

Bentley Systems

4Q23 Wrap: Trading upside for visibility

Reiterate Rating: NEUTRAL | PO: 57.00 USD | Price: 49.46 USD

Underlying momentum overshadowed by headwinds

Strong momentum of fundamental ARR growth (+13.5% excluding China) and the continued flow of IJIA funding were offset by headwinds impacting results and the FY24 outlook. The accelerating shift away from subscription revenue (to perpetual licenses) in China pressured 4Q ARR growth, and we expect less benefit to ARR from contract escalations in 2024 given lower inflation (escalations were in the mid-single digits in 2022/2023). E365 renewal negotiations, including floors and ceilings for what BSY can charge for consumption, are likely to limit both revenue upside and downside potential to 2024 estimates, in our view. We reiterate our Neutral rating.

4Q results slightly below Street, FY24 guidance in line

BSY reported 4Q23 total revenue of \$310.6mn (+8.3% y/y), slightly below our \$315.3mn estimate and consensus \$311.6mn on subscription revenue weakness (China). Similarly, subscription revenue of \$272.5mn (+8.3% y/y, +7.4% cc) was slightly below our \$279.7mn estimate and consensus of \$275.4mn. Organic constant-currency ARR was \$1.175bn, representing a y/y growth rate of 12.5%. Adjusted operating margin was reported at 29.4% (not including SBC) compared to 30.7% in 4Q22. Management introduced FY24 total revenue guidance of \$1.350bn to \$1.375bn (+11% y/y at the midpoint), in line with consensus of \$1.364bn. Management also introduced cc ARR growth guidance of 10.5% to 13.0% and adjusted operating income margin of roughly 27.4%, including SBC.

Asset analytics opportunity in focus for 2024

BSY has validated a bottoms-up entry point for digital twin monetization and is increasing focus on its opportunity in asset analytics in 2024, leveraging AI and the iTwin platform. Management commentary suggests that the opportunity for Asset Analytics Cloud Service is in the three-digit ARR range per cell tower.

Reiterate Neutral rating and \$57 PO

We reiterate our \$57 PO, based on a target CY25 FCF multiple of 45x (we roll our multiple forward from 46x CY24 and adjust for lower expected subscription revenue growth), a premium to design software peers at 32x. We believe that a premium multiple is justified based on strong secular growth trends and profitability. Our Neutral rating remains based on BSY's premium valuation relative to peers, which we expect to limit near-term multiple expansion.

Estimates (Dec) (US\$)	2022A	2023A	2024E	2025E	2026E
EPS	0.84	0.89	0.99	1.12	1.26
GAAP EPS	0.53	0.98	0.68	0.85	1.09
EPS Change (YoY)	0%	6.0%	11.2%	13.1%	12.5%
Consensus EPS (Bloomberg)			1.00	1.13	1.59
DPS	0.11	0.18	0.24	0.24	0.24
Valuation (Dec)					
P/E	58.9x	55.6x	50.0x	44.2x	39.3x
GAAP P/E	93.3x	50.5x	72.7x	58.2x	45.4x
Dividend Yield	0.2%	0.4%	0.5%	0.5%	0.5%
EV / EBITDA*	48.7x	42.8x	37.9x	33.3x	30.2x
Free Cash Flow Yield*	1.6%	2.4%	2.2%	2.5%	2.9%

* For full definitions of *IQmethod*SM measures, see page 9.

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Refer to important disclosures on page 10 to 12. Analyst Certification on page 8. Price Objective Basis/Risk on page 8.

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27 February 2024

Equity

Key Changes

(US\$)	Previous	Current
2024E Rev (m)	1,362.6	1,354.3
2025E Rev (m)	1,501.6	1,492.1
2026E Rev (m)	NA	1,645.0
2024E EPS	1.00	0.99
2025E EPS	0.86	1.12
2026E EPS	NA	1.26
2024E DPS	0.19	0.24

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Stock Data

Price	49.46 USD
Price Objective	57.00 USD
Date Established	7-Nov-2023
Investment Opinion	B-2-7
52-Week Range	37.21 USD - 55.37 USD
Mkt Val (mn) / Shares Out (mn)	16,491 USD / 333.4
Free Float	78.6%
Average Daily Value (mn)	40.29 USD
BofA Ticker / Exchange	BSY / NAS
Bloomberg / Reuters	BSY US / BSY.OQ
ROE (2024E)	33.3%
Net Dbt to Eqty (Dec-2023A)	165.2%

ESGMeter™ **High**

ESGMeter is not indicative of a company's future stock price performance and is not an investment recommendation or rating. ESGMeter is independent of BofA Global Research's equity investment rating, volatility risk rating, income rating, and price objective for that company. For full details, refer to "[BofA ESGMeter Methodology](#)".

