CBRE

CBRE GROUP, INC.

First Quarter 2019: Earnings Conference Call

MAY 8, 2019

FORWARD-LOOKING STATEMENTS

This presentation contains statements that are forward looking within the meaning of the Private Securities Litigation Reform Act of 1995. These include statements regarding CBRE's future growth momentum, operations, market share, business outlook, foreign currency impact and financial performance expectations. These statements are estimates only and actual results may ultimately differ from them. Except to the extent required by applicable securities laws, we undertake no obligation to update or publicly revise any of the forward-looking statements that you may hear today. Please refer to our first quarter earnings release, furnished on Form 8-K and our most recent annual report filed on Form 10-K, and in particular any discussion of risk factors or forward-looking statements therein, which are available on the SEC's website (www.sec.gov), for a full discussion of the risks and other factors that may impact any forward-looking statements that you may hear today. We may make certain statements during the course of this presentation, which include references to "non-GAAP financial measures," as defined by SEC regulations. Where required by these regulations, we have provided reconciliations of these measures to what we believe are the most directly comparable GAAP measures, which are attached hereto within the appendix.

CONFERENCE CALL PARTICIPANTS

Bob Sulentic

President and Chief Executive Officer

Jim Groch

Chief Financial Officer and Chief Investment Officer

Brad Burke

Investor Relations

1Q 2019 OVERVIEW

- Strong operating leverage across each of our three business segments
  - 29% growth in Adjusted EBITDA[1] and 46% growth in Adjusted EPS[2]
- Advisory Services and Global Workplace Solutions realized combined 190bps increase in Adjusted EBITDA margin on fee revenue[3]
- Advisory leasing led fee revenue growth, up 22% (local currency)
- Continued double-digit fee revenue growth (local currency) in Global Workplace Solutions
- Real estate development drove strong quarter for Real Estate Investments segment

See slide 26 for footnotes.

1Q 2019 FINANCIAL RESULTS

$ millions except per share figures

	Revenue	Fee Revenue[1]	EBITDA[2]	Adj. EBITDA[3]	EPS[4]	Adj. EPS[4,5]
1Q19	5,136	2,429	427	450	$0.48	$0.79
1Q18	4,674	2,277	358	348	$0.44	$0.54
USD	▲ 10%	▲ 7%	▲ 19%	▲ 29%	▲ 9%	▲ 46%
Local Currency	▲ 13%	▲ 10%	▲ 20%	▲ 31%		

– Advisory Services and Global Workplace Solutions segments experienced 22% combined Adjusted EBITDA growth supported by 190bps Adjusted EBITDA margin expansion

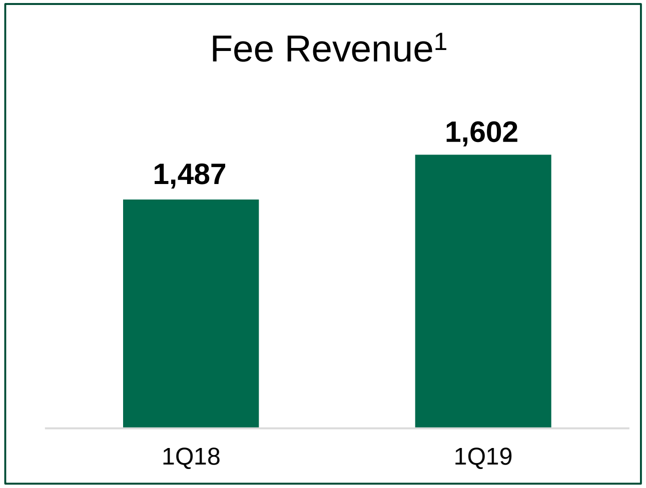
– Strong performance in Real Estate Investments segment

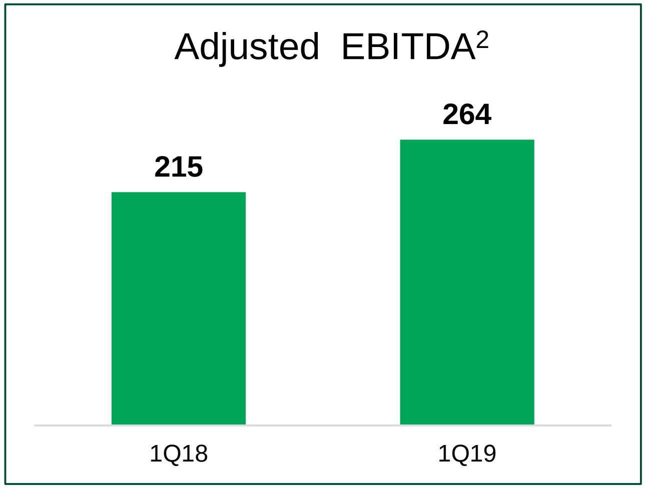
– First quarter was a particularly challenging FX comparison for revenue growth, but we expect that FX should have less impact over the balance of the year

See slide 26 for footnotes.

