

Fourth Quarter and Full Year 2016

Financial and Operating Results

March 20, 2017

This presentation may contain "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, Section 21E of the Securities Exchange Act of 1934 and/or the Private Securities Litigation Reform Act of 1995, which reflect Global Brokerage's current views with respect to, among other things, its operations and financial performance in the future. These forward-looking statements are not historical facts and are based on current expectations, estimates and projections about Global Brokerage's industry, business plans, management's beliefs and certain assumptions made by management, many of which, by their nature, are inherently uncertain and beyond our control. Accordingly, readers are cautioned that any such forward-looking statements are not guarantees of future performance and are subject to certain risks, uncertainties and assumptions that are difficult to predict including, without limitation, risks associated with Global Brokerage's strategy to focus on its operations outside the United States, risks associated with the events that took place in the currency markets on January 15, 2015 and their impact on Global Brokerage's capital structure, risks associated with Global Brokerage's ability to recover all or a portion of any capital losses, risks relating to the ability of Global Brokerage to satisfy the terms and conditions of or make payments pursuant to the terms of the finance agreements with Leucadia, as well as risks associated with Global Brokerage's obligations under its other financing agreements, risks related to Global Brokerage's dependence on FX market makers, market conditions, risks associated with the outcome of any potential litigation or regulatory inquiries to which Global Brokerage may become subject, risks associated with potential reputational damage to Global Brokerage resulting from its sale of US customer accounts, and those other risks described under "Risk Factors" in Global Brokerage's Annual Report on Form 10-K, Global Brokerage's latest Quarterly Report on Form 10-Q, and other reports or documents Global Brokerage files with, or furnishes to, the SEC from time to time, which are accessible on the SEC website at sec.gov. This information should also be read in conjunction with Global Brokerage's Consolidated Financial Statements and the Notes thereto contained in Global Brokerage's Annual Report on Form 10-K, Global Brokerage's latest Quarterly Report on Form 10-Q, and in other reports or documents that Global Brokerage files with, or furnishes to, the SEC from time to time, which are accessible on the SEC website at sec.gov.

Global Brokerage undertakes no obligation to publicly update or review any forward-looking statement, whether as a result of new information, future developments or otherwise.

Non-GAAP Financial Measures: This presentation presents certain non-GAAP financial measures. These measures should not be considered in isolation from, or as a substitute for, measures prepared in accordance with generally accepted accounting principles. See the appendix to this presentation for reconciliations of these non-GAAP financial measures to the most comparable measures calculated and presented in accordance with GAAP.

Highlights for Q4 2016 include:

- **Net Revenues** from continuing operations were **\$80.6 million**, an increase of \$13.6 million from \$67.0 million in Q4 2015.
- A \$16.3 million increase in **Adjusted EBITDA** from continuing operations from **\$10.0 million** in Q4 2015 to **\$26.3 million** in Q4 2016.
- **Net Income** from continuing operations **attributable to Global Brokerage, Inc.** of **\$10.7 million** or **\$1.91/share**
 - **Includes a non-cash item:** \$6.4 million non-cash net gain on derivative liabilities (Leucadia Credit Agreement)

Operating (continuing operations only)