AI: artificial intelligence

ARR: annualized recurring revenue

Cc: constant currency

IJIA: Infrastructure Investment and Jobs Act

PO: price objective

SBC: stock-based compensation

iQprofileSM Bentley Systems

iQmethodSM – Bus Performance*

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Return on Capital Employed	13.6%	7.8%	15.0%	15.6%	16.2%
Return on Equity	56.0%	40.8%	33.3%	30.1%	27.3%
Operating Margin	31.7%	32.2%	33.0%	34.1%	35.9%
Free Cash Flow	256	392	360	420	483

iQmethodSM – Quality of Earnings*

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Cash Realization Ratio	1.0x	1.4x	1.1x	1.2x	1.2x
Asset Replacement Ratio	0.3x	0.3x	0.3x	0.5x	0.6x
Tax Rate	NM	78.0%	NM	NM	NM
Net Debt-to-Equity Ratio	298.0%	165.2%	106.5%	60.4%	24.8%
Interest Cover	10.3x	10.0x	15.5x	17.6x	20.4x

Income Statement Data (Dec)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Sales	1,099	1,228	1,354	1,492	1,645
% Change	13.9%	11.8%	10.3%	10.2%	10.2%
Gross Profit	885	986	1,089	1,210	1,343
% Change	15.6%	11.4%	10.5%	11.1%	10.9%
EBITDA	366	417	470	535	590
% Change	12.8%	13.7%	12.9%	13.7%	10.4%
Net Interest & Other Income	(34)	(40)	(29)	(29)	(29)
Net Income (Adjusted)	275	297	332	375	430
% Change	3.0%	8.0%	11.7%	13.1%	14.5%

Free Cash Flow Data (Dec)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Net Income from Cont Operations (GAAP)	175	327	228	285	371
Depreciation & Amortization	72	72	68	60	56
Change in Working Capital	(18)	68	(8)	5	(16)
Deferred Taxation Charge	(5)	(199)	0	0	0
Other Adjustments, Net	51	149	94	99	105
Capital Expenditure	(19)	(25)	(22)	(30)	(33)
Free Cash Flow	256	392	360	420	483
% Change	-5.4%	53.1%	-8.2%	16.7%	15.2%
Share / Issue Repurchase	(53)	(37)	0	0	0
Cost of Dividends Paid	(34)	(59)	(79)	(80)	(81)
Change in Debt	330	(5)	0	0	0

Balance Sheet Data (Dec)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Cash & Equivalents	72	68	349	689	1,091
Trade Receivables	296	303	310	340	374
Other Current Assets	48	49	54	38	42
Property, Plant & Equipment	32	40	45	60	79
Other Non-Current Assets	2,717	2,860	2,845	2,832	2,824
Total Assets	3,165	3,320	3,603	3,958	4,410
Short-Term Debt	5	10	10	10	10
Other Current Liabilities	623	750	806	877	951
Long-Term Debt	1,776	1,518	1,518	1,518	1,518
Other Non-Current Liabilities	187	157	161	163	166
Total Liabilities	2,592	2,436	2,495	2,569	2,645
Total Equity	573	884	1,108	1,390	1,765
Total Equity & Liabilities	3,165	3,320	3,603	3,958	4,410

* For full definitions of iQmethodSM measures, see page 9.

Company Sector

Server & Enterprise Software

Company Description

Bentley is a design software and services company providing a range of solutions that enable customers to design, model, build, construct, manage and operate infrastructure assets. Bentley's core tools include its MicroStation-based applications for modeling and simulation, ProjectWise for collaboration, AssetWise for asset performance, and iTwin for digital Twins. Bentley is headquartered in Exton, Pennsylvania, has 4,000+ employees, and generates annual revenues of more than \$750mn.

Investment Rationale

Bentley checks all the boxes for us to be bullish: superior tech/data to drive market share, strong product moat, large base of large and small customers, large total addressable market with expansion potential, and stable recurring model to provide long-term visibility and margin upside. However, relative valuation and broader de-risking in the current environment balance our constructive fundamental view and could limit near-term multiple expansion to our estimated fair value target multiple.