ADVISORY SERVICES

$ millions





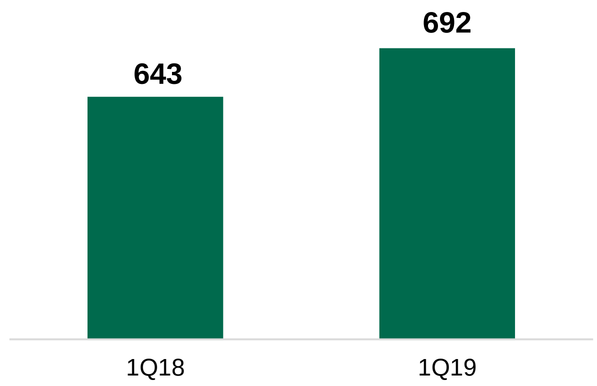
Line of Business	Fee Revenue	Growth USD	Growth Local Currency
Advisory Leasing	$623	▲ 20%	▲ 22%
Advisory Sales	$386	▼ -7%	▼ -5%
Property & Advisory Project Management	$288	▲ 6%	▲ 10%
Valuation	$138	▲ 3%	▲ 7%
Commercial Mortgage Origination	$121	▲ 13%	▲ 13%
Loan Servicing	$46	▲ 10%	▲ 10%
Advisory Services Total	**$1,602**	**▲ 8%**	**▲ 10%**

See slide 26 for footnotes.

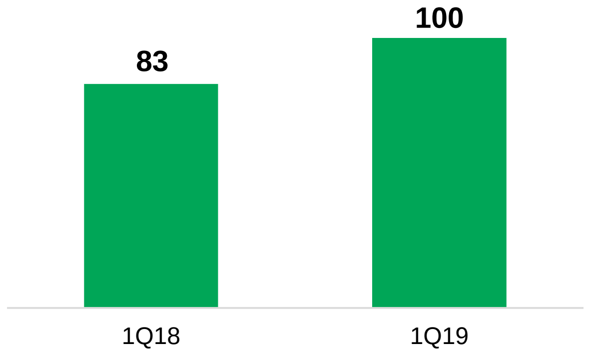
GLOBAL WORKPLACE SOLUTIONS

$ millions

Fee Revenue[1]



Adjusted EBITDA[2]



HIGHLIGHTS

- 20% (USD) Adjusted EBITDA growth driven by 12% (local currency) fee revenue growth and 150bps increase in Adjusted EBITDA margin on fee revenue
- Expanded relationship with Lowe's to provide Facilities Management for its 196 million square foot portfolio
- FacilitySource driving growth with clients that have large, widely dispersed operations

1Q19 REPRESENTATIVE CLIENTS

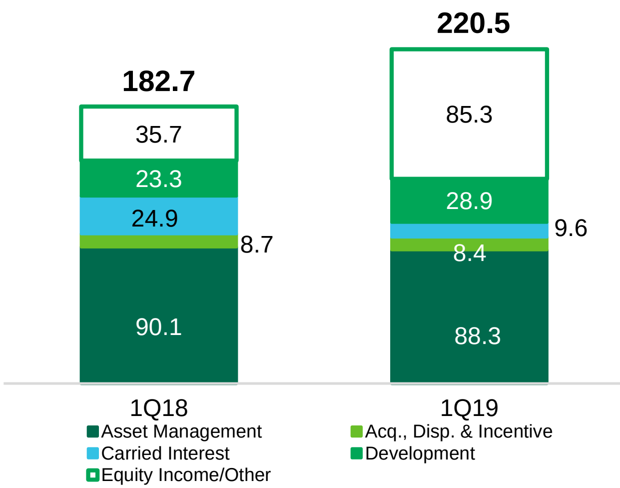
Lowe's, Providence Health & Services, Salesforce, Chevron

See slide 26 for footnotes.