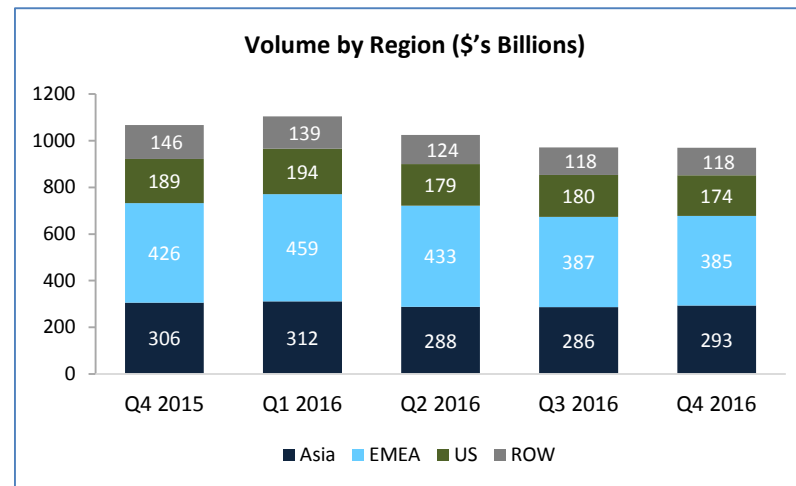
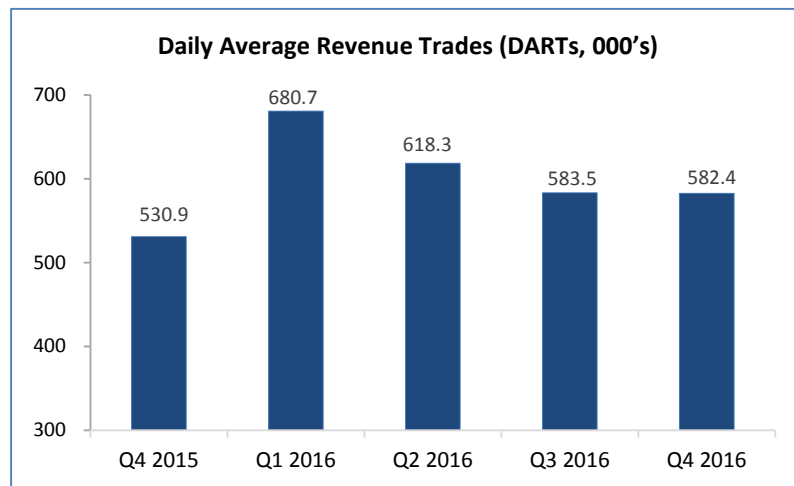
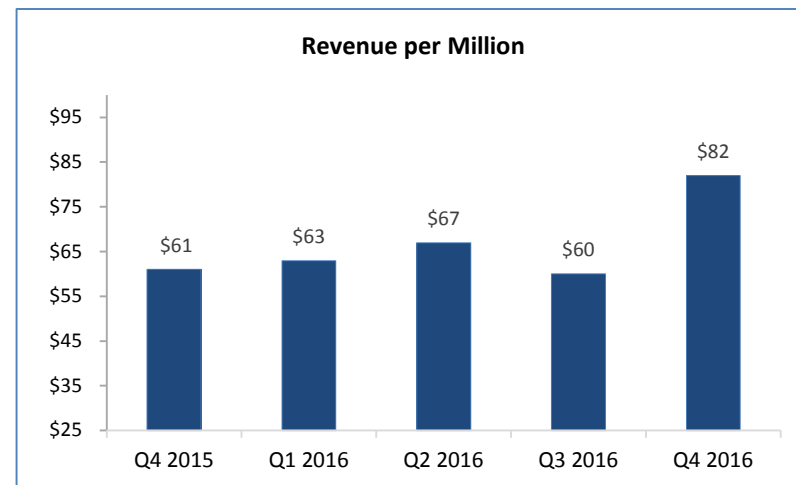
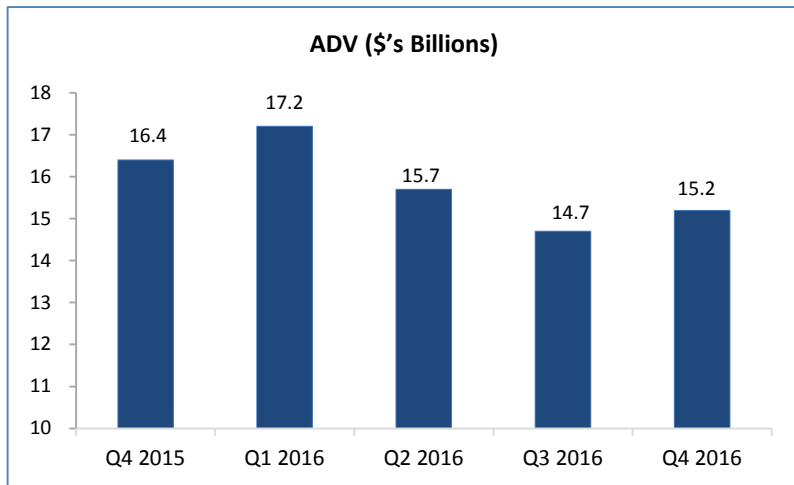
- **Trading revenue per million** of **\$82/MM up 33.7%** vs. \$61/MM in Q4/15.
- **Trading volume** of **\$970 billion for Q4/16** decreased 9.1% from Q4/15
 - Dealing Desk (“DD”) initiative for smaller clients reached **21.6% of trading volume in Q4 2016** vs. **14.5% in Q4 2015**
- **Tradeable accounts** decreased by 6,279 or **3.9% to 155,353** since 12/31/15

Updates:

- In March 2017, repaid \$30.0 million of Leucadia loan leaving \$128.0 million outstanding

- **\$202.8 million in operating cash** at 12/31/16 in our continuing operations vs. \$206.6 million at 12/31/15
 - Together with discontinued operations, **\$226.2 million in operating cash** at 12/31/16

	December 31, 2016			December 31, 2015		
	Continuing Ops	Disc Ops	Combined	Continuing Ops	Disc Ops	Combined
Cash & Cash Equivalents	\$ 200,914	\$ 9,378	\$ 210,292	\$ 203,854	\$ 10,786	\$ 214,640
Due From Brokers	3,363	14,090	17,453	3,781	22,234	26,015
Due to Brokers	(1,471)	(45)	(1,516)	(1,073)	-	(1,073)
Operating Cash	\$ 202,806	\$ 23,423	\$ 226,229	\$ 206,562	\$ 33,020	\$ 239,582



⁽¹⁾ Trading metrics data excludes discontinued operations and includes FXCM US LLC.

(In thousands, except per share amounts)

	Three Months Ended December 31,	
	2016	2015
Revenues		
Trading revenue	\$ 79,450	\$ 65,370
Interest income	617	595
Brokerage interest expense	<u>(233)</u>	<u>(229)</u>
Net interest revenue	384	366
Other income	759	1,258
Total net revenues	<u>80,593</u>	<u>66,994</u>
Operating Expenses		
Compensation and benefits	17,978	20,969
Referring broker fees	9,099	11,125
Advertising and marketing	5,496	4,516
Communication and technology	7,263	7,473
Trading costs, prime brokerage and clearing fees	977	1,005
General and administrative	22,164	19,202
Depreciation and amortization	6,140	7,195
Total operating expenses	<u>69,117</u>	<u>71,132</u>
Operating income (loss)	11,476	(4,138)
Other (Income) Expense		
(Gain) loss on derivative liabilities — Letter & Credit Agreement	(6,402)	99,927
Loss on equity method investments, net	2,575	168
Gain on sale of investment	(37,157)	-
Interest on borrowings	15,915	22,736
Income (loss) from continuing operations before income taxes	36,545	(126,969)
Income tax provision (benefit)	719	(418)
Income (loss) from continuing operations	35,826	(126,551)
Loss from discontinued operations, net of tax	(64,225)	(43,379)
Net loss	(28,399)	(169,930)
Net loss attributable to non-controlling interest in Global Brokerage Holdings, LLC	(3)	(49,945)
Net income attributable to redeemable non-controlling interest in FXCM Group, LLC	4,073	-
Net loss attributable to other non-controlling interests	(32,110)	(15,035)
Net loss attributable to Global Brokerage, Inc.	<u>\$ (359)</u>	<u>\$ (104,950)</u>
Income (loss) from continuing operations attributable to Global Brokerage, Inc.	\$ 10,744	\$ (85,691)
Loss from discontinued operations attributable to Global Brokerage, Inc.	(11,103)	(19,259)
Net loss attributable to Global Brokerage, Inc.	<u>\$ (359)</u>	<u>\$ (104,950)</u>
Weighted average shares of Class A common stock outstanding - Basic and Diluted	5,627	5,441
Net income (loss) per share attributable to stockholders of Class A common stock of Global Brokerage, Inc. - Basic and Diluted		
Continuing operations	\$ 1.91	\$ (15.75)
Discontinued operations	(1.97)	(3.54)
Net loss attributable to Global Brokerage, Inc.	<u>\$ (0.06)</u>	<u>\$ (19.29)</u>

Financial Summary

Three Months Ended December 31, 2016 and 2015
(unaudited)

(\$'s in Thousands)

	Three Months Ended December 31, 2016						Three Months Ended December 31, 2015						Change in Adjusted Combined
	Continuing Ops	Adjust.	Adj Continuing Ops	Disc Ops	Adjust.	Adjusted Combined	Continuing Ops	Adjust.	Adj Continuing Ops	Disc Ops	Adjust.	Adjusted Combined	
Trading Revenue ⁽¹⁾	\$ 79,450	\$ -	\$ 79,450	\$ 8,491	\$ -	\$ 87,941	\$ 65,370	\$ -	\$ 65,370	\$ 11,346	\$ -	\$ 76,716	\$ 11,225
Interest	384	-	384	158	-	542	366	-	366	25	-	391	151
Other ⁽²⁾	759	-	759	77	-	836	1,258	145	1,403	898	-	2,301	(1,465)
Adjusted Total Revenues	80,593	-	80,593	8,726	-	89,319	66,994	145	67,139	12,269	-	79,408	9,911
Compensation and benefits	17,978	-	17,978	(650)	-	17,328	20,969	-	20,969	3,176	-	24,145	(6,817)
Referring broker fees	9,099	-	9,099	-	-	9,099	11,125	-	11,125	-	-	11,125	(2,026)
Advertising and marketing	5,496	-	5,496	-	-	5,496	4,516	-	4,516	-	-	4,516	980
Communication and technology	7,263	-	7,263	1,359	-	8,622	7,473	-	7,473	1,720	-	9,193	(571)
Trading costs	977	-	977	3,386	-	4,363	1,005	-	1,005	3,662	-	4,667	(304)
General and administrative ⁽³⁾	22,164	(8,688)	13,476	326	-	13,802	19,202	(7,313)	11,889	2,099	(1,453)	12,535	1,267
Adjusted Operating Expenses	62,977	(8,688)	54,289	4,421	-	58,710	63,937	(6,960)	56,977	10,657	(1,453)	66,181	(7,471)
(Loss) gain on equity method investments, net ⁽⁴⁾	(2,575)	2,575	-	193	-	193	(168)	-	(168)	(446)	-	(614)	807
Adjusted EBITDA	\$ 15,041	\$ 11,263	\$ 26,304	\$ 4,498	\$ -	\$ 30,802	\$ 2,889	\$ 7,105	\$ 9,994	\$ 1,166	\$ 1,453	\$ 12,613	\$ 18,189

Footnotes:

⁽¹⁾ Included in Q4 2016 continuing ops is \$78.8 million from Retail and \$0.6 million from FXCM Pro. Included in Q4 2016 discontinued ops is \$7.2 million from Lucid and \$1.3 million from V3.

Included in Q4 2015 continuing ops is \$63.7 million from Retail and \$1.6 million from FXCM Pro. Included in Q4 2015 discontinued ops is \$4.7 million from Lucid and \$6.6 million from V3.

⁽²⁾ Represents the \$0.1 million charge in Q4 2015 attributable to the remeasurement of our tax receivable agreement liability to reflect a revised effective tax rate.

⁽³⁾ Represents \$9.1 million of regulatory fines and professional fees, including the CFTC regulatory fine of \$7.0 million and CFTC and SNB related professional fees of \$2.1 million, partially offset by \$0.4 million of insurance recoveries to reimburse for costs incurred related to the January 15, 2015 SNB event included in continuing operations for the three months ended December 31, 2016. For the three months ended December 31, 2015, represents the elimination of a \$6.8 million reserve recorded against an uncollected broker receivable, \$0.8 million of legal fees resulting from the January 15, 2015 SNB event and other professional fees, \$0.5 million of costs related to the cyber incident and a recovery of \$0.8 million related to a settlement of a lawsuit, all recorded in continuing operations for Q4 2015, and a \$1.5 million reserve for restitution related to pre-August 2010 trade execution practices recorded in discontinued operations in Q4 2015.

⁽⁴⁾ Represents \$2.6 million of impairments taken on equity method investments in the three months ended December 31, 2016.

Balance Sheet

As of December 31, 2016 and December 31, 2015
(unaudited, condensed)

(\$'s in Thousands)

	<u>December 31, 2016</u>	<u>December 31, 2015</u>		<u>December 31, 2016</u>	<u>December 31, 2015</u>
Assets			Liabilities, Redeemable Non-Controlling Interest and Stockholders' Deficit		
Current assets			Current liabilities		
Cash and cash equivalents	\$ 200,914	\$ 203,854	Customer account liabilities	\$ 661,936	\$ 685,043
Cash and cash equivalents, held for customers	661,936	685,043	Accounts payable and accrued expenses	55,491	38,298
Due from brokers	3,363	3,781	Due to brokers	1,471	1,073
Accounts receivable, net	5,236	1,636	Other liabilities	2,629	-
Tax receivable	199	1,766	Due to related parties pursuant to tax receivable agreement	-	145
Assets held for sale	<u>97,103</u>	<u>233,937</u>	Liabilities held for sale	<u>2,325</u>	<u>14,510</u>
Total current assets	968,751	1,130,017	Total current liabilities	723,852	739,069
Deferred tax asset	330	14	Deferred tax liability	215	719
Office, communication and computer equipment, net	32,815	35,891	Senior convertible notes	161,425	154,255
Goodwill	23,479	28,080	Credit Agreement — Related Party	150,516	147,262
Other intangible assets, net	6,285	13,782	Derivative liability — Letter Agreement	-	448,458
Notes receivable	-	7,881	Other liabilities	<u>7,319</u>	<u>16,044</u>
Other assets	<u>7,364</u>	<u>11,421</u>	Total liabilities	<u>1,043,327</u>	<u>1,505,807</u>
Total assets	<u>\$ 1,039,024</u>	<u>\$ 1,227,086</u>	Redeemable non-controlling interest	46,364	-
			Stockholders' Deficit		
			Total stockholders' deficit	<u>(50,667)</u>	<u>(278,721)</u>
			Total liabilities, redeemable non-controlling interest and stockholders' deficit	<u>\$ 1,039,024</u>	<u>\$ 1,227,086</u>

Appendix

Reconciliation of GAAP Reported to Non-GAAP Adjusted Financial Measures*

3 Months Ended December 31, 2016 and 2015 (000's, unaudited)

(\$'s in Thousands)

	Reconciliation of U.S. GAAP Net Income (Loss) to Adjusted EBITDA ⁽¹⁾					
	Three Months Ended December 31,					
	2016			2015		
	Continuing Ops	Disc Ops	Combined	Continuing Ops	Disc Ops	Combined
Net income (loss)	\$ 35,826	\$ (64,225)	\$ (28,399)	\$ (126,551)	\$ (43,379)	\$ (169,930)
Adjustments:						
Net Revenues ⁽²⁾	-	-	-	145	-	145
Allocation of net income to Lucid members for services provided ⁽³⁾	-	(750)	(750)	-	(1,852)	(1,852)
General and administrative ⁽⁴⁾	8,688	-	8,688	7,313	1,453	8,766
Bad debt recovery ⁽⁵⁾	-	-	-	(353)	-	(353)
Loss on equity method investments, net ⁽⁶⁾	2,575	-	2,575	-	-	-
Depreciation and amortization	6,140	-	6,140	7,195	-	7,195
Loss on classification as held for sale	-	69,419	69,419	-	38,840	38,840
(Loss) gain on derivative liabilities - Letter & Credit Agreement	(6,402)	-	(6,402)	99,927	-	99,927
Interest on borrowings	15,915	-	15,915	22,736	-	22,736
Income tax provision (benefit)	719	54	773	(418)	443	25
(Gain) loss on completed dispositions	(37,157)	-	(37,157)	-	7,114	7,114
Total adjustments	(9,522)	68,723	59,201	136,545	45,998	182,543
Adjusted EBITDA	\$ 26,304	\$ 4,498	\$ 30,802	\$ 9,994	\$ 2,619	\$ 12,613

* See footnotes following

Reconciliation of GAAP Reported to Non-GAAP Adjusted Financial Measures

3 Months Ended December 31, 2016 and 2015 (footnotes)

(1) Adjusted EBITDA is a Non-GAAP measure that is not prepared under any comprehensive set of accounting rules or principles and does not reflect all of the amounts associated with the Company's results of operations as determined in accordance with U.S. GAAP.

(2) Represents the \$0.1 million charge in Q4 2015 for expected tax receivable payments.

(3) Represents the elimination of the 49.9% of Lucid's earnings allocated among the non-controlling interests recorded as compensation for U.S. GAAP purposes included in discontinued operations.

(4) Represents a CFTC regulatory fine of \$7.0 million and \$2.1 million of professional fees, partially offset by \$0.4 million of insurance recoveries to reimburse for costs incurred related to the January 15, 2015 SNB event included in continuing operations for the three months ended December 31, 2016. For the three months ended December 31, 2015, represents the elimination of a \$6.8 million reserve recorded against an uncollected broker receivable, \$0.8 million of legal fees resulting from the January 15, 2015 SNB event and other professional fees, \$0.5 million of costs related to the cyber incident and a recovery of \$0.8 million related to a settlement of a lawsuit, all recorded in continuing operations for Q4 2015, and a \$1.5 million reserve for restitution related to pre-August 2010 trade execution practices recorded in discontinued operations in Q4 2015.

(5) Represents a recovery against the net bad debt expense related to client debit balances associated with the January 15, 2015 SNB event.

(6) Represents \$2.6 million of impairments taken on equity method investments in the three months ended December 31, 2016.

Financial Summary

Twelve Months Ended December 31, 2016 and 2015
(unaudited)

(\$'s in Thousands)

	Twelve Months Ended December 31, 2016						Twelve Months Ended December 31, 2015						Change in Adjusted Combined
	Continuing Ops	Adjust.	Adj Continuing Ops	Disc Ops	Adjust.	Adjusted Combined	Continuing Ops	Adjust.	Adj Continuing Ops	Disc Ops	Adjust.	Adjusted Combined	
Trading Revenue ⁽¹⁾	\$ 276,000	\$ -	\$ 276,000	\$ 31,101	\$ -	\$ 307,101	\$ 250,042	\$ -	\$ 250,042	\$ 71,500	\$ -	\$ 321,542	\$ (14,441)
Interest	1,629	-	1,629	309	-	1,938	1,009	-	1,009	172	-	1,181	757
Other ⁽²⁾	6,427	44	6,471	113	-	6,584	151,227	(145,079)	6,148	5,700	-	11,848	(5,264)
Adjusted Total Revenues	284,056	44	284,100	31,523	-	315,623	402,278	(145,079)	257,199	77,372	-	334,571	(18,948)
Compensation and benefits	91,377	-	91,377	(248)	-	91,129	93,413	-	93,413	14,708	-	108,121	(16,992)
Referring broker fees	38,213	-	38,213	-	-	38,213	54,827	-	54,827	208	-	55,035	(16,822)
Advertising and marketing	20,849	-	20,849	-	-	20,849	14,932	-	14,932	736	-	15,668	5,181
Communication and technology	28,262	-	28,262	5,694	-	33,956	33,545	-	33,545	8,248	-	41,793	(7,837)
Trading costs	3,585	-	3,585	13,062	-	16,647	3,952	-	3,952	18,378	-	22,330	(5,683)
General and administrative ⁽³⁾	75,790	(21,265)	54,525	2,395	(513)	56,407	58,436	(11,654)	46,782	6,314	(1,453)	51,643	4,764
Bad debt (recovery) expense ⁽⁴⁾	(141)	141	-	-	-	-	256,950	(256,950)	-	8,408	(8,408)	-	-
Adjusted Operating Expenses	257,935	(21,124)	236,811	20,903	(513)	257,201	516,055	(268,604)	247,451	57,000	(9,861)	294,590	(37,389)
(Loss) gain on equity method investments, net ⁽⁵⁾	(3,053)	2,575	(478)	1,114	(679)	(43)	(467)	-	(467)	(1,267)	-	(1,734)	1,691
Adjusted EBITDA	\$ 23,068	\$ 23,743	\$ 46,811	\$ 11,734	\$ (166)	\$ 58,379	\$ (114,244)	\$ 123,525	\$ 9,281	\$ 19,105	\$ 9,861	\$ 38,247	\$ 20,132

Footnotes:

⁽¹⁾ Included in Twelve Months Ended December 31, 2016 continuing ops is \$270.4 million from Retail and \$5.6 million from FXCM Pro. Included in Twelve Months Ended December 31, 2016 \$26.2 million from Lucid and \$4.9 million from V3.

Included in twelve months ended December 31, 2015 continuing ops is \$235.0 million from Retail and \$15.0 million from FXCM Pro. Included in twelve months ended December 31, 2015 discontinued ops is \$6.6 million from Retail, \$38.0 million from Lucid, \$24.6 million from V3 and \$2.3 million from Faros.

⁽²⁾ Represents a \$0.1 million charge in the twelve months ended December 31, 2016 for tax receivable agreement payments and the elimination of a \$145.1 million noncash benefit in the twelve months ended December 31, 2015 attributable to the reduction of our tax receivable agreement contingent liability to zero.

⁽³⁾ Represents the provision for debt forgiveness of \$8.2 million against the notes receivable from the non-controlling members of Lucid, a CFTC regulatory fine of \$7.0 million and \$7.4 million of professional fees, including fees related to the Leucadia Restructuring Transaction and the Stockholder Rights Plan, partially offset by \$1.4 million of insurance recoveries to reimburse for costs incurred related to the January 15, 2015 SNB event and the cybersecurity incident, which is included in continuing operations in the twelve months ended December 31, 2016, and expense of \$0.5 million included in discontinued operations in the twelve months ended December 31, 2016 related to pre-August 2010 trade execution practices and other regulatory fees and fines. For the twelve months ended December 31, 2015, represents the elimination of a \$6.8 million reserve recorded against an uncollected broker receivable, \$4.9 million of legal fees resulting from the January 15, 2015 SNB event and other professional fees, including the elimination of the expense related to the Stockholders Rights Plan, \$0.7 million of costs related to the cyber incident and a recovery of \$0.8 million related to a settlement of a lawsuit, all recorded in continuing operations in the twelve months ended December 31, 2015, and a \$1.5 million reserve for restitution related to pre-August 2010 trade execution practices recorded in discontinued operations in the twelve months ended December 31, 2015.

⁽⁴⁾ Represents the net bad debt (recovery) expense related to client debit balances associated with the January 15, 2015 SNB event.

⁽⁵⁾ Represents \$2.6 million of impairments taken on equity method investments in the twelve months ended December 31, 2016 included in continuing operations and a \$0.7 million gain on the disposition of an equity method investment related to V3 in the twelve months ended December 31, 2016 included in discontinued operations.

Reconciliation of GAAP Reported to Non-GAAP Adjusted Financial Measures*

12 Months Ended December 31, 2016 and 2015 (000's, unaudited)

(\$'s in Thousands)

	Reconciliation of U.S. GAAP Net Income (Loss) to Adjusted EBITDA ⁽¹⁾					
	Twelve Months Ended December 31,					
	2016			2015		
	Continuing Ops	Disc Ops	Combined	Continuing Ops	Disc Ops	Combined
Net income (loss)	\$ 161,793	\$ (117,860)	\$ 43,933	\$ (814,503)	\$ (118,294)	\$ (932,797)
Adjustments:						
Net Revenues ⁽²⁾	44	-	44	(145,079)	-	(145,079)
Allocation of net income to Lucid members for services provided ⁽³⁾	-	3,029	3,029	-	5,064	5,064
General and administrative ⁽⁴⁾	21,265	513	21,778	11,654	1,453	13,107
Bad debt (recovery) expense ⁽⁵⁾	(141)	-	(141)	256,950	8,408	265,358
Loss (gain) on equity method investments, net ⁽⁶⁾	2,575	(679)	1,896	-	-	-
Depreciation and amortization	27,289	-	27,289	28,331	12,359	40,690
Goodwill impairment and loss on classification as held for sale	-	126,511	126,511	9,513	121,525	131,038
(Gain) loss on derivative liabilities - Letter & Credit Agreement	(206,777)	-	(206,777)	354,657	-	354,657
Interest on borrowings	77,143	-	77,143	126,560	-	126,560
Income tax provision	777	54	831	181,198	5,764	186,962
Gain on completed dispositions	(37,157)	-	(37,157)	-	(7,313)	(7,313)
Total adjustments	(114,982)	129,428	14,446	823,784	147,260	971,044
Adjusted EBITDA	\$ 46,811	\$ 11,568	\$ 58,379	\$ 9,281	\$ 28,966	\$ 38,247

* See footnotes following

Reconciliation of GAAP Reported to Non-GAAP Adjusted Financial Measures

12 Months Ended December 31, 2016 and 2015 (footnotes)

- (1) Adjusted EBITDA is a Non-GAAP measure that is not prepared under any comprehensive set of accounting rules or principles and does not reflect all of the amounts associated with the Company's results of operations as determined in accordance with U.S. GAAP.
- (2) Represents a \$0.1 million charge in the twelve months ended December 31, 2016 for tax receivable agreement payments and the elimination of a \$145.1 million noncash benefit in the twelve months ended December 31, 2015 attributable to the reduction of our tax receivable agreement contingent liability to zero.
- (3) Represents the elimination of the 49.9% of Lucid's earnings allocated among the non-controlling interests recorded as compensation for U.S. GAAP purposes included in discontinued operations.
- (4) Represents the provision for debt forgiveness of \$8.2 million against the notes receivable from the non-controlling members of Lucid, a CFTC regulatory fine of \$7.0 million and \$7.4 million of professional fees, including fees related to the Leucadia Restructuring Transaction and the Stockholder Rights Plan, partially offset by \$1.4 million of insurance recoveries to reimburse for costs incurred related to the January 15, 2015 SNB event and the cybersecurity incident, which is included in continuing operations in the twelve months ended December 31, 2016, and expense of \$0.5 million included in discontinued operations in the twelve months ended December 31, 2016 related to pre-August 2010 trade execution practices and other regulatory fees and fines. For the twelve months ended December 31, 2015, represents the elimination of a \$6.8 million reserve recorded against an uncollected broker receivable, \$4.9 million of legal fees resulting from the January 15, 2015 SNB event and other professional fees, including the elimination of the expense related to the Stockholders Rights Plan, \$0.7 million of costs related to the cyber incident and a recovery of \$0.8 million related to a settlement of a lawsuit, all recorded in continuing operations in the twelve months ended December 31, 2015, and a \$1.5 million reserve for restitution related to pre-August 2010 trade execution practices recorded in discontinued operations in the twelve months ended December 31, 2015.
- (5) Represents the net bad debt (recovery) expense related to client debit balances associated with the January 15, 2015 SNB event.
- (6) Represents \$2.6 million of impairments taken on equity method investments in the twelve months ended December 31, 2016 included in continuing operations and a \$0.7 million gain on the disposition of an equity method investment related to V3 in the twelve months ended December 31, 2016 included in discontinued operations.