Stock Data

Average Daily Volume 814,619

Quarterly Earnings Estimates

	2023	2024
Q1	0.25A	0.26E
Q2	0.24A	0.24E
Q3	0.22A	0.26E
Q4	0.19A	0.24E

4Q results slightly below Street, FY24 guidance in line

BSY reported 4Q23 total revenue of \$310.6mn (+8.3% y/y), slightly below our \$315.3mn estimate and consensus \$311.6mn on subscription revenue weakness (China). Similarly, subscription revenue of \$272.5mn (+8.3% y/y, +7.4% cc) was slightly below our \$279.7mn estimate and consensus of \$275.4mn. Organic cc ARR was \$1.175bn, representing a y/y growth rate of 12.5%. Adjusted operating margin was reported at 29.4% (not including SBC) compared to 30.7% in 4Q22. Management introduced FY24 total revenue guidance of \$1.350bn to \$1.375bn (+11% y/y at the midpoint), in line with consensus at \$1.364bn. Management also introduced cc ARR growth guidance of 10.5% to 13.0% and adjusted operating income margin of roughly 27.4%, including SBC.

Exhibit 1: BSY's subscription revenues were slightly below our estimate

BSY variance analysis

\$ in Thousands (except per share data)	BofA Estimates	4Q23 Actuals	Variance
Subscriptions	\$279,657	\$272,468	-3%
Perpetual licenses	\$11,884	\$12,886	8%
Services	\$23,761	\$25,287	6%
Total Revenue	\$315,302	\$310,641	-1%
Cost of subscriptions and licenses	\$38,852	\$41,366	6%
Cost of services	\$21,860	\$21,096	-3%
Cost of revenues	\$60,712	\$62,462	3%
Gross Profit	\$254,590	\$248,179	-3%
Operating Expenses			
Research and development	\$64,637	\$64,186	-1%
Selling and marketing	\$57,385	\$62,012	8%
General and administrative	\$36,575	\$30,788	-16%
Total Operating Expenses	\$158,597	\$156,987	-1%
Operating Income (loss)	\$95,993	\$91,192	-5%
Total Other Income (Expense)	(\$10,047)	(\$9,170)	-9%
Income before Taxes	\$85,946	\$82,022	-5%
Provision for Income Taxes	\$16,674	\$17,769	
Net Income - Pro forma	\$69,272	\$64,253	-7%
EPS (Diluted) - Pro forma	\$0.21	\$0.19	-7%
Net Income - GAAP	\$43,623	\$179,585	312%
EPS (Diluted) - GAAP	\$0.13	\$0.54	312%
Shares outstanding (Non-GAAP Diluted)	333,325	333,419	0%
Growth Analysis - Y-Y			
Subscriptions	11%	8%	-2.9%
Perpetual licenses	-2%	6%	8.2%
Services	2%	9%	6.6%
Total Revenue	10%	8%	-1.6%
Margin Analysis			
Total gross margin	80.7%	79.9%	-0.9%
Research & development	20.5%	20.7%	0.2%
Sales & Marketing	18.2%	20.0%	1.8%
General & Administrative	11.6%	9.9%	-1.7%
Operating Margin	30.4%	29.4%	-1.1%
Pre-tax margin	27.3%	26.4%	-0.9%
Tax rate - pro forma	19.4%	21.7%	2.3%
Net Margin	22.0%	20.7%	-1.3%
Balance Sheet & Cash Flow Data			
Cash & equivalents	\$93,767	\$68,412	-27.0%
Deferred revenue	\$265,884	\$269,647	1.4%
Cash flow from operations	\$51,941	\$87,053	67.6%
Free cash flow	\$171,939	\$171,939	0.0%

Source: BofA Global Research, company filings

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Exhibit 2: We slightly lower our FY24 subscription revenue estimate

BSY estimate changes

	1Q24E				2024E				2025E			
	Previous Estimate	Previous Y/Y Growth	New Estimate	New Y/Y Growth	Previous Estimate	Previous Y/Y Growth	New Estimate	New Y/Y Growth	Previous Estimate	Previous Y/Y Growth	New Estimate	New Y/Y Growth
Subscriptions	\$ 308,409	11.0%	\$ 302,852	9.0%	\$ 1,213,864	11.6%	\$ 1,202,963	11.4%	\$ 1,349,399	11.2%	\$ 1,337,320	11.2%
Perpetual licenses	\$9,738	2.0%	\$ 9,738	2.0%	\$46,232	2.7%	\$ 47,259	2.7%	\$47,559	2.9%	\$ 48,617	2.9%
Services	\$27,559	2.0%	\$27,559	2.0%	\$102,553	2.0%	\$104,109	2.0%	\$104,604	2.0%	\$106,192	2.0%
Total revenue	\$345,706	10.0%	\$340,149	8.2%	\$1,362,649	10.5%	\$1,354,331	10.3%	\$1,501,561	10.2%	\$1,492,128	10.2%
Operating Income	\$122,037	11.3%	\$116,669	6.4%	\$465,251	16.0%	\$446,830	12.8%	\$515,482	10.8%	\$508,861	13.9%
Net Income – PF	\$88,107	7.9%	\$86,579	6.0%	\$335,586	11.0%	\$331,974	11.7%	\$370,440	10.4%	\$375,466	13.1%

Source: BofA Global Research estimates

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Exhibit 3: BSY reported 2023 revenues of \$1.228bn

BSY income statement

\$ Thousands	Year FY21A	Year FY22A	Year FY23A	Mar 1Q24E	Jun 2Q24E	Sep 3Q24E	Dec 4Q24E	Year FY24E	Year FY25E	Year FY26E
Subscriptions	812,839	960,221	1,080,308	302,852	290,352	304,595	305,164	1,202,963	1,337,320	1,486,697
Perpetual licenses	53,080	43,377	46,038	9,738	12,070	12,244	13,208	47,259	48,617	50,013
Total Subscription and licenses	865,919	1,003,598	1,126,346	312,590	302,422	316,838	318,372	1,250,222	1,385,937	1,536,710
Services	99,159	95,485	102,068	27,559	26,304	24,453	25,793	104,109	106,192	108,315
		1,099,083	1,228,414	340,149	328,726	341,292	344,165	1,354,331	1,492,128	1,645,025
Total Revenue	965,078	3	4	9	5	2	5	1	8	5
Y/Y rev growth	20.3%	13.9%	11.8%	8.2%	10.8%	11.3%	10.8%	10.3%	10.2%	10.2%
Cost of subscriptions and licenses	114,471	132,183	153,904	40,637	41,432	42,773	44,572	169,414	183,950	202,822
Cost of services	85,228	82,205	88,692	25,355	24,199	22,497	23,729	95,781	97,696	99,650
Total Cost of Revenue	199,699	214,388	242,596	65,991	65,631	65,270	68,301	265,194	281,646	302,472
Gross Profit	765,379	884,695	985,818	274,158	263,094	276,022	275,864	1,089,137	1,210,482	1,342,554
Gross Margin	79.3%	80.5%	80.3%	80.6%	80.0%	80.9%	80.2%	80.4%	81.1%	81.6%
Operating Expenses										
Research and development	194,623	225,481	242,054	66,329	63,773	66,211	68,489	264,801	290,982	304,346
Selling and marketing	155,713	185,096	215,080	54,424	55,883	56,313	61,950	228,570	246,543	271,812
General and administrative	108,887	125,623	132,536	36,736	37,146	37,883	37,170	148,935	164,096	175,984
				157,489	156,802	160,407	167,608			
Total Operating Expenses	459,223	536,200	589,671	9	2	7	8	642,307	701,621	752,142
Operating Income	306,156	348,495	396,147	116,669	106,292	115,614	108,255	446,830	508,861	590,411
Operating Margin	31.7%	31.7%	32.2%	34.3%	32.3%	33.9%	31.5%	33.0%	34.1%	35.9%
EBITDA	324,948	366,440	416,789	122,570	111,437	121,047	115,425	470,479	534,909	590,411
Total Other Income (Expense)	(12,163)	(33,883)	(39,793)	(7,225)	(7,225)	(7,225)	(7,225)	(28,900)	(28,900)	(28,900)
Income before Taxes	293,993	314,612	356,354	109,444	99,067	108,389	101,030	417,930	479,961	561,511
Provision for Income Taxes	26,896	39,530	59,179	22,865	20,206	22,516	20,370	85,956	104,495	131,573
Net Income	267,097	275,082	297,175	86,579	78,862	85,873	80,660	331,974	375,466	429,938
Net income per share:										
Non-GAAP EPS - Basic	\$0.87	\$0.89	\$0.95	\$0.28	\$0.25	\$0.27	\$0.26	\$1.06	\$1.19	\$1.34
Non-GAAP EPS - Diluted	\$0.84	\$0.84	\$0.89	\$0.26	\$0.24	\$0.26	\$0.24	\$0.99	\$1.12	\$1.26