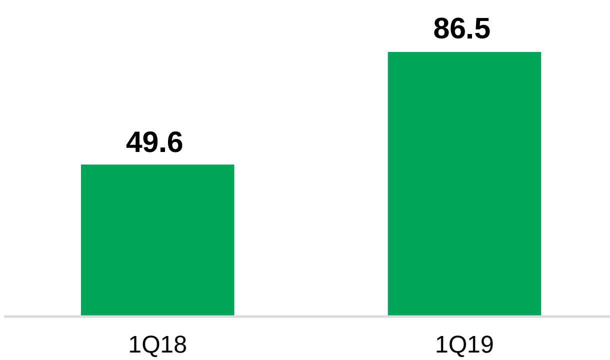
REAL ESTATE INVESTMENTS

$ millions

Adjusted Revenue[1]



Adjusted EBITDA[2]

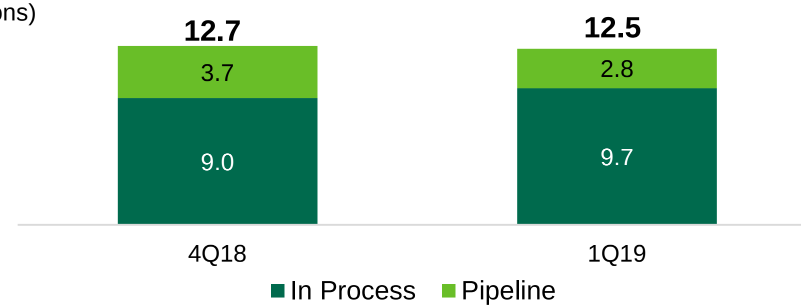


INVESTMENT MANAGEMENT ASSETS UNDER MANAGEMENT (AUM)

($ in billions)

DEVELOPMENT PROJECTS IN-PROCESS[3]/PIPELINE[4]

($ in billions)



- $7.5 billion[5] of capital to deploy in global investment management line of business
- Co-Investment: $184 million and $110 million in global investment management and development services lines of business, respectively[5]
- $9.5 million[5] in repayment guarantees on outstanding debt balances in development services line of business

See slide 27 for footnotes.

SUMMARY

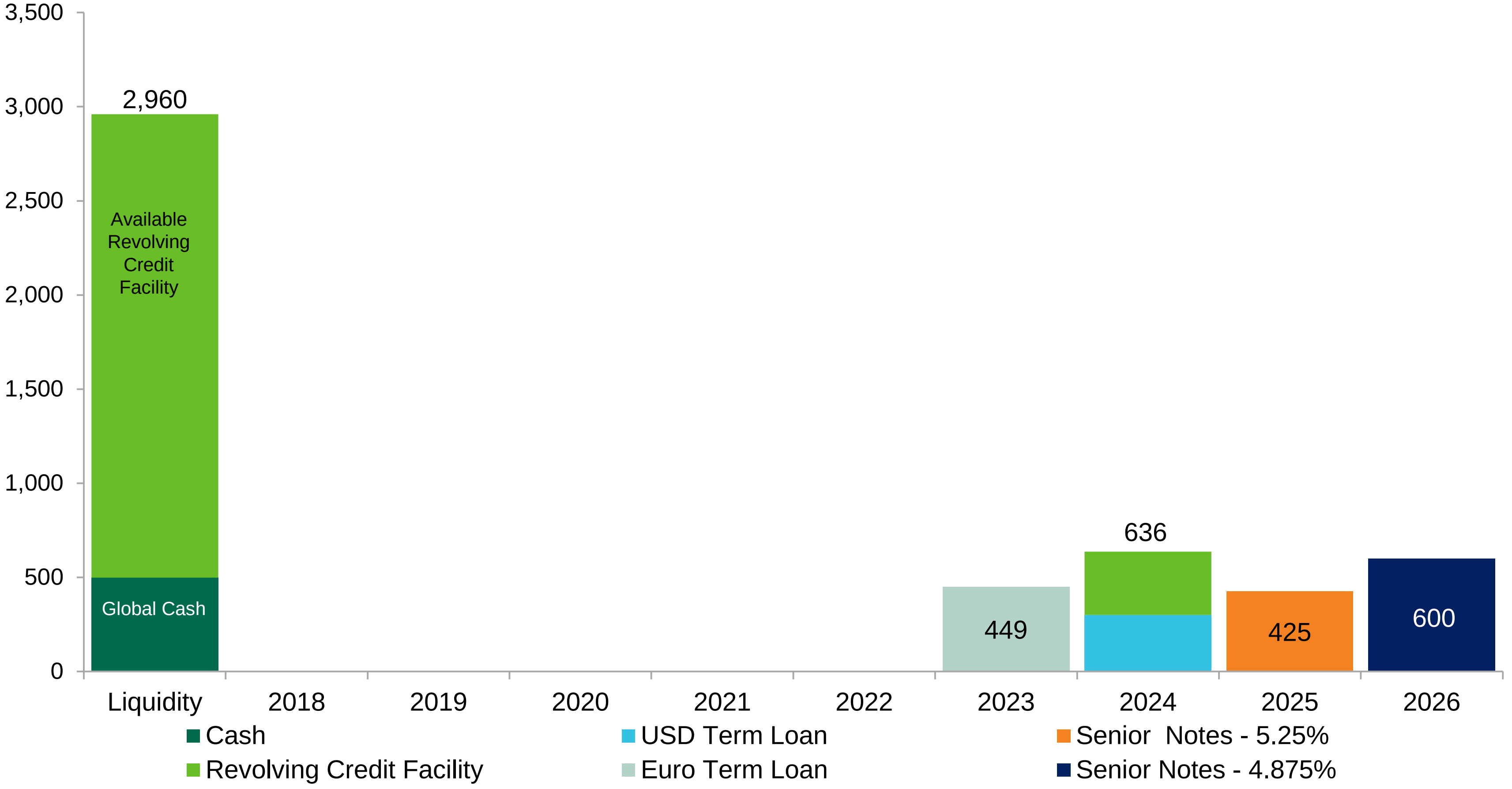
- Business has positive momentum; running ahead of 2019 guidance
- Macro market drivers and our inherent competitive advantages remain intact
- Caution against reading too much into Q1 results, given seasonality

