



Earnings Presentation

Fourth Quarter 2021

February 28, 2022



Cautionary Note Regarding Forward-looking Statements



Statements in this news release regarding, among other things, future financial results and performance, achievements, plans, objectives and shares repurchases may be considered forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Such statements involve known and unknown risks, uncertainties, and other factors, the occurrence of which are outside JLL's control, including but not limited to, the impact of the COVID-19 pandemic on JLL's business, which may cause JLL's actual results, performance, achievements, plans, and objectives to be materially different from those expressed or implied by such forward-looking statements. For additional information concerning risks, uncertainties, and other factors that could cause actual results to differ materially from those anticipated in forward-looking statements, and risks to JLL's business in general, please refer to those factors discussed under "Risk Factors," "Business," "Management's Discussion and Analysis of Financial Condition and Results of Operations," "Quantitative and Qualitative Disclosures about Market Risk," and elsewhere in JLL's soon to be filed Annual Report on Form 10-K for the year ended December 31, 2021, and other reports filed with the Securities and Exchange Commission. Any forward-looking statements speak only as of the date of this release, and except to the extent required by applicable securities laws, JLL expressly disclaims any obligation or undertaking to publicly update or revise any forward-looking statements contained herein to reflect any change in expectations or results, or any change in events.

Consolidated Fourth Quarter 2021 Financial Results



Growth rates and margins in local currency; growth rates represent % change over three months ended Q4 2020 and Q4 2019

	Q4 2021	Q4 2020	'21/'20 % Chg.	Q4 2019	'21/'19 % Chg.
Revenue	\$5.9B	\$4.8B	↑ +23%	\$5.4B	↑ +9%
Fee Revenue	\$2.8B	\$2.0B	↑ +42%	\$2.4B	↑ +16%
Adjusted EBITDA	\$622M	\$417M	↑ +50%	\$494M	↑ +26%
Adjusted EBITDA Margin	22.4%	21.3%	↑ +110 bps	20.8%	↑ +180 bps
Adjusted Diluted EPS	\$8.66	\$5.29	↑ +65%	\$6.35	↑ +37%

Notes:

- Non-GAAP items listed above include Fee Revenue, Adjusted EBITDA, Adjusted EBITDA margin and Adjusted Diluted EPS
- Refer to pages 24 - 26 for definitions and reconciliations of non-GAAP financial measures

Consolidated Full Year 2021 Financial Results



Growth rates and margins in local currency; growth rates represent % change over twelve months ended Q4 2020 and Q4 2019

	FY 2021	FY 2020	'21/'20 % Chg.	FY 2019	'21/'19 % Chg.
Revenue	\$19.4B	\$16.6B	↑ +15%	\$18.0B	↑ +6%
Fee Revenue	\$8.1B	\$6.1B	↑ +31%	\$7.1B	↑ +12%
Adjusted EBITDA	\$1,497M	\$860M	↑ +73%	\$1,116M	↑ +33%
Adjusted EBITDA Margin	18.6%	14.0%	↑ +460 bps	15.6%	↑ +300 bps
Adjusted Diluted EPS	\$19.47	\$9.46	↑ +104%	\$14.09	↑ +40%

Notes:

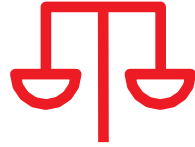
- Non-GAAP items listed above include Fee Revenue, Adjusted EBITDA, Adjusted EBITDA margin and Adjusted Diluted EPS
- FY comparisons to 2019 are not pro forma for the acquisition of HFF
- Refer to pages 24 - 26 for definitions and reconciliations of non-GAAP financial measures

2021 Strategic Review and Key Highlights



Drove Strong Momentum Across Business

- Broad-based recovery continues to take hold; Capital Markets and Leasing performance exceeded 2019 levels
- Globally scaled platform drove revenue gains across all business lines



Disciplined Adherence to Capital Allocation Framework

- Reinvesting to drive future growth both organically in our people and platform and augmented with the acquisitions of Skyline AI and Building Engines
- Accelerated return of capital to shareholders, with \$343M of shares repurchased in the year compared to \$100M in 2020; additional \$1.5B authorized in February 2022



Benefiting From Technology Investments

- Realized significant valuation increases related to JLL Technologies' early-stage prop-tech investments
- Continue to leverage tech investments to evaluate technology solutions for our clients while creating incremental revenue streams



Accelerated Sustainability Leadership

- Committed to net zero carbon emissions across all areas of operations, including client sites managed globally, by 2040
- Introduced refreshed global sustainability strategy to support overall purpose of Shaping the Future of Real Estate For a Better World

Q4 2021 Commercial Real Estate Operating Environment



- Global **capital markets transaction volumes totaled \$469 billion during the quarter, up 55% year-over-year**. The emergence of Omicron brings ongoing uncertainty, but pandemic's impact on real estate capital flows is increasingly limited
- Global investors continue to be a consistent and growing source of capital; **cross-border flows accelerated** to their highest quarterly level
- Global office leasing volumes **were 51% higher compared to Q4 2020** but remain 13% below Q4 2019. Asia Pacific was the only region to be back above Q4 2019 leasing volumes in the final quarter of 2021 (+7%), while Europe (-12%) and the U.S. (-23%) remain below 2019 levels
- While tenant-friendly conditions persist across most markets, the continued corporate emphasis on wellbeing, quality and sustainability has supported **resilient pricing levels** among premium office spaces
- Persistently high levels of demand combined with tight supply in the **industrial sector led to new records being set** across regions
- Investor **demand remains buoyant across multifamily globally** with structural factors continuing to drive portfolio re-allocation to the sector