Source: BofA Global Research, company filings

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Exhibit 4: BSY ended 2023 with \$68.4mn in cash

BSY balance sheet

\$ Thousands	Year FY21A	Year FY22A	Year FY23A	Mar 1Q24E	Jun 2Q24E	Sep 3Q24E	Dec 4Q24E	Year FY24E	Year FY25E	Year FY26E
Current assets										
Cash	329,337	71,684	68,412	58,292	223,523	207,663	348,939	348,939	688,766	1,091,361
Accounts receivable	241,807	296,376	302,501	323,141	295,853	307,163	309,749	309,749	340,231	373,938
Other current assets	44,687	47,835	48,644	53,265	51,476	53,444	53,894	53,894	37,803	41,549
									1,066,801	1,506,847
Total current assets	615,831	415,895	419,557	434,698	570,852	568,269	712,581	712,581	1	7
Property, plant & equipment (net)	31,823	32,251	40,100	42,638	43,493	44,464	45,045	45,045	59,925	78,879
Operating lease right-of-use assets	50,818	40,249	38,476	38,476	38,476	38,476	38,476	38,476	38,476	38,476
	1,834,31	2,529,45	2,518,12					2,466,91	2,422,02	2,380,18
Intangible assets (net)	1	5	3	2,505,328	2,493,100	2,480,656	2,466,910	0	4	5
Investment in Joint Venture	6,438	22,270	23,480	23,480	23,480	23,480	23,480	23,480	23,480	23,480
Other assets	120,022	124,885	280,114	306,722	279,417	313,989	316,632	316,632	347,792	382,247
	2,659,24	3,165,00	3,319,85	3,351,34	3,448,81	3,469,33	3,603,12	3,603,12	3,958,49	4,410,11
Total assets	3	5	0	2	7	5	3	3	8	5
Current liabilities										
Current portion of LTD	5,000	5,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Accounts payable	16,483	15,176	18,094	20,409	39,447	34,129	34,417	34,417	37,803	41,549
Deferred subscriptions	224,610	226,955	253,785	253,114	244,538	227,089	268,373	268,373	289,081	306,729
Income taxes payable	6,696	4,507	9,491	9,491	9,491	9,491	9,491	9,491	9,491	9,491
Operating Lease Liabilities	17,482	14,672	11,645	11,645	11,645	11,645	11,645	11,645	11,645	11,645
Other current liabilities	323,603	362,048	457,348	425,186	460,216	443,680	481,831	481,831	529,249	581,681
Total current liabilities	593,874	628,358	760,363	729,845	775,337	736,034	815,756	815,756	887,270	961,095
	1,430,99	1,775,69	1,518,40					1,518,40	1,518,40	1,518,40
Long-term debt	2	6	3	1,518,403	1,518,403	1,518,403	1,518,403	3	3	3
Long-term operating lease liabilities	35,274	27,670	30,626	30,626	30,626	30,626	30,626	30,626	30,626	30,626
Deferred subscriptions	7,983	16,118	15,862	18,301	18,561	19,032	19,802	19,802	21,643	24,534
Other long term liabilities	181,898	143,709	110,614	110,614	110,614	110,614	110,614	110,614	110,614	110,614
	2,250,02	2,591,55	2,435,86	2,407,78	2,453,54	2,414,70	2,495,20	2,495,20	2,568,55	2,645,27
Total liabilities	1	1	8	9	0	9	1	1	6	2
Common stock	2,825	2,890	2,963	2,963	2,963	2,963	2,963	2,963	2,963	2,963
		1,031,17	1,127,93					1,127,93	1,127,93	1,127,93
Additional paid in capital	937,805	0	8	1,127,938	1,127,938	1,127,938	1,127,938	8	8	8
Notes receivable	0	0	0	0	0	0	0	0	0	0
AOCI	(91,774)	(89,740)	(84,987)	(104,745)	(124,510)	(144,281)	(164,059)	(164,059)	(243,798)	(324,546)
Treasury stock	0	0	0	0	0	0	0	0	0	0
Accumulated Deficit	(439,634)	(370,866)	(161,932)	(82,602)	(11,114)	68,006	141,080	141,080	502,839	958,488
						1,054,62	1,107,92	1,107,92	1,389,94	1,764,84
Total stockholders' equity	409,222	573,454	883,982	943,553	995,277	6	2	2	2	3
Total liabilities and shareholder equity	2,659,24	3,165,00	3,319,85	3,351,34	3,448,81	3,469,33	3,603,12	3,603,12	3,958,49	4,410,11
	3	5	0	2	7	5	3	3	8	5