SUPPLEMENTAL SLIDES, GAAP RECONCILIATION TABLES AND FOOTNOTES

MANDATORY AMORTIZATION AND MATURITY SCHEDULE

AS OF MARCH 31, 2019[1]

($ in millions)



1. $2,800 million revolving credit facility matures in March 2024. As of March 31, 2019, the revolving credit facility balance was $336 million.

DEBT & LEVERAGE

($ in millions)	March 31, 2019
Cash[1]	$ 498
Revolving credit facility	336
Senior term loans[2]	744
Senior notes[2]	1,016
Other debt[3,4]	3
Total debt	$ 2,099
Total net debt[5]	**$ 1,601**
TTM Adjusted EBITDA[6]	$ 2,007
Net debt to TTM Adjusted EBITDA	**0.80x**

1. Excludes $107.0 million of cash in consolidated funds and other entities not available for company use at March 31, 2019.
2. Outstanding amount is reflected net of unamortized debt issuance costs.
3. Excludes $1,561.2 million of warehouse facilities for loans originated on behalf of the FHA and other government sponsored enterprises outstanding at March 31, 2019, which are non-recourse to CBRE Group, Inc.
4. Excludes non-recourse notes payable on real estate, net of unamortized debt issuance costs, of $6.3 million at March 31, 2019.
5. Total net debt is calculated as total debt (excluding non-recourse debt) less cash available for company use, as disclosed above.
6. Adjusted EBITDA excludes (from EBITDA) the impact of a one-time non-cash gain associated with remeasuring CBRE's investment in an unconsolidated subsidiary in New England to fair value as of the date it acquired the remaining controlling interest, costs associated with our reorganization, including cost-savings initiatives, costs incurred in connection with a litigation settlement, integration and other costs related to acquisitions, and certain carried interest incentive compensation expense to align with the timing of associated revenue.

Q1 2019 BUSINESS LINE REVENUE

CONTRACTUAL REVENUE AND LEASING, WHICH IS LARGELY RECURRING OVER TIME[1], IS 78% OF FEE REVENUE

($ in millions)

	Contractual Revenue & Leasing										
	Global Workplace Solutions	Property & Advisory Project Management	Investment Management (excl. Carried Interest)	Valuation	Loan Servicing	Advisory Leasing	Advisory Sales	Commercial Mortgage Origination	Development Services	Carried Interest	Total
Revenue											
Q1 2019	$ 3,166	$ 521	$ 97	$ 138	$ 46	$ 623	$ 386	$ 121	$ 29	$ 9	$ 5,136
Fee Revenue[2]											
Q1 2019	$ 692	$ 288	$ 97	$ 138	$ 46	$ 623	$ 386	$ 121	$ 29	$ 9	$ 2,429
% of Q1 2019 Total Fee Revenue	28%	12%	4%	6%	2%	26%	16%	5%	1%	<1%	100%
Fee Revenue Growth Rate (Change Q1 2019-over-Q1 2018)											
USD	▲ 8%	▲ 6%	▼ -2%	▲ 3%	▲ 10%	▲ 20%	▼ -7%	▲ 13%	▲ 24%	▼ -62%	▲ 7%
Local Currency	▲ 12%	▲ 10%	▲ 2%	▲ 7%	▲ 10%	▲ 22%	▼ -5%	▲ 13%	▲ 24%	▼ -61%	▲ 10%

78% of total fee revenue

See slide 27 for footnotes.

AMERICAS REVENUE

Q1 2019 FEE REVENUE UP 11% IN USD AND 12% IN LOCAL CURRENCY

($ in millions)	Contractual Revenue Sources						Advisory Leasing	Advisory Sales	Commercial Mortgage Origination
	Global Workplace Solutions		Property & Advisory Project Management		Valuation	Loan Servicing			
	Gross	Fee[1]	Gross	Fee[1]					
Q1 2019	$ 2,000	$ 302	$ 269	$ 148	$ 62	$ 43	$ 480	$ 260	$ 119
Q1 2018	$ 1,745	$ 274	$ 246	$ 136	$ 59	$ 40	$ 382	$ 272	$ 106
USD[2]	▲ 15%	▲ 10%	▲ 9%	▲ 9%	▲ 4%	▲ 8%	▲ 26%	▼ -4%	▲ 12%
Local Currency[2]	▲ 16%	▲ 11%	▲ 10%	▲ 10%	▲ 5%	▲ 8%	▲ 26%	▼ -4%	▲ 12%

1. Fee revenue is gross revenue less both client reimbursed costs largely associated with employees that are dedicated to client facilities and subcontracted vendor work performed for clients.
2. Growth rate for Q1 2019 versus Q1 2018.

EMEA REVENUE

Q1 2019 FEE REVENUE UP 2% IN USD AND 9% IN LOCAL CURRENCY

($ in millions)	Contractual Revenue Sources								
	Global Workplace Solutions		Property & Advisory Project Management		Valuation	Loan Servicing	Advisory Leasing	Advisory Sales	Commercial Mortgage Origination
	Gross	Fee[1]	Gross	Fee[1]					
Q1 2019	$ 906	$ 319	$ 143	$ 96	$ 46	$ 3	$ 85	$ 73	$ 2
Q1 2018	$ 830	$ 306	$ 145	$ 97	$ 42	$ 2	$ 80	$ 81	$ 1
USD[2]	▲ 9%	▲ 4%	▼ -2%	◄► 0%	▲ 10%	▲ 31%	▲ 6%	▼ -10%	▲ 70%
Local Currency[2]	▲ 17%	▲ 11%	▲ 5%	▲ 6%	▲ 17%	▲ 38%	▲ 13%	▼ -4%	▲ 82%

1. Fee revenue is gross revenue less both client reimbursed costs largely associated with employees that are dedicated to client facilities and subcontracted vendor work performed for clients.
2. Growth rate for Q1 2019 versus Q1 2018.

APAC REVENUE

Q1 2019 FEE REVENUE UP 2% IN USD AND 7% IN LOCAL CURRENCY

($ in millions)	Contractual Revenue Sources							
	Global Workplace Solutions		Property & Advisory Project Management		Valuation	Advisory Leasing	Advisory Sales	Commercial Mortgage Origination
	Gross	Fee[1]	Gross	Fee[1]				
Q1 2019	$ 259	$ 70	$ 108	$ 44	$ 30	$ 58	$ 53	$ -
Q1 2018	$ 253	$ 63	$ 94	$ 40	$ 32	$ 56	$ 61	$ -
USD[2]	▲ 3%	▲ 12%	▲ 16%	▲ 11%	▼ -8%	▲ 4%	▼ -13%	n/a
Local Currency[2]	▲ 8%	▲ 17%	▲ 23%	▲ 17%	▼ -1%	▲ 9%	▼ -9%	n/a

1. Fee revenue is gross revenue less both client reimbursed costs largely associated with employees that are dedicated to client facilities and subcontracted vendor work performed for clients.
2. Growth rate for Q1 2019 versus Q1 2018.

REAL ESTATE INVESTMENTS SEGMENT REVENUE

Q1 2019 ADJUSTED REVENUE[1] UP 24% IN USD AND 27% IN LOCAL CURRENCY

($ in millions)	Contractual Revenue Sources: Asset Management	Contractual Revenue Sources: Acquisition, Disposition, Incentive & Other	Carried Interest	Development	Equity Income/Other[1]
Q1 2019	$ 88	$ 8	$ 10	$ 29	$ 85
Q1 2018	$ 90	$ 9	$ 25	$ 23	$ 36
USD[2]	▼ -2%	▼ -3%	▼ -62%	▲ 24%	▲ 139%
Local Currency[2]	▲ 2%	◀▶ 0%	▼ -61%	▲ 24%	▲ 139%

1. Equity Income/Other represents amounts added to revenue to come to adjusted revenue, which includes equity income from unconsolidated subsidiaries and gain on disposition of real estate, net of non-controlling interests.
2. Growth rate for Q1 2019 versus Q1 2018.

OTHER FINANCIAL METRICS

($ in thousands)	Three Months Ended March 31, 2019	Three Months Ended March 31, 2018
OMSR Gains	38,270	32,117
Amortization	(27,698)	(26,893)

($ in thousands)	Q1 2019 over Q1 2018
OMSR Gains	6,153
Amortization	805

($ in billions)	As of March 31, 2019	As of March 31, 2018
Loan Servicing Balance	210.5	183.5

NON-GAAP FINANCIAL MEASURES

The following measures are considered “non-GAAP financial measures” under SEC guidelines:

i. fee revenue

ii. organic fee revenue (which we also refer to as fee revenue excluding M&A contributions)

iii. contractual fee revenue

iv. adjusted revenue for the Real Estate Investments segment

v. net income attributable to CBRE Group, Inc., as adjusted (which we also refer to as “adjusted net income”)

vi. diluted income per share attributable to CBRE Group, Inc. shareholders, as adjusted (which we also refer to as “adjusted earnings per share” or “adjusted EPS”)

vii. EBITDA, adjusted EBITDA and adjusted EBITDA on fee revenue margin

These measures are not recognized measurements under United States generally accepted accounting principles, or “GAAP.” When analyzing our operating performance, investors should use them in addition to, and not as an alternative for, their most directly comparable financial measure calculated and presented in accordance with GAAP. Because not all companies use identical calculations, our presentation of these measures may not be comparable to similarly titled measures of other companies.

Our management generally uses these non-GAAP financial measures to evaluate operating performance and for other discretionary purposes. The company believes that these measures provide a more complete understanding of ongoing operations, enhance comparability of current results to prior periods and may be useful for investors to analyze our financial performance because they eliminate the impact of selected charges that may obscure trends in the underlying performance of our business. The company further uses certain of these measures, and believes that they are useful to investors, for purposes described below.

With respect to fee revenue and organic fee revenue: the company believes that investors may find these measures useful to analyze the financial performance of our Global Workplace Solutions segment and Property & Advisory Project Management business line and our business generally. Fee revenue excludes costs reimbursable by clients, and as such provides greater visibility into the underlying performance of our business. Organic fee revenue for the three months ended March 31, 2019 further excludes contributions from all acquisitions completed after first-quarter 2018.

With respect to adjusted revenue: the company believes that investors may find this measure useful to analyze the financial performance of our Real Estate Investments segment because it is more reflective of this segment’s total operations.

With respect to contractual fee revenue: the company believes that investors may find this measure useful to analyze our overall financial performance because it identifies revenue streams that are typically more stable over time.

With respect to adjusted net income, adjusted EPS, EBITDA, adjusted EBITDA and adjusted EBITDA on fee revenue margin: the company believes that investors may find these measures useful in evaluating our operating performance compared to that of other companies in our industry because their calculations generally eliminate the accounting effects of acquisitions, which would include impairment charges of goodwill and intangibles created from acquisitions—and in the case of EBITDA, adjusted EBITDA and adjusted EBITDA fee revenue margin—the effects of financings and income tax and the accounting effects of capital spending. All of these measures and adjusted revenue may vary for different companies for reasons unrelated to overall operating performance. In the case of EBITDA and adjusted EBITDA, these measures are not intended to be measures of free cash flow for our management’s discretionary use because they do not consider cash requirements such as tax and debt service payments. The EBITDA and adjusted EBITDA measures calculated herein may also differ from the amounts calculated under similarly titled definitions in our credit facilities and debt instruments, which amounts are further adjusted to reflect certain other cash and non-cash charges and are used by us to determine compliance with financial covenants therein and our ability to engage in certain activities, such as incurring additional debt and making certain restricted payments. The company also uses adjusted EBITDA and adjusted EPS as significant components when measuring our operating performance under our employee incentive compensation programs.

RECONCILIATION OF ADJUSTED EBITDA TO EBITDA TO NET INCOME

	Three Months Ended March 31,		Twelve Months Ended March 31,
($ in millions)	2019	2018	2019
Net income attributable to CBRE Group, Inc.	$ 164.4	$ 150.3	$ 1,077.3
Add:			
Depreciation and amortization	105.8	108.2	449.6
Intangible asset impairment	89.0	-	89.0
Interest expense	22.7	28.9	101.1
Write-off of financing costs on extinguished debt	2.6	28.0	2.6
Provision for income taxes	43.9	46.1	310.8
Less:			
Interest income	1.5	3.7	6.4
EBITDA	$ 426.9	$ 357.8	$ 2,024.0
Adjustments:			
One-time gain associated with remeasuring an investment in an unconsolidated subsidiary to fair value as of the date the remaining controlling interest was acquired	-	-	(100.4)
Costs associated with our reorganization, including cost-savings initiatives	15.8	-	53.8
Costs incurred in connection with litigation settlement	-	-	8.8
Carried interest incentive compensation expense (reversal) to align with the timing of associated revenue	7.3	(10.0)	12.1
Integration and other costs related to acquisitions	-	-	9.1
Adjusted EBITDA	$ 450.0	$ 347.8	$ 2,007.4

RECONCILIATION OF NET INCOME TO ADJUSTED NET INCOME AND ADJUSTED EARNINGS PER SHARE

	Three Months Ended March 31,	
($ in millions, except per share amounts)	2019	2018
Net income attributable to CBRE Group, Inc.	$ 164.4	$ 150.3
Intangible asset impairment	89.0	-
Non-cash depreciation and amortization expense related to certain assets attributable to acquisitions	22.2	29.0
Costs associated with our reorganization, including cost-savings initiatives	15.8	-
Carried-interest incentive compensation expense (reversal) to align with the timing of associated revenue	7.3	(10.0)
Write-off of financing costs on extinguished debt	2.6	28.0
Tax impact of adjusted items	(33.8)	(11.6)
Impact of U.S. tax reform	-	0.5
Adjusted net income	$ 267.5	$ 186.2
Adjusted diluted earnings per share	$ 0.79	$ 0.54
Weighted average shares outstanding for diluted income per share	340,158,399	342,589,810

RECONCILIATION OF REVENUE TO FEE REVENUE, CONTRACTUAL FEE REVENUE AND ORGANIC FEE REVENUE

	Three Months Ended March 31,	
($ in millions)	**2019**	**2018**
Consolidated revenue	$ 5,135.5	$ 4,674.0
Less:		
Client reimbursed costs largely associated with employees dedicated to client facilities and subcontracted vendor work performed for clients	2,706.8	2,397.1
Consolidated fee revenue	$ 2,428.7	$ 2,276.9
Less:		
Non-contractual fee revenue	1,167.6	1,086.9
Contractual fee revenue	$ 1,261.1	$ 1,190.0

Consolidated fee revenue	$ 2,428.7
Less:	
Acquisitions	(46.2)
Organic fee revenue	$ 2,382.5

RECONCILIATION OF REVENUE TO FEE REVENUE

($ in millions)	Three Months Ended March 31,					
	Americas		EMEA		APAC	
	2019	2018	2019	2018	2019	2018
Revenue	$ 3,233.2	$ 2,850.2	$ 1,258.3	$ 1,181.3	$ 508.8	$ 495.5
Less:						
Client reimbursed costs largely associated with employees dedicated to client facilities and subcontracted vendor work performed for clients	1,819.0	1,581.5	634.5	571.9	253.2	243.7
Fee revenue	$ 1,414.2	$ 1,268.7	$ 623.8	$ 609.4	$ 255.6	$ 251.8
Global Workplace Solutions revenue	$ 2,000.4	$ 1,745.2	$ 906.4	$ 829.5	$ 259.2	$ 252.7
Less:						
Client reimbursed costs largely associated with employees dedicated to client facilities and subcontracted vendor work performed for clients	1,697.9	1,471.3	587.4	523.2	188.7	189.6
Global Workplace Solutions fee revenue	$ 302.5	$ 273.9	$ 319.0	$ 306.3	$ 70.5	$ 63.1
Property & Advisory Project Management revenue	$ 269.1	$ 245.8	$ 143.4	$ 145.4	$ 108.4	$ 93.7
Less:						
Client reimbursed costs largely associated with employees dedicated to client facilities and subcontracted vendor work performed for clients	121.1	110.2	47.1	48.7	64.5	54.1
Property & Advisory Project Management fee revenue	$ 148.0	$ 135.6	$ 96.3	$ 96.7	$ 43.9	$ 39.6

RECONCILIATION OF ADJUSTED EBITDA ON FEE REVENUE MARGIN

	Three Months Ended March 31,	
($ in millions)	2019	2018
Consolidated Adjusted EBITDA	$ 450.0	$ 347.8
Consolidated Fee Revenue	2,428.7	2,276.9
Adjusted EBITDA on fee revenue margin	18.5%	15.3%

REAL ESTATE INVESTMENTS RECONCILIATION OF REVENUE TO ADJUSTED REVENUE

	Three Months Ended March 31,	
($ in millions)	2019	2018
Revenue	$ 135.2	$ 147.0
Add:		
Equity income from unconsolidated subsidiaries	72.8	35.8
Gain on disposition of real estate	19.2	-
Less:		
Non-controlling interest	6.7	0.1
Adjusted Revenue	$ 220.5	$ 182.7

FOOTNOTES

Notes – Local currency percent changes versus prior year is a non-GAAP measure noted on slides 4, 5, 6, 7, 13, 14, 15,16 and 17. These percent changes are calculated by comparing current year results at prior year exchange rates versus prior year results.

Slide 4

1. Adjusted EBITDA excludes costs associated with our reorganization, including cost-savings initiatives and certain carried interest incentive compensation expense (reversal) to align with the timing of associated revenue.
2. Adjusted EPS excludes intangible asset impairments, depreciation and amortization expense related to certain assets attributable to acquisitions, costs associated with our reorganization, including cost-savings initiatives, write-off of financing costs on extinguished debt and certain carried interest incentive compensation expense (reversal) to align with the timing of associated revenue as well as adjusts the provision for income taxes for such charges. Adjusted EPS for the first quarter of 2018 also excludes an update to the provisional estimated tax impact of U.S. tax reform initially recorded in the fourth quarter of 2017. All EPS information is based on diluted shares.
3. Fee revenue is gross revenue less both client reimbursed costs largely associated with employees that are dedicated to client facilities and subcontracted vendor work performed for clients.

Slide 5

1. Fee revenue is gross revenue less both client reimbursed costs largely associated with employees that are dedicated to client facilities and subcontracted vendor work performed for clients.
2. EBITDA represents earnings before net interest expense, write-off of financing costs on extinguished debt, income taxes, depreciation, amortization and intangible asset impairments.
3. Adjusted EBITDA excludes costs associated with our reorganization, including cost-savings initiatives and certain carried interest incentive compensation expense (reversal) to align with the timing of associated revenue.
4. All EPS information is based on diluted shares.
5. Adjusted EPS excludes intangible asset impairments, depreciation and amortization expense related to certain assets attributable to acquisitions, costs associated with our reorganization, including cost-savings initiatives, write-off of financing costs on extinguished debt and certain carried interest incentive compensation expense (reversal) to align with the timing of associated revenue as well as adjusts the provision for income taxes for such charges. Adjusted EPS for the first quarter of 2018 also excludes an update to the provisional estimated tax impact of U.S. tax reform initially recorded in the fourth quarter of 2017.

Slide 6, 7

1. Fee revenue is gross revenue less both client reimbursed costs largely associated with employees that are dedicated to client facilities and subcontracted vendor work performed for clients.
2. Adjusted EBITDA excludes costs associated with our reorganization, including cost-savings initiatives.

FOOTNOTES

Slide 8

1. Adjusted revenue is revenue plus equity income from unconsolidated subsidiaries and gain on disposition of real estate, net of non-controlling interests.
2. Adjusted EBITDA excludes costs associated with our reorganization, including cost-savings initiatives and certain carried interest incentive compensation expense (reversal) to align with the timing of associated revenue.
3. In-Process figures include Long-Term Operating Assets (LTOA) of $0.03 billion for 1Q 19 and $0.1 billion for 1Q 18. LTOA are projects that have achieved a stabilized level of occupancy or have been held 18-24 months following shell completion or acquisition.
4. Pipeline deals are projects we are pursuing which we believe have a greater than 50% chance of closing or where land has been acquired and the projected construction start is more than 12 months out.
5. As of March 31, 2019.

Slide 13

1. Contractual revenue refers to revenue derived from our Global Workplace Solutions, Property & Advisory Project Management, Investment Management (excl. carried interest), Valuation and Loan Servicing businesses. We regard advisory leasing revenue as largely recurring over time because unlike most other transaction businesses, leasing activity normally takes place when leases expire. The average lease expires in five to six years. This means that, on average, in a typical year approximately 17% to 20% of leases roll over and a new leasing decision must be made. When a lease expires in the ordinary course, we expect it to be renewed, extended or the tenant to vacate the space to lease another space in the market. In each instance, a transaction is completed. If there is a downturn in economic activity, some tenants may seek a short term lease extension, often a year, before making a longer term commitment. In this scenario, that delayed leasing activity tends to be stacked on top of the normal activity in the following year. Thus, we characterize advisory leasing as largely recurring over time because we expect an expiration of a lease, in the ordinary course, to lead to an opportunity for a leasing commission from such completed transaction even if delayed by a year or two during an economic downturn.
2. Fee revenue is gross revenue less both client reimbursed costs largely associated with employees that are dedicated to client facilities and subcontracted vendor work performed for clients.