A	Costa Rica
Liberty Telecomunicaciones de Costa Rica LY, S.A.	Costa Rica
Liberty Gestion de Infraestructura LY, 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
Γ.V. Distribution Services N.V.	Curacao
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

Name	Country
UTS Antilles Francaises S.A.R.L.	France - French Sint Maarten
United Telecommunications Services 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
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
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
Dutch United Telecommunication Services B.V.	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
Claro Panama S.A.	Panama
Claro Wireless Corp.	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
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
Cable & Wireless Puerto Rico, Inc.	Puerto Rico
Liberty Communications of Puerto Rico LLC	Puerto Rico
Cable & Wireless (Singapore) Pte Limited	Singapore
Liberty Iberoamérica S.L.U.	Spain
Liberty Iberoamérica Investment Holding 1, S.L.	Spain
Liberty Iberoamérica Investment Holding 2, S.L.	Spain

Name	Country
Cable & Wireless St. Kitts & Nevis Limited	St Kitts and Nevis
Cable and Wireless (St Lucia) Limited	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
United Telecommunications Services Eastern Caribbean Holding N.V.	St Maarten
United Telecommunications Services 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
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
CWC UK Finance Limited	UK-England & Wales
CWIG Limited	UK-England & Wales
CWIGroup Limited	UK-England & Wales
LGE Coral Holdco Limited	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
LLA Operations LLC	USA-Colorado
A.SUR NET, Inc.	USA-Delaware
ARCOS-1 USA, Inc.	USA-Delaware
Cable & Wireless Delaware 1, Inc.	USA-Delaware

Name	Country
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
Liberty Communications PR Holding 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 LLC	USA-Delaware
Petrel Communications Corporation	USA-Delaware
SkyOnline Maya-1, LLC	USA-Delaware
Cable & Wireless Communications LLC	USA-Virginia
Columbus Networks Venezuela S.A.	Venezuela
Cable and Wireless (BVI) Limited	Virgin Islands, British
Cable and Wireless (EWC) Limited	Virgin Islands, British
Broadband VI, LLC	Virgin Islands, United States

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the registration statements (No. 333-222515, 333-223322, 333-256046, 333-263858, 333-265018 and 333-266354) on Form S-8 of our reports dated February 22, 2023, with respect to the consolidated financial statements of Liberty Latin America Ltd. and subsidiaries and the effectiveness of internal control over financial reporting.

/s/ KPMG LLP

Denver, Colorado

February 22, 2023

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 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: February 22, 2023

/s/ Balan Nair

Balan Nair President and Chief Executive Officer

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: February 22, 2023

/s/ Christopher Noyes

Christopher Noyes Senior Vice President and Chief Financial Officer

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, 2022 (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, 2022 and December 31, 2021, and for the years ended December 31, 2022, 2021 and 2020.

Dated: February 22, 2023

/s/ Balan Nair

Balan Nair President and Chief Executive Officer

Dated: February 22, 2023

/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.