Source: BofA Global Research, company filings

BofA GLOBAL RESEARCH

Exhibit 5: BSY generated \$417mn in CFO during 2023

BSY cash flow statement

\$ Thousands	Year	Year	Year	Mar	Jun	Sep	Dec	Year	Year	Year
	FY21A	FY22A	FY23A	1Q24E	2Q24E	3Q24E	4Q24E	FY24E	FY25E	FY26E
Cash flows from operating activities										
Net income	93,192	174,780	326,787	60,476	52,779	59,835	54,468	227,558	285,420	371,482
Adjustments:										
Depreciation and Amortization	52,793	71,537	71,861	17,060	16,304	16,592	18,329	68,284	59,848	55,785
			(198,878)							
Deferred income taxes	(19,745)	(5,126)	)					0	0	0
DCP and executive equity based compensation	0	(15,782)	13,580					0	0	0
Stock-based compensation	49,045	75,206	72,972	18,854	18,710	19,285	18,606	75,455	76,340	84,166
Equity in loss (gain) of joint venture, net of tax	3,585	0	0					0	0	0
Other non-cash	(1,998)	(11,199)	32,924					0	0	0
				(79,949)	102,135	(86,681)				
Working Capital	111,152	(15,092)	97,450	)		)	74,813	10,318	27,802	4,809
								(30,483)		
Accounts receivable	(35,519)	(60,938)	(5,180)	(20,640)	27,289	(11,310)	(2,586)	(7,248)	)	(33,706)
								(41,767)	(15,070)	
Prepaid and other assets	14,260	14,053	4,112	(31,229)	29,094	(36,540)	(3,093)	)	)	(38,200)
Other assets	0	0	0					0	0	0
Accounts payable and other liabilities (CSS)	50,077	29,181	68,733	(29,847)	54,068	(21,854)	38,439	40,806	50,805	56,177
Deferred subscriptions	5,340	2,292	19,933	1,768	(8,316)	(16,978)	42,053	18,527	22,551	20,539
Income taxes payable	(15,932)	320	9,852	0	0	0	0	0	0	0
Other Liabilities	92,926	0	0					0	0	0
Net cash from operating activities	288,024	274,324	416,696	16,441	189,927	9,031	166,216	381,614	449,409	516,243
Cash flows from investing activities										
Purchases of PP&E and investments in capitalized software	(17,539)	(18,546)	(25,002)	(6,803)	(4,931)	(5,119)	(5,162)	(22,016)	(29,843)	
	(1,034,983)	(743,007)						)	)	(32,901)
Acquisitions	)	)	(26,023)					0	0	0
Investment in Joint Venture	0	0	0					0	0	0
Capitalization of Translations and Other	0	0	0					0	0	0
Other Investing Activities	(4,081)	(8,574)	(9,479)					0	0	0
	(1,056,603)	(770,127)						(22,016)	(29,843)	
Net cash used in investing activities	)	)	(60,504)	(6,803)	(4,931)	(5,119)	(5,162)	)	)	(32,901)
Cash flows from financing activities										
Borrowings (payments) on long-term debt	1,178,671	330,140	(5,000)					0	0	0
			(253,569)							
Proceeds from credit facilities, net		0	)					0	0	0
								(79,072)	(79,740)	
Dividends	(33,396)	(34,493)	(58,756)	(19,758)	(19,765)	(19,771)	(19,777)	)	)	(80,748)
Proceeds from Common Stock Purchase Agreement	0	10,335	9,988					0	0	0
Payments for shares acquired including shares withheld for taxes	(120,539)	(43,561)	(58,937)					0	0	0
Repurchase of common stock		(28,250)	0					0	0	0
Net proceeds from exercise of common stock options and restricted stock	3,846	8,338	11,715					0	0	0
Other	(46,000)	525	(4,515)					0	0	0
			(359,074)					(79,072)	(79,740)	
Net cash from financing activities	982,582	243,034	)	(19,758)	(19,765)	(19,771)	(19,777)	)	)	(80,748)
Exchange rate differences	(6,672)	(4,884)	(390)					0	0	0
		(257,653)								
Increase (decrease) in cash	207,331	)	(3,272)	(10,120)	165,231	(15,860)	141,276	280,527	339,827	402,595
Cash, beginning of period	122,006	329,337	71,684	68,412	58,292	223,523	207,663	68,412	348,939	688,766
Cash, end of period	329,337	71,684	68,412	58,292	223,523	207,663	348,939	348,939	688,766	1,091,361

Source: BofA Global Research, company filings

BofA GLOBAL RESEARCH



Price objective basis & risk

Bentley Systems (BSY)

Our PO of \$57 is based on an EV/FCF multiple of 45x our C25 free cash flow estimate, a premium to the design software group, which we believe is warranted given strong secular growth drivers and defensive exposure, as well as its high visibility revenue and attractive margin profile.

Downside risks: 1) Premium valuation presents risk of pullback in the event of changes to market sentiment stemming from global macro uncertainty, or potentially disappointing quarterly revenue, 2) prolonged COVID headwinds resulting in slower economic activity and decreased company budgets, 3) ability to drive upsell and cross sell through the installed base, 4) increased competition from Autodesk and vertical-specific vendors resulting in elevated churn, 5) execution issues within growth initiatives such as China and Digital Twins.

Analyst Certification

I, Michael J. Funk, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

US - Enterprise Software Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	8x8	EGHT	EGHT US	Michael J. Funk
	Adobe	ADBE	ADBE US	Brad Sills
	Alarm.com	ALRM	ALRM US	Michael J. Funk
	Amplitude, Inc.	AMPL	AMPL US	Koji Ikeda, CFA
	Asana	ASAN	ASAN US	Michael J. Funk
	BILL	BILL	BILL US	Brad Sills
	CCC Intelligent Solutions	CCCS	CCCS US	Michael J. Funk
	Dynatrace	DT	DT US	Koji Ikeda, CFA
	Elastic NV	ESTC	ESTC US	Koji Ikeda, CFA
	GitLab Inc.	GTLB	GTLB US	Koji Ikeda, CFA
	Global-e Online Ltd.	GLBE	GLBE US	Koji Ikeda, CFA
	HubSpot	HUBS	HUBS US	Brad Sills
	Informatica Inc.	INFA	INFA US	Koji Ikeda, CFA
	Intapp Inc.	INTA	INTA US	Koji Ikeda, CFA
	Intuit	INTU	INTU US	Brad Sills
	JFrog Ltd	FROG	FROG US	Koji Ikeda, CFA
	MeridianLink, Inc.	MLNK	MLNK US	Koji Ikeda, CFA
	Microsoft Corporation	MSFT	MSFT US	Brad Sills
	Monday.com	MNDY	MNDY US	Michael J. Funk
	MongoDB Inc	MDB	MDB US	Brad Sills
	nCino, Inc.	NCNO	NCNO US	Adam Bergere
	NICE Ltd.	NICE	NICE US	Michael J. Funk
	NICE Ltd.	NCSYF	NICE IT	Michael J. Funk
	PagerDuty	PD	PD US	Koji Ikeda, CFA
	PowerSchool Holdings, Inc.	PWSC	PWSC US	Koji Ikeda, CFA
	RingCentral	RNG	RNG US	Michael J. Funk
	Salesforce.com	CRM	CRM US	Brad Sills
	ServiceNow	NOW	NOW US	Brad Sills
	UiPath	PATH	PATH US	Brad Sills
	Unity	U	U US	Michael J. Funk
	Weave	WEAV	WEAV US	Michael J. Funk
	Workday Inc.	WDAY	WDAY US	Brad Sills
	Zeta Global	ZETA	ZETA US	Koji Ikeda, CFA
	ZoomInfo	ZI	ZI US	Koji Ikeda, CFA
NEUTRAL				
	Autodesk	ADSK	ADSK US	Michael J. Funk
	Bentley Systems	BSY	BSY US	Michael J. Funk

