

# **EPAM** Systems

# Demand shows signs of stabilization, but long way to go

Reiterate Rating: UNDERPERFORM | PO: 241.00 USD | Price: 299.70 USD

### Worst is over but we remain cautious

EPAM beat 4Q revs/adj. EPS driven by stabilizing client demand and FX tailwinds. Initial '24 margin guide is below consensus, with revs growth in-line. Following recent underperformance, shares are trading higher on improving demand commentary and better than feared guide. India is expected to be largest headcount location by YE'24, and we remain cautious on structural growth implications of geographic headcount repositioning. With shares trading at ~28.5x, risk/reward skews negative; Reiterate U/P.

### '24 revs guide is back half weighted

EPAM expects stable client spending in 1H24, followed by 2H improvement. 1Q and 2Q are expected to see flattish q/q growth, implying material acceleration to an average of about 4% q/q growth in 2H. As a result, '24 revs guide does not seem conservative to us, and we believe visibility on the timing and magnitude of discretionary spending recovery across the industry remains limited. EPAM could exit '24 with upper-single-digit y/y growth, but the path to significant further acceleration isn't clear.

### Soft margin guide due to comp and limited pricing power

Despite 4Q23 adj. op. margin outperformance, initial F24 guidance assumes 130bps contraction, due to increases in compensation, as well as limited ability to improve client pricing. EPAM is also planning on investing in enhanced sales strategies and go to market initiatives to help capture incremental demand in 2024. These effects will lead to lower gross margins in 1H, followed by 2H improvement.

# 1Q revs guide ahead of Street, offset by soft op. margins

1Q24 revs guidance of \$1,155M-\$1,165M (4% y/y decline at midpoint) is ahead of BofAe/Street at \$1,138M/\$1,146M, however, adj. margin guide of 13.5%-14.5% is below BofAe/Street at 14.8%/15.2%, leading to adj. EPS guide of \$2.26-\$2.34 vs. BofAe/Street at \$2.36/\$2.42. For F24, revs growth guide of 1%-4% is in-line with BofAe/Street at 2.6%/3.8%, with adj. op. margin guide of 14.5%-15.5% vs. BofAe/Street at 15.8%/15.7% in-line with management commentary in 3Q suggesting y/y margin contraction.

### Tweak PO to \$241

Following 4Q results and management commentary, we adjust our PO to \$241 from \$233 prior, based on 25x C24 EPS (22x prior) and our DCF. **See inside for more on PO and estimate changes, as well as 4Q results.** 

os							
Estimates (Dec) (US\$)	2022A	2023A	2024E	2025E	2026E		
EPS	10.90	10.59	10.24	11.90	13.46		
GAAP EPS	7.08	7.06	7.40	8.64	9.69		
EPS Change (YoY)	20.4%	-2.8%	-3.3%	16.2%	13.1%		
Consensus EPS (Bloomberg)			10.56	12.42	14.76		
DPS	0	0	0	0	0		
Valuation (Dec)							
P/E	27.4x	28.2x	29.2x	25.1x	22.2x		
GAAP P/E	42.2x	42.4x	40.4x	34.6x	30.9x		
EV / EBITDA*	16.4x	17.9x	18.4x	15.5x	13.7x		
Free Cash Flow Yield*	2.2%	3.1%	3.1%	3.7%	4.2%		
* For full definitions of **Method ** measures, see page 5.							

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Refer to important disclosures on page 6 to 8. Analyst Certification on page 4. Price
Objective Basis/Risk on page 4.

Timestamp: 15 February 2024 10:53AM EST

### 15 February 2024

### Equity

Key Changes		
(US\$)	Previous	Current
Price Obj.	233.00	241.00
2024E Rev (m)	4,788.7	4,801.3
2025E Rev (m)	5,340.6	5,354.2
2026E Rev (m)	NA	5,971.2
2024E EPS	10.56	10.24
2025E EPS	11.87	11.90
2026E EPS	NA	13.46

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#### Stock Data

Price	299.70 USD
Price Objective	241.00 USD
Date Established	15-Feb-2024
Investment Opinion	C-3-9
52-Week Range	197.99 USD - 368.69 USD
Mrkt Val (mn) / Shares Out	17,293 USD / 57.7
(mn)	
Free Float	97.5%
Average Daily Value (mn)	153.08 USD
BofA Ticker / Exchange	EPAM / NYS
Bloomberg / Reuters	EPAM US / EPAM.N
ROE (2024E)	15.9%
Net Dbt to Eqty (Dec-2023A)	-57.9%
ESGMeter™	Medium

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".