Financial Overview

Q4 2021 Financial Results – Segment Revenue



(\$ in millions; % change in local currency over three and twelve months ended Q4 2020)

	Q4 2021 Revenue	Q4 2021 Fee Revenue	FY 2021 Revenue	FY 2021 Fee Revenue
Americas	\$3,659 ↑+27%	\$1,678 ↑+56%	\$11,887 ↑+18%	\$4,876 ↑+41%
EMEA	\$1,122 ↑+18%	\$574 ↑+24%	\$3,478 ↑+8%	\$1,644 ↑+15%
APAC	\$1,002 ↑+12%	\$365 ↑+20%	\$3,502 ↑+10%	\$1,112 ↑+20%
LaSalle	\$163 ↑+55%	\$156 ↑+56%	\$500 ↑+17%	\$473 ↑+17%

Notes:

- Refer to pages 24 - 26 for definitions and reconciliations of non-GAAP financial measures

Q4 2021 Financial Results – Segment Profitability



(\$ in millions; % change, Adjusted EBITDA Margin and corresponding change in bps in local currency over three and twelve months ended Q4 2020)

	Q4 2021 Adjusted EBITDA	Q4 2021 Adjusted EBITDA Margin	FY 2021 Adjusted EBITDA	FY 2021 Adjusted EBITDA Margin
Americas	\$461 ↑ +71%	27.5% ↑ +250 bps	\$1,158 ↑ 84%	23.7% ↑ +560 bps
EMEA	\$47 ↓ (8)%	8.4% ↓ (290) bps	\$34 ↑ 26%	2.2% ↑ +20bps
APAC	\$63 ↓ (3)%	17.5% ↓ (420) bps	\$160 ↑ +7%	14.4% ↓ (170) bps
LaSalle	\$51 ↑ +86%	32.0% ↑ +520 bps	\$144 ↑ +134%	30.5% ↑ +1530 bps

Notes:

- Refer to pages 24 - 26 for definitions and reconciliations of non-GAAP financial measures
- N.M." defined as "not meaningful"

Q4 2021 Adjusted EBITDA Margin Performance



Real Estate Services (“RES”):

Reflected strong growth in Leasing and Capital Markets offset by the expected reduction of certain non-permanent cost savings, including government subsidies in 2020

LaSalle:

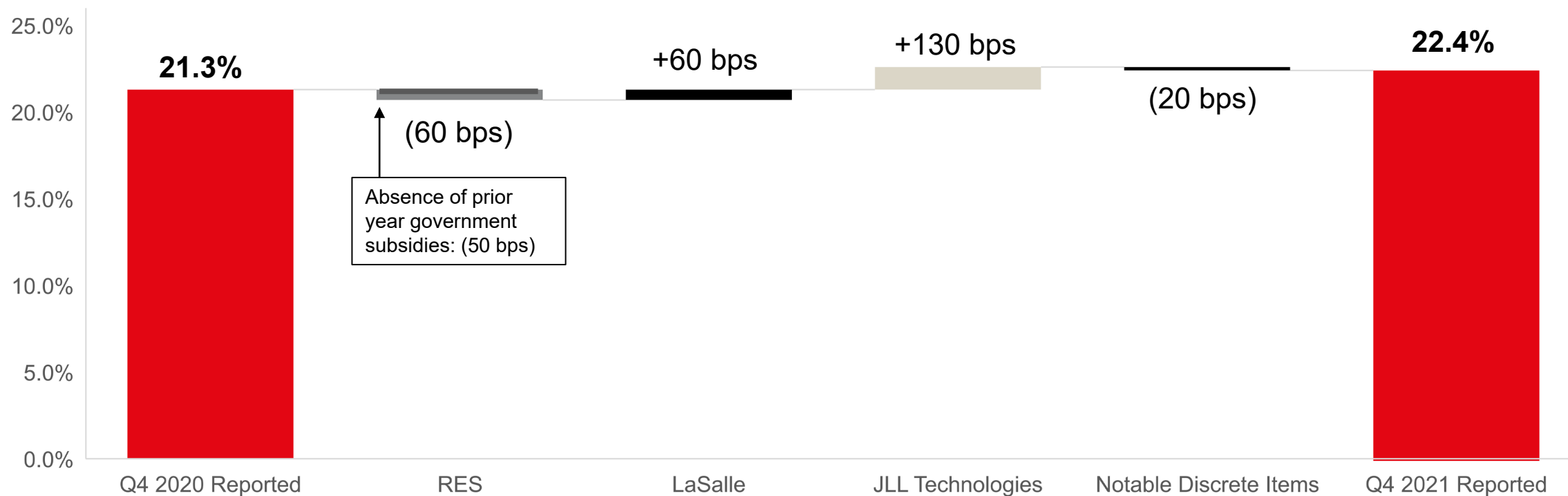
Positive margin contribution attributable to strong incentive fee performance and increases to net fair value estimates in co-investment portfolio

JLL Technologies:

Reflected equity earnings associated with valuation increases from investments in early-stage proptech companies partially offset by continued investment in JLL Technologies

Notable Discrete Items:

Impact of reduction to loan loss reserve in Q4 2021



Notes:

- Refer to pages 24 - 26 for definitions and reconciliations of non-GAAP financial measures
- All margin percentage references are on a Fee Revenue basis and in USD; basis points are rounded