US - Enterprise Software Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	BigCommerce Holdings, Inc.	BIGC	BIGC US	Koji Ikeda, CFA
	Coveo	YCVO	CVO CN	Koji Ikeda, CFA
	Datadog Inc	DDOG	DDOG US	Koji Ikeda, CFA
	DocuSign	DOCU	DOCU US	Brad Sills
	Freshworks, Inc.	FRSH	FRSH US	Adam Bergere
	HashiCorp	HCP	HCP US	Brad Sills
	Jamf	JAMF	JAMF US	Koji Ikeda, CFA
	Lightspeed Commerce Inc.	LSPD	LSPD US	Koji Ikeda, CFA
	Lightspeed Commerce Inc.	YLSPD	LSPD CN	Koji Ikeda, CFA
	Oracle Corporation	ORCL	ORCL US	Brad Sills
	Paycom	PAYC	PAYC US	Adam Bergere
	Paylocity	PCTY	PCTY US	Adam Bergere
	Shopify, Inc.	SHOP	SHOP US	Brad Sills
	Snowflake	SNOW	SNOW US	Brad Sills
	Veeva Systems, Inc.	VEEV	VEEV US	Brad Sills
	Zoom Video Communications	ZM	ZM US	Michael J. Funk
UNDERPERFORM				
	AvidXchange, Inc.	AVDX	AVDX US	Brad Sills
	Blackbaud, Inc.	BLKB	BLKB US	Koji Ikeda, CFA
	BlackLine, Inc.	BL	BL US	Koji Ikeda, CFA
	C3.ai	AI	AI US	Brad Sills
	Confluent	CFLT	CFLT US	Brad Sills
	CS Disco, Inc.	LAW	LAW US	Koji Ikeda, CFA
	Dropbox	DBX	DBX US	Michael J. Funk
	Enfusion, Inc.	ENFN	ENFN US	Koji Ikeda, CFA
	Five9	FIVN	FIVN US	Michael J. Funk
	Guidewire Software, Inc.	GWRE	GWRE US	Michael J. Funk
	Smartsheet	SMAR	SMAR US	Michael J. Funk
	Twilio	TWLO	TWLO US	Michael J. Funk
	Vertex, Inc.	VERX	VERX US	Brad Sills
RSTR				
	Splunk	SPLK	SPLK US	Brad Sills

iQmethodSM Measures Definitions**Business Performance**

Return On Capital Employed

Return On Equity

Operating Margin

Earnings Growth

Free Cash Flow

Quality of Earnings

Cash Realization Ratio

Asset Replacement Ratio

Tax Rate

Net Debt-To-Equity Ratio

Interest Cover

Valuation Toolkit

Price / Earnings Ratio

Price / Book Value

Dividend Yield

Free Cash Flow Yield

Enterprise Value / Sales

EV / EBITDA

Numerator

NOPAT = (EBIT + Interest Income) × (1 – Tax Rate) + Goodwill Amortization

Net Income

Operating Profit

Expected 5 Year CAGR From Latest Actual

Cash Flow From Operations – Total Capex

Numerator

Cash Flow From Operations

Capex

Tax Charge

Net Debt = Total Debt – Cash & Equivalents

EBIT

Numerator

Current Share Price

Current Share Price

Annualised Declared Cash Dividend

Cash Flow From Operations – Total Capex

EV = Current Share Price × Current Shares + Minority Equity + Net Debt +

Other LT Liabilities

Enterprise Value

Denominator

Total Assets – Current Liabilities + ST Debt + Accumulated Goodwill Amortization

Shareholders' Equity

Sales

N/A

N/A

Denominator

Net Income

Depreciation

Pre-Tax Income

Total Equity

Interest Expense

Denominator

Diluted Earnings Per Share (Basis As Specified)

Shareholders' Equity / Current Basic Shares

Current Share Price

Market Cap = Current Share Price × Current Basic Shares

Sales

Basic EBIT + Depreciation + Amortization

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Important Disclosures

Bentley Systems (BSY) Price Chart



B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

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Equity Investment Rating Distribution: Technology Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	215	53.09%	Buy	111	51.63%
Hold	97	23.95%	Hold	45	46.39%
Sell	93	22.96%	Sell	24	25.81%

Equity Investment Rating Distribution: Global Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	1895	53.62%	Buy	1083	57.15%
Hold	832	23.54%	Hold	454	54.57%
Sell	807	22.84%	Sell	383	47.46%

^{R1} Issuers that were investment banking clients of BofA Securities or one of its affiliates within the past 12 months. For purposes of this Investment Rating Distribution, the coverage universe includes only stocks. A stock rated Neutral is included as a Hold, and a stock rated Underperform is included as a Sell.

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Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster ^{R2}
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

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