# **iQ**profile<sup>™</sup> EPAM Systems

iQmethod <sup>sм</sup> − Bus Performance*					
(US\$ Millions)	2022A	2023A	2024E	2025E	2026
Return on Capital Employed	22.5%	17.1%	14.1%	14.2%	13.8%
Return on Equity	23.5%	19.3%	15.9%	15.6%	15.0%
Operating Margin	17.0%	16.3%	15.0%	16.0%	16.3%
Free Cash Flow	382	534	533	635	724
<i>iQ</i> method <sup>™</sup> – <b>Quality of Earnings*</b>					
(US\$ Millions)	2022A	2023A	2024E	2025E	2026
Cash Realization Ratio	0.7x	0.9x	1.1x	1.1x	1.1x
Asset Replacement Ratio	0.9x	0.4x	1.4x	1.4x	1.4>
Tax Rate	17.3%	22.3%	21.0%	21.5%	21.5%
Net Debt-to-Equity Ratio	-55.1%	-57.9%	-61.8%	-65.3%	-68.3%
Interest Cover	NA	NA	NA	NA	NA
Income Statement Data (Dec)					
(US\$ Millions)	2022A	2023A	2024E	2025E	2026
Sales	4,825	4,691	4,801	5,354	5,971
% Change	28.4%	-2.8%	2.4%	11.5%	11.5%
Gross Profit	1,538	1,434	NA	NA	NA
% Change	20.7%	-6.8%	NA	NA	NA
EBITDA	910	834	812	959	1,088
% Change Net Interest & Other Income	19.5% (66)	-8.4% 35	-2.6% 66	18.2% 54	13.4% 46
Net Income (Adjusted)	645	<b>626</b>	604	702	7 <b>94</b>
% Change	20.7%	-3.0%	-3.5%	16.2%	13.1%
(US\$ Millions)	2022A	2023A	2024E	2025E	2026
Net Income from Cont Operations (GAAP)	419	417	437	510	571
Depreciation & Amortization	92	69	91	102	113
Change in Working Capital	(230)	(148)	(56) 0	(52) 0	(45) C
Deferred Taxation Charge Other Adjustments, Net	(42) 224	(12) 236	192	220	245
Other Aujustinents, Net					
Canital Expenditure					
Capital Expenditure  Free Cash Flow	(82)	(28)	(131)	(144)	(160)
Free Cash Flow					(160) <b>724</b>
	(82) <b>382</b>	(28) <b>534</b>	(131) <b>533</b>	(144) <b>635</b>	(160) <b>724</b> <b>14.0%</b>
Free Cash Flow % Change	(82) <b>382</b> - <b>17.0%</b>	(28) <b>534</b> <b>39.5%</b>	(131) <b>533</b> <b>-0.1%</b>	(144) <b>635</b> <b>19.2%</b>	(160) <b>724</b> <b>14.0%</b>
Free Cash Flow % Change Share / Issue Repurchase	(82) <b>382</b> <b>-17.0%</b> 51	(28) <b>534</b> <b>39.5%</b> (100)	(131) <b>533</b> <b>-0.1%</b>	(144) <b>635</b> <b>19.2%</b> O	(160) <b>724</b> <b>14.0%</b> 0
Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid	(82) <b>382</b> <b>-17.0%</b> 51 0	(28) <b>534</b> <b>39.5%</b> (100) 0	(131) <b>533</b> <b>-0.1%</b> 14 0	(144) <b>635</b> <b>19.2%</b> 0	(160) <b>724</b> <b>14.0%</b> 0
Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid Change in Debt	(82) <b>382</b> <b>-17.0%</b> 51 0	(28) <b>534</b> <b>39.5%</b> (100) 0	(131) <b>533</b> <b>-0.1%</b> 14 0	(144) <b>635</b> <b>19.2%</b> 0	(160) <b>724</b> <b>14.0%</b> 0
Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid Change in Debt  Balance Sheet Data (Dec) (US\$ Millions) Cash & Equivalents	(82) <b>382</b> <b>-17.0%</b> 51 0 2 <b>2022A</b> 1,681	(28) 534 39.5% (100) 0 (2) 2023A 2,036	(131) <b>533</b> <b>-0.1%</b> 14 0 0 <b>2024E</b> 2,583	(144) <b>635</b> <b>19.2%</b> 0 0 0 <b>2025E</b> 3,218	(160) 724 14.0% 0 0 0 2026 3,942
Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid Change in Debt  Balance Sheet Data (Dec) (US\$ Millions) Cash & Equivalents Trade Receivables	(82) 382 -17.0% 51 0 2  2022A 1,681 933	(28) 534 39.5% (100) 0 (2) 2023A 2,036 897	(131) 533 -0.1% 14 0 0 0 2024E 2,583 990	(144) <b>635</b> <b>19.2%</b> 0 0 0 <b>2025E</b> 3,218 1,071	(160) 724 14.0% C C C 2026 3,942 1,148
Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid Change in Debt  Balance Sheet Data (Dec) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets	(82) 382 -17.0% 51 0 2  2022A 1,681 933 146	(28) 534 39.5% (100) 0 (2) 2023A 2,036 897 158	(131) 533 -0.1% 14 0 0 2024E 2,583 990 151	(144) <b>635</b> <b>19.2%</b> 0 0 0 <b>2025E</b> 3,218 1,071 169	(160) 724 14.0% 0 0 0 0 2026l 3,942 1,148
Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid Change in Debt  Balance Sheet Data (Dec) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment	(82) 382 -17.0% 51 0 2  2022A 1,681 933 146 273	(28) 534 39.5% (100) 0 (2) 2023A 2,036 897 158 235	(131) 533 -0.1% 14 0 0 2024E 2,583 990 151 303	(144) <b>635</b> <b>19.2%</b> 0 0 0 <b>2025E</b> 3,218 1,071 169 375	(160) 724 14.0% 0 0 0 0 2026 3,942 1,148 190 456
Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid Change in Debt  Balance Sheet Data (Dec) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment Other Non-Current Assets	(82) 382 -17.0% 51 0 2  2022A 1,681 933 146 273 976	(28) 534 39.5% (100) 0 (2) 2023A 2,036 897 158 235 1,026	(131) 533 -0.1% 14 0 0 2024E 2,583 990 151 303 989	(144) <b>635</b> <b>19.2%</b> 0 0 0 <b>2025E</b> 3,218 1,071 169 375 1,002	(160) 724 14.0% 0 0 0 2026l 3,942 1,148 190 456 1,015
Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid Change in Debt  Balance Sheet Data (Dec) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment Other Non-Current Assets Total Assets	(82) 382 -17.0% 51 0 2  2022A 1,681 933 146 273 976 4,009	(28) 534 39.5% (100) 0 (2) 2023A 2,036 897 158 235 1,026 4,352	(131) 533 -0.1% 14 0 0 2024E 2,583 990 151 303 989 5,016	(144) <b>635</b> <b>19.2%</b> 0 0 0 <b>2025E</b> 3,218 1,071 169 375 1,002 <b>5,835</b>	(160) 724 14.0% 0 0 0 0 2026 3,942 1,148 190 456 1,015 6,751
Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid Change in Debt  Balance Sheet Data (Dec) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment Other Non-Current Assets Total Assets Short-Term Debt	(82) 382 -17.0% 51 0 2  2022A 1,681 933 146 273 976 4,009 0	(28) 534 39.5% (100) 0 (2) 2023A 2,036 897 158 235 1,026 4,352 0	(131) 533 -0.1% 14 0 0 2024E 2,583 990 151 303 989 5,016 0	(144) <b>635</b> <b>19.2%</b> 0 0 0 <b>2025E</b> 3,218 1,071 169 375 1,002 <b>5,835</b> 0	(160) 724 14.0% 0 0 0 0 2026 3,942 1,148 190 456 1,015 6,751
Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid Change in Debt  Balance Sheet Data (Dec) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment Other Non-Current Assets Total Assets Short-Term Debt Other Current Liabilities	(82) 382 -17.0% 51 0 2  2022A 1,681 933 146 273 976 4,009 0 747	(28) 534 39.5% (100) 0 (2)  2023A 2,036 897 158 235 1,026 4,352 0 645	(131) 533 -0.1% 14 0 0 2024E 2,583 990 151 303 989 5,016 0 646	(144) 635 19.2% 0 0 0 0 2025E 3,218 1,071 169 375 1,002 5,835 0 712	(160) 724 14.0% 0 0 0 0 2026l 3,942 1,148 190 456 1,015 6,751
Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid Change in Debt  Balance Sheet Data (Dec) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment Other Non-Current Assets Total Assets Short-Term Debt	(82) 382 -17.0% 51 0 2  2022A 1,681 933 146 273 976 4,009 0	(28) 534 39.5% (100) 0 (2) 2023A 2,036 897 158 235 1,026 4,352 0	(131) 533 -0.1% 14 0 0 2024E 2,583 990 151 303 989 5,016 0	(144) <b>635</b> <b>19.2%</b> 0 0 0 <b>2025E</b> 3,218 1,071 169 375 1,002 <b>5,835</b> 0	(160) 724 14.0% 0 0 0 0 2026l 3,942 1,148 190 456 1,015 6,751 0 786
Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid Change in Debt  Balance Sheet Data (Dec) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment Other Non-Current Assets Total Assets Short-Term Debt Other Current Liabilities Long-Term Debt	(82) 382 -17.0% 51 0 2  2022A 1,681 933 146 273 976 4,009 0 747 28	(28) 534 39.5% (100) 0 (2)  2023A 2,036 897 158 235 1,026 4,352 0 645 26	(131) 533 -0.1% 14 0 0 2024E 2,583 990 151 303 989 5,016 0 646 26	(144) <b>635</b> <b>19.2%</b> 0 0 0 <b>2025E</b> 3,218 1,071 169 375 1,002 <b>5,835</b> 0 712 26	(160) 724 14.0% 0 0 0 0 20268 3,942 1,148 190 456 1,015 6,751 0 786 26 210
Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid Change in Debt  Balance Sheet Data (Dec) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment Other Non-Current Assets Total Assets Short-Term Debt Other Current Liabilities Long-Term Debt Other Non-Current Liabilities	(82) 382 -17.0% 51 0 2  2022A 1,681 933 146 273 976 4,009 0 747 28 231	(28) 534 39.5% (100) 0 (2)  2023A 2,036 897 158 235 1,026 4,352 0 645 26 210	(131) 533 -0.1% 14 0 0 0 2024E 2,583 990 151 303 989 5,016 0 646 26 210	(144) 635 19.2% 0 0 0 0 2025E 3,218 1,071 169 375 1,002 5,835 0 712 26 210	(160) 724 14.0% 0 0 0 2026 3,942 1,148 190 456 1,015 6,751 0 786 210 1,022 5,729