FY 2021 Adjusted EBITDA Margin Performance



Real Estate Services (“RES”):

Reflected strong growth in Leasing and Capital Markets, partially offset by the expected reduction of certain non-permanent cost savings, including government subsidies in 2020

LaSalle:

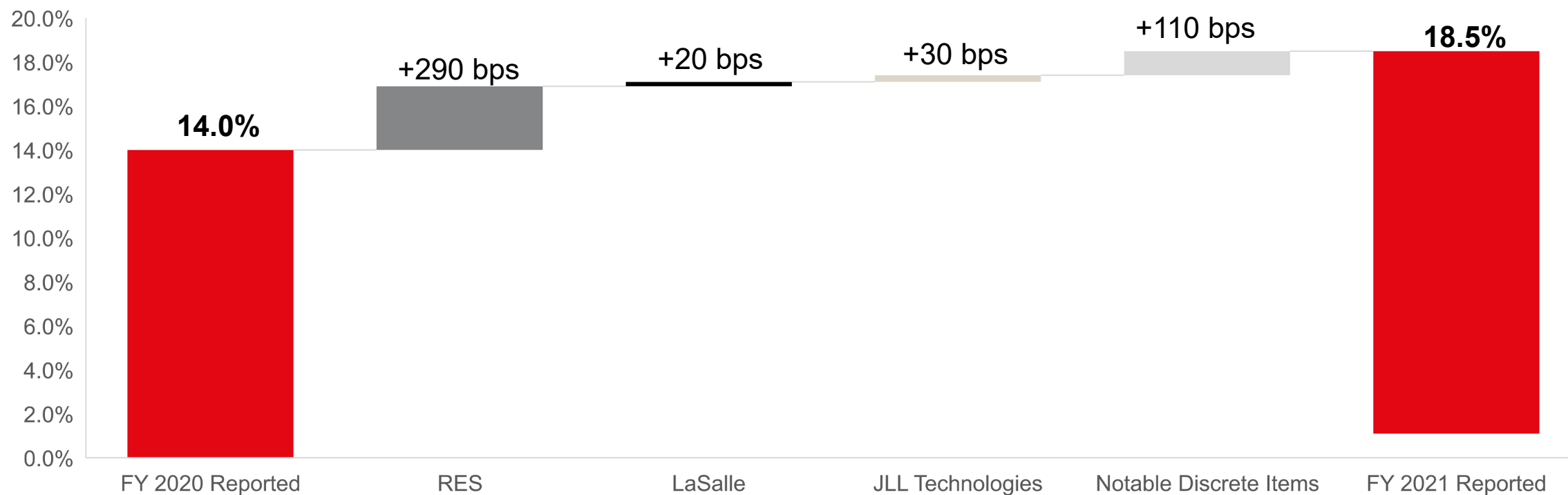
Positive margin contribution attributable to strong incentive fee performance and increases to net fair value estimates in co-investment portfolio in the second half of 2021

JLL Technologies:

Reflected equity earnings associated with valuation increases from investments in early-stage proptech companies partially offset by continued investment in JLL Technologies

Notable Discrete Items:

Reflects reduction in loan loss reserve over FY 2020 and changes in net fair value estimates of LaSalle co-investment portfolio in first half of 2020 and 2021



Notes:

- Refer to pages 24 - 26 for definitions and reconciliations of non-GAAP financial measures
- All margin percentage references are on a Fee Revenue basis and in USD; basis points are rounded
- For consistency to prior disclosures, Q1 & Q2 LaSalle Equity Earnings margin impact reflected in LaSalle and Q3 & Q4 LaSalle Equity Earnings margin impact reflected in Notable Discrete Items

Q4 2021 Real Estate Services Fee Revenue by Service Line



(\$ in millions; % change over Q4 2020)

	Americas			EMEA			APAC			Total RES		
	(\$M)	% Change		(\$M)	% Change		(\$M)	% Change		(\$M)	% Change	
		USD	LC		USD	LC		USD	LC		USD	LC
Leasing	\$725	74%	74%	\$134	49%	55%	\$115	46%	49%	\$974	66%	68%
Capital Markets	\$575	75%	75%	\$183	41%	45%	\$66	18%	20%	\$824	61%	62%
Property & Facility Management	\$187	12%	12%	\$84	2%	2%	\$80	(1)%	-%	\$350	6%	7%
Project & Development Services	\$119	15%	15%	\$87	5%	8%	\$38	10%	11%	\$244	10%	12%
Advisory, Consulting & Other	\$72	16%	16%	\$87	(6)%	(3)%	\$66	15%	16%	\$225	6%	7%
Total	\$1,678	56%	56%	\$574	21%	24%	\$365	19%	20%	\$2,616	41%	42%

Notes:

- Refer to pages 24 - 26 for definitions and reconciliations of non-GAAP financial measures

FY 2021 Real Estate Services Fee Revenue by Service Line



(\$ in millions; % change over FY 2020)

	Americas			EMEA			APAC			Total RES		
	(\$M)	% Change		(\$M)	% Change		(\$M)	% Change		(\$M)	% Change	
		USD	LC		USD	LC		USD	LC		USD	LC
Leasing	\$2,132	52%	52%	\$331	38%	36%	\$250	43%	40%	\$2,713	49%	48%
Capital Markets	\$1,463	66%	66%	\$451	44%	40%	\$185	62%	57%	\$2,099	60%	59%
Property & Facility Management	\$649	9%	9%	\$322	6%	-%	\$316	4%	-%	\$1,286	7%	5%
Project & Development Services	\$393	4%	4%	\$276	-%	(3)%	\$137	10%	7%	\$806	4%	2%
Advisory, Consulting & Other	\$238	20%	20%	\$265	7%	3%	\$225	24%	19%	\$727	16%	13%
Total	\$4,876	41%	41%	\$1,644	19%	15%	\$1,112	24%	20%	\$7,632	33%	31%

Notes:

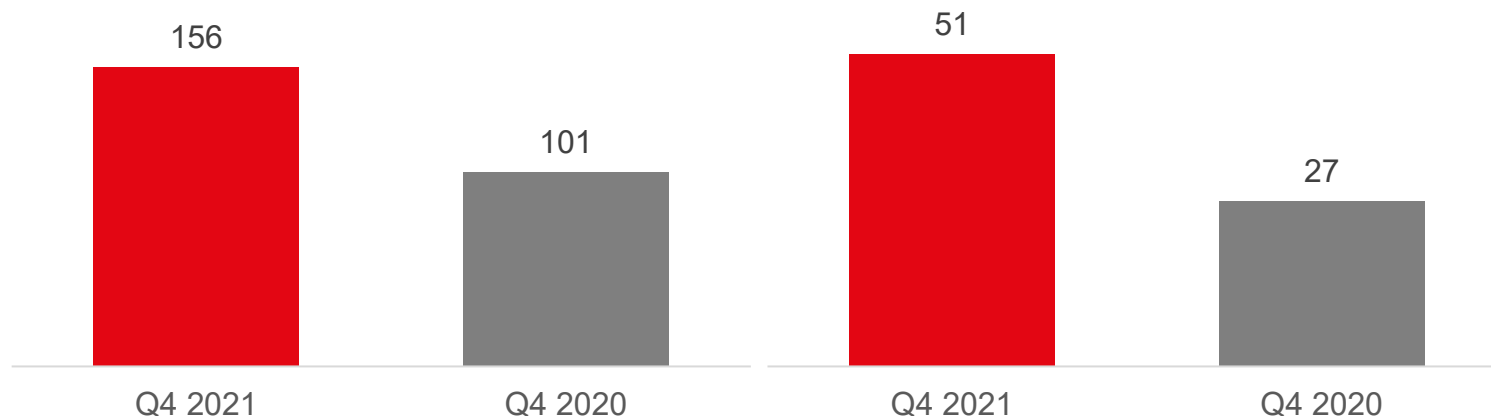
- Refer to pages 24 - 26 for definitions and reconciliations of non-GAAP financial measures

LaSalle – Fourth Quarter 2021 Performance

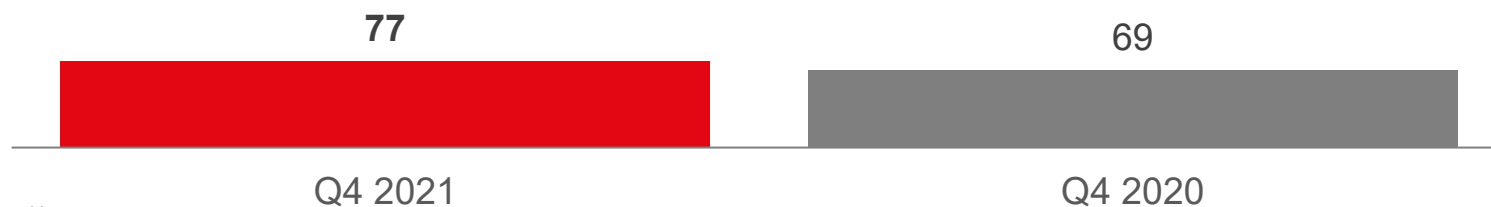


Fee Revenue in \$M

Adjusted EBITDA in \$M



Assets Under Management (“AUM”) in \$B



Notes:

- Refer to pages 24 - 26 for definitions and reconciliations of non-GAAP financial measures

Fourth Quarter Overview

Fee Revenue increased by 56% (in LC)

- Revenue growth driven by:
 - Strong advisory fee growth resulting from recent capital raising and valuation increases
 - Incentive fees performance in a U.S. fund and dispositions in Asia Pacific
- Adjusted EBITDA benefiting from higher incentive fees & equity earnings**
- Continued momentum in capital raising with an additional \$1.8 billion raised in the quarter and \$8.2 billion for FY 2021**

Debt and Leverage

Highlights:

- Strong balance sheet with ample liquidity provides operational flexibility
- Strong cash generation supports strategic capital deployment

Debt and Leverage (\$M)	Q4 2021	Q4 2020
Cash and Cash Equivalents	594	574
Total Debt	970	767
Short-term Borrowings	423	62
Credit Facility	150	0
Long Term Senior Notes	397	705
Total Net Debt	\$376	\$192
Adjusted TTM EBITDA	\$1,497	\$860
Net Debt /Adjusted TTM EBITDA	0.2x	0.2x

Notes:

- Refer to pages 24 - 26 for definitions and reconciliations of non-GAAP financial measures
- Credit Facility and Long-Term Senior Notes amounts shown are gross of debt issuance costs
- Senior Notes due November 2022 re-classified from Long Term Senior Notes to Short-term Borrowings in Q4 2021
- Credit Facility figures shown in table represent amount drawn



Investment Grade Credit Ratings

Moody's: Baa1

S&P: BBB+

\$275M, 4.4% fixed

Senior Notes

Due November 2022

\$2.75B

Credit Facility

Maturing in April 2026

€ 350M

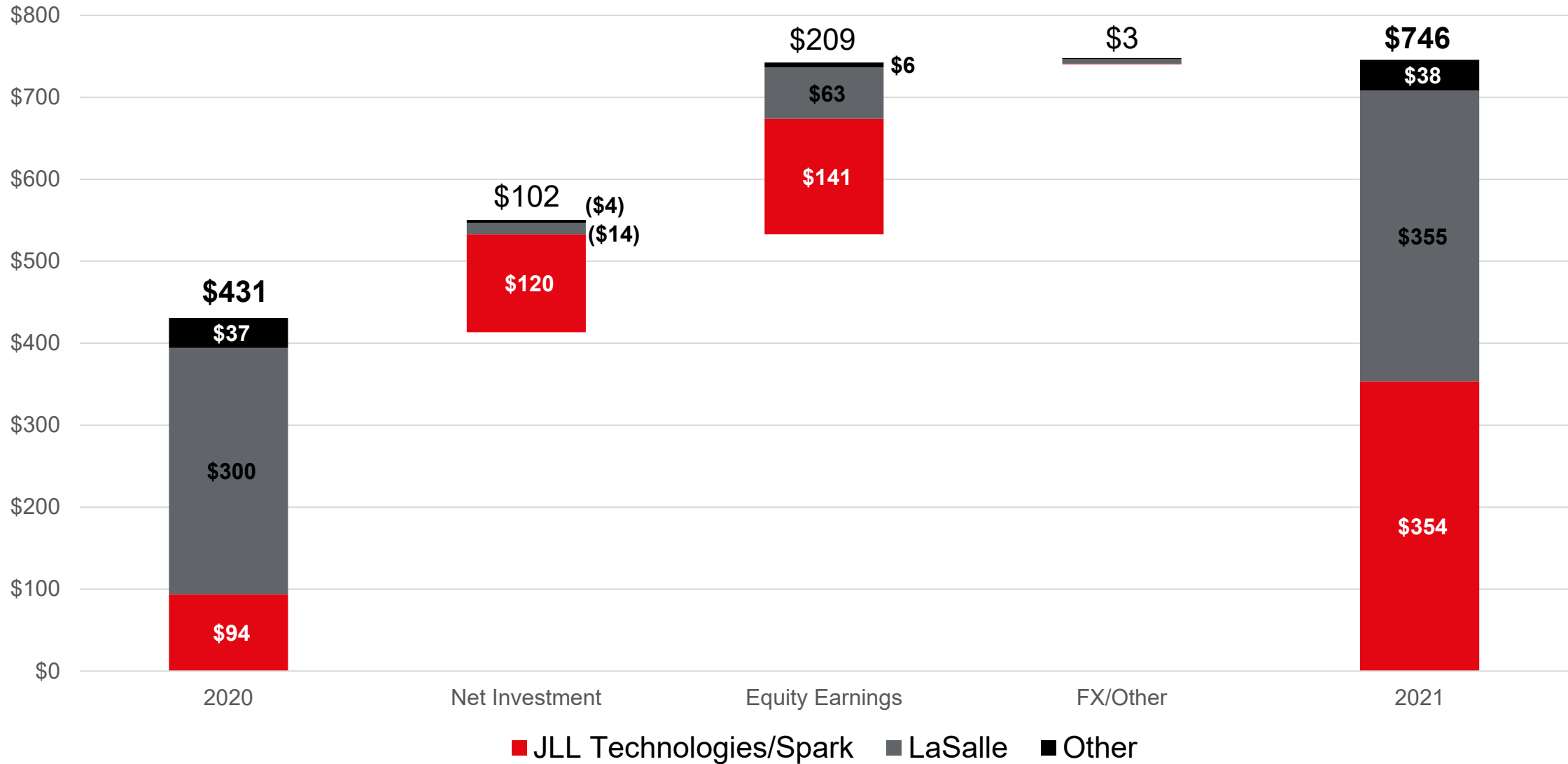
LT Senior Notes

10-yr debt 1.96% fixed (*due 2027*)

12-yr debt 2.21% fixed (*due 2029*)

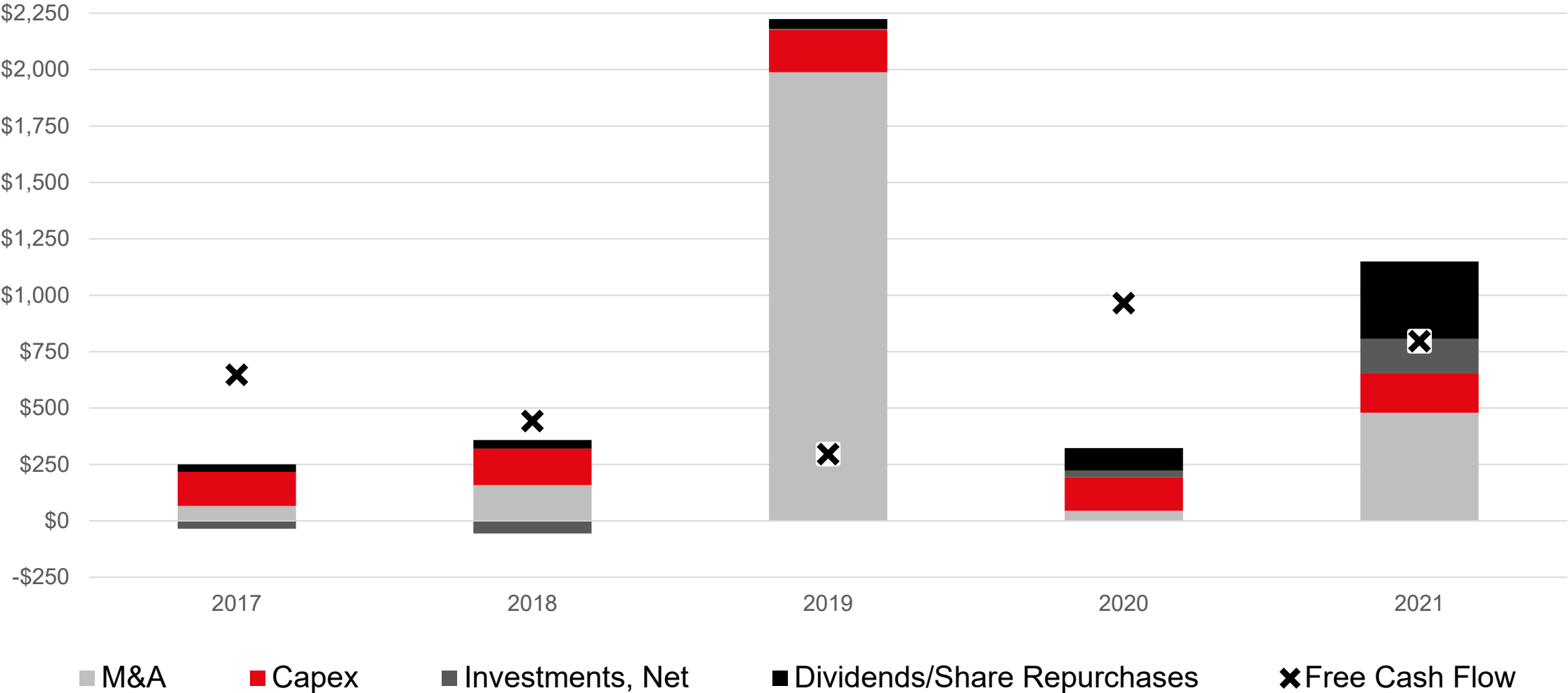
Investments Rollforward

(\$ in millions)



Historical Capital Allocation

(\$ in millions)



Notes:
• M&A includes total M&A financed plus payments of deferred acquisition obligation and earnouts

Reporting Change

Moving to Five Business Lines for Reporting Segments

- As part of our Beyond strategy, we have aligned to global Business Lines that will serve as our new external reporting segments
- This evolution is another step in our transformation to better leverage the strength of our global full-service platform and shape the future of real estate for a better world
- Aligning around five global Business Lines will:



Accelerate our **One JLL** journey by formalizing how we work across services and deliver the best capabilities to our clients



Strengthen global collaboration across the enterprise, **streamlining** and simplifying decision making



Enhance **transparency** into business line performance



• New Reporting Segments:

- Markets Advisory
 - Capital Markets
 - Work Dynamics
 - JLL Technologies
 - LaSalle
- JLL will report financial results using the new segment structure beginning in the first quarter of 2022
 - Prior to first quarter of 2022 reporting, additional information will be provided including restatements of 2020 & 2021 under new business segments

JLL's New External Reporting Business Segments



Business Segments	Markets Advisory	Capital Markets	Work Dynamics	JLL Technologies	LaSalle (No Change)
	- Leasing - Property Management - Advisory & Consulting	- Investment Sales - Debt & Equity Advisory - Loan Servicing - Valuation Advisory	- Workplace Management ⁽¹⁾ - Project Management ⁽²⁾ - Portfolio Services	- Software - Professional Services - Spark Venture & Investment	- Advisory - Transaction - Incentive & Other
	Greg O'Brien	Richard Bloxam	Neil Murray	Yishai Lerner Mihir Shah	Mark Gabbay

Fees

1. Workplace Management was formerly Facilities Management
2. Project Management was formerly Project Development Services

Changes in reporting

- New reporting segments effective January 1, 2022 and first reporting quarter in Q1 2022
- Discontinue geographic segment reporting going forward

Previous

Leasing	
Capital Markets	
Property & Facility Management	
Property Management	
Facilities Management	
Project & Development Services	
Advisory Consulting & Other	
Valuations	
JLL Technologies	
Advisory & Consulting	
Sustainability Services	
LaSalle	

New

Markets Advisory	
	
	
Capital Markets	
	
Work Dynamics	
	
	
JLL Technologies	
LaSalle	

Appendix and Supplemental Material

Q4 2021 JLL Research Market Performance Summary



Americas

EMEA

APAC

Global

Gross Office Leasing Volumes (square footage – volumes relate to the office sector)

Q4 2021
(vs Q4 2020)

+59%

+40%

+56%

+51%

Q4 2021
(vs Q4 2019)

(23)%

(12)%

+7%

(13)%

FY 2021
(vs FY 2020)

+15%

+27%

+28%

+21%

Direct Commercial Real Estate Investment Sales Volumes (\$ - represents deals over \$5 million)

Q4 2021
(vs Q4 2020)

+98%

+12%

+18%

+55%

Q4 2021
(vs Q4 2019)

+73%

(2)%

+19%

+38%

FY 2021
(vs FY 2020)

+87%

+25%

+26%

+54%

Notes:

- Source: JLL Research, February 2022
- Direct commercial real estate investment includes office, multifamily residential, retail, hotels, industrial, mixed use, healthcare and alternatives sectors. Excludes entity-level and development transactions
- For gross leasing volumes, Americas refers to U.S. only

Q4 2021 Real Estate Services Revenue by Service Line



(\$ in millions; % change over Q4 2020)

	Americas			EMEA			APAC			Total RES		
	(\$M)	% Change		(\$M)	% Change		(\$M)	% Change		(\$M)	% Change	
		USD	LC		USD	LC		USD	LC		USD	LC
Leasing	\$737	72%	72%	\$138	50%	56%	\$120	47%	49%	\$995	65%	66%
Capital Markets	\$592	59%	59%	\$189	41%	45%	\$69	17%	19%	\$850	50%	51%
Property & Facility Management	\$1,799	16%	16%	\$430	4%	4%	\$613	5%	6%	\$2,842	12%	12%
Project & Development Services	\$404	(3)%	(3)%	\$275	21%	25%	\$128	12%	13%	\$808	7%	8%
Advisory, Consulting & Other	\$128	18%	18%	\$89	(12)%	(10)%	\$73	16%	17%	\$289	6%	7%
Total	\$3,658	27%	27%	\$1,122	16%	18%	\$1,002	11%	12%	\$5,782	22%	23%

Notes:

- Refer to pages 24 - 26 for definitions and reconciliations of non-GAAP financial measures

FY 2021 Real Estate Services Revenue by Service Line



(\$ in millions; % change over FY 2020)

	Americas			EMEA			APAC			Total RES		
	(\$M)	% Change		(\$M)	% Change		(\$M)	% Change		(\$M)	% Change	
		USD	LC		USD	LC		USD	LC		USD	LC
Leasing	\$2,179	50%	50%	\$347	41%	39%	\$268	43%	40%	\$2,794	48%	47%
Capital Markets	\$1,526	60%	60%	\$473	43%	39%	\$194	56%	51%	\$2,194	56%	54%
Property & Facility Management	\$6,375	8%	8%	\$1,505	3%	(2)%	\$2,343	9%	5%	\$10,223	8%	6%
Project & Development Services	\$1,366	2%	2%	\$871	11%	8%	\$448	9%	5%	\$2,685	6%	4%
Advisory, Consulting & Other	\$441	13%	13%	\$282	3%	(1)%	\$250	27%	22%	\$972	13%	10%
Total	\$11,887	19%	19%	\$3,478	12%	8%	\$3,502	14%	10%	\$18,867	17%	15%

Notes:

- Refer to pages 24 - 26 for definitions and reconciliations of non-GAAP financial measures

Fee Revenue / Fee-based Operating Expenses Reconciliation



	Three Months Ended December 31,		Twelve Months Ended December 31,	
(\$ in millions)	2021	2020	2021	2020
Revenue	\$5,945.7	\$4,845.1	\$19,367.0	\$16,589.9
Reimbursements	(2,342.1)	(2,098.2)	(8,321.4)	(7,689.8)
Revenue before reimbursements	3,603.6	2,747.2	11,045.6	8,900.1
Gross contract costs	(815.5)	(739.7)	(2,881.5)	(2,703.2)
Net non-cash MSR and mortgage banking derivative activity	(15.8)	(44.9)	(59.3)	(66.6)
Fee revenue	\$2,772.3	\$1,962.6	\$8,104.8	\$6,130.3
Operating expenses	\$5,500.1	\$4,516.6	\$18,323.5	\$16,030.8
Reimbursed expenses	(2,342.1)	(2,098.2)	(8,321.4)	(7,689.8)
Gross contract costs	(815.5)	(739.7)	(2,881.5)	(2,703.2)
Fee-based operating expenses	\$2,342.5	\$1,678.7	\$7,120.6	\$5,637.8

Reconciliation of Net Income to Adjusted Net Income and Adjusted Diluted Earnings Per Share



	Three Months Ended December 31,		Twelve Months Ended December 31,	
(\$ in millions except per share data)	2021	2020	2021	2020
Net income attributable to common shareholders	\$421.4	\$250.1	\$961.6	\$402.5
Shares (in 000s)	51,619	52,075	52,071	52,282
Diluted earnings per share	\$8.16	\$4.80	\$18.47	\$7.70
Net income attributable to common shareholders	\$421.4	\$250.1	\$961.6	\$402.5
Restructuring and acquisition charges	33.8	66.6	84.7	142.4
Net non-cash MSR and mortgage banking derivative activity	(15.8)	(44.9)	(59.3)	(66.6)
Amortization of acquisition-related intangibles	14.6	13.8	53.3	57.1
Gain on disposition	—	—	(12.4)	(4.8)
Tax impact of adjusted items	(7.0)	(9.9)	(14.3)	(35.9)
Adjusted net income	\$447.0	\$275.7	\$1,013.6	\$494.7
Shares (in 000s)	51,619	52,075	52,071	52,282
Adjusted diluted earnings per share⁽¹⁾	\$8.66	\$5.29	\$19.47	\$9.46

(1) Calculated on a local currency basis, the results for the three and twelve months ended December 31, 2021, include \$0.06 unfavorable and \$0.17 favorable impact, respectively, due to foreign exchange rate fluctuations.

Reconciliation of Net Income Attributable To Common Shareholders To Adjusted EBITDA



	Three Months Ended December 31,		Twelve Months Ended December 31,	
(\$ in millions)	2021	2020	2021	2020
Net income attributable to common shareholders	\$421.4	\$250.1	\$961.6	\$402.5
Interest expense, net of interest income	9.5	11.0	40.1	52.8
Provision for income taxes	115.9	74.7	264.3	106.9
Depreciation and amortization	57.2	59.6	217.5	226.4
EBITDA	\$604.0	\$395.4	\$1,483.5	\$788.6
Restructuring and acquisition charges	33.8	66.6	84.7	142.4
Gain on disposition	—	—	(12.4)	(4.8)
Net non-cash MSR and mortgage banking derivative activity	(15.8)	(44.9)	(59.3)	(66.6)
Adjusted EBITDA	\$622.0	\$417.1	\$1,496.5	\$859.6
Net income margin attributable to common shareholders ⁽¹⁾	11.7%	9.1%	8.7%	4.5%
Adjusted EBITDA margin (presented on a fee revenue and LC basis)	22.4%	21.3%	18.6%	14.0%

Adjusted EBITDA attributable to common shareholders ("Adjusted EBITDA") represents EBITDA attributable to common shareholders ("EBITDA") further adjusted for certain items we do not consider directly indicative of our ongoing performance in the context of certain performance measurements

(1) Calculated as % of Revenue before Reimbursements

Non-GAAP Measures



Management uses certain non-GAAP financial measures to develop budgets and forecasts, measure and reward performance against those budgets and forecasts, and enhance comparability to prior periods. These measures are believed to be useful to investors and other external stakeholders as supplemental measures of core operating performance and include the following:

- Fee revenue and Fee-based operating expenses,
- Adjusted EBITDA attributable to common shareholders ("Adjusted EBITDA") and Adjusted EBITDA margin,
- Adjusted net income attributable to common shareholders and Adjusted diluted earnings per share, and
- Percentage changes against prior periods, presented on a local currency basis.

However, non-GAAP financial measures should not be considered alternatives to measures determined in accordance with U.S. generally accepted accounting principles ("GAAP"). Any measure that eliminates components of a company's capital structure, cost of operations or investments, or other results has limitations as a performance measure. In light of these limitations, management also considers GAAP financial measures and does not rely solely on non-GAAP financial measures. Because the company's non-GAAP financial measures are not calculated in accordance with GAAP, they may not be comparable to similarly titled measures used by other companies.

Adjustments to GAAP Financial Measures Used to Calculate non-GAAP Financial Measures

Gross Contract Costs represent certain costs associated with client-dedicated employees and third-party vendors and subcontractors and are indirectly reimbursed through the fees we receive. These costs are presented on a gross basis in Operating expenses with the equal amount of corresponding fees in Revenue before reimbursements. Consistent with the treatment of directly reimbursed expenses, excluding gross contract costs from both Fee revenue and Fee-based operating expenses more accurately reflects how the company manages its expense base and operating margins and also enables a more consistent performance assessment across a portfolio of contracts with varying payment terms and structures, including those with direct versus indirect reimbursement of such costs.

Net Non-Cash Mortgage Servicing Rights ("MSR") and Mortgage Banking Derivative Activity consists of the balances presented within Revenue composed of (i) derivative gains/losses resulting from mortgage banking loan commitment and warehousing activity and (ii) gains recognized from the retention of MSR upon origination and sale of mortgage loans, offset by (iii) amortization of MSR intangible assets over the period that net servicing income is projected to be received. Non-cash derivative gains/losses resulting from mortgage banking loan commitment and warehousing activity are calculated as the estimated fair value of loan commitments and subsequent changes thereof, primarily represented by the estimated net cash flows associated with future servicing rights. MSR gains and corresponding MSR intangible assets are calculated as the present value of estimated cash flows over the estimated mortgage servicing periods. The above activity is reported entirely within Revenue of the Capital Markets service line of the Americas segment. Excluding net non-cash MSR and mortgage banking derivative activity reflects how the company manages and evaluates performance because the excluded activity is non-cash in nature.

Restructuring and Acquisition Charges primarily consist of: (i) severance and employment-related charges, including those related to external service providers, incurred in conjunction with a structural business shift, which can be represented by a notable change in headcount, change in leadership or transformation of business processes; (ii) acquisition, transaction and integration-related charges, including fair value adjustments, which are generally non-cash in the periods such adjustments are made, to assets and liabilities recorded in purchase accounting such as earn-out liabilities and intangible assets; and (iii) lease exit charges. Such activity is excluded as the amounts are generally either non-cash in nature or the anticipated benefits from the expenditures would not likely be fully realized until future periods. Restructuring and acquisition charges are excluded from segment operating results and therefore not a line item in the segments' reconciliation to Adjusted EBITDA.

Amortization of Acquisition-Related Intangibles, primarily composed of the estimated fair value ascribed at closing of an acquisition to assets such as acquired management contracts, customer backlog and relationships, and trade name, is more notable following the company's increase in acquisition activity in recent years. Such non-cash activity is excluded as the change in period-over-period activity is generally the result of longer-term strategic decisions and therefore not necessarily indicative of core operating results.

Gain on Disposition reflects the gain recognized on the sale of businesses. Given the low frequency of business disposals by the company historically, the gain directly associated with such activity is excluded as it is not considered indicative of core operating performance. In 2021, \$12.0 million of the activity related to a business disposition within Americas, with \$0.4 million relating to a sold business within EMEA, while activity in 2020 related to the sale of property management businesses in continental Europe.

Thank you