### **Company Sector**

Payments, Processors & IT Services

### **Company Description**

Based in Newtown, PA, EPAM provides complex software development and engineering, as well as high-end digital IT services to clients located primarily in North America and Europe, employing specialized engineers primarily from lower-cost countries in Central/Eastern European, as well as India/LatAm. EPAM maintains a bench of high-quality software engineering talent, and the company's clients primarily consist of Forbes Global 2000 corporations. In F23, EPAM generated revenues of \$4.698.

#### **Investment Rationale**

We rate EPAM shares Underperform. EPAM's lack of costcutting related service offerings and low visibility on growth re-acceleration to management's traditional 20%+ growth target led us to conclude that the valuation multiple will likely be impaired beyond the near-term. We believe EPAM may also be suffering from some diminished brand equity among clients following last year's broad geographic headcount re-positioning post the start of the Russia/Ukraine war.

### Stock Data

Average Daily Volume

510,788

### **Quarterly Earnings Estimates**

	2023	2024
Q1	2.47A	2.31E
Q2	2.64A	2.40E
Q3	2.73A	2.70E
04	2.75A	2.82E



# Solid quarter across the P&L

- In 4Q, revs declined 6% y/y to \$1,157M, ahead of BofAe/Street at \$1,134M/\$1,137M and guide of \$1,130M-\$1,140M. On an organic cc basis ex-Russia, revs declined 7.1% y/y.
- Growth was led by y/y growth in Life Sciences and Emerging Verticals, offset by more meaningful declines in Software & Hi-Tech and Business Information & Media.
- By geography, N. America remained the largest at 58% of total revs while seeing sequential declines of 0.1%. Europe increased 1.7% q/q and accounted for 39% of revs.
- Adj. op. margin of 17.3% was 170bps above BofAe/Street and guide of 15%-16% driven by larger than expected non-GAAP add backs. This led to adj. EPS of \$2.75, above BofAe/Street/guide of \$2.50/\$2.51/\$2.47-\$2.55.
- Billable headcount declined 2.4% q/q to 47,350, while utilization improved to 74.4% vs. 72.7% in 3Q.
- Following 4Q results and management commentary, we adjust our PO to \$241 from \$233 based on 25x C24 EPS (22x prior) and our DCF. The increase in multiple is due to solid quarterly execution and client demand stabilization. Our DCF uses a WACC of 12.7% (vs. 13.1% prior) and terminal growth of 3.8% (no change).
- We also roll out initial 2026 revs/adj. EPS estimates of \$5,971M/\$13.46, respectively.



### Price objective basis & risk

### **EPAM Systems (EPAM)**

We use a 25x 2024E non-GAAP EPS multiple and discounted cash flow (DCF, 50/50 blend) to calculate our 12-month price objective of \$241. Our 25x multiple reflects a modest premium to EPAM's LTM average, justified, in our view, by the company's revenue growth and margin profile. Our DCF uses a weighted-average cost of capital (WACC) of 12.7% and terminal growth rate of 3.8%.

Downside risks to our price objective are 1) volatility in revenues from EPAM's largest clients, 2) competition for engineering talent, 3) geopolitical volatility in Central/Eastern Europe, 4) cyclical nature of discretionary IT services spending among EPAM's clients, 5) continued regulatory and macro/FX uncertainty.

Upside risks to our price objective are 1) accelerated demand turn-around for growth-oriented initiatives, 2) increased pricing power for both new and existing contracts, 3) decline in attrition and improvement in utilization metrics.

## **Analyst Certification**

I, Jason Kupferberg, 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 - Payments, Processors, Specialty Finance and IT services Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	Accenture Plc	ACN	ACN US	Jason Kupferberg
	American Express Company	AXP	AXP US	Mihir Bhatia
	Block Inc	SQ	SQ US	Jason Kupferberg
	Capital One Financial	COF	COF US	Mihir Bhatia
	Discover Financial	DFS	DFS US	Mihir Bhatia
	Enact Holdings	ACT	ACT US	Mihir Bhatia
	Essent Group	ESNT	ESNT US	Mihir Bhatia
	Fidelity National Information Services	FIS	FIS US	Jason Kupferberg
	Fisery Inc	FI	FIUS	Jason Kupferberg
	FleetCor Technologies Inc.	FLT	FLT US	Mihir Bhatia
	Flywire	FLYW	FLYW US	Jason Kupferberg
	Global Payments Inc	GPN	GPN US	Jason Kupferberg
	Jack Henry & Associates	JKHY	JKHY US	Jason Kupferberg
	Marqeta	MQ	MQ US	Cassie Chan
	Mastercard Inc	MA	MA US	Jason Kupferberg
	MGIC Investment Corp.	MTG	MTG US	Mihir Bhatia
	NMI Holdings	NMIH	NMIH US	Mihir Bhatia
	Nuvei	NVEI	NVEI US	Jason Kupferberg
	Nuvei	YNVEI	NVEI CN	Jason Kupferberg
	OneMain Holdings, Inc.	OMF	OMF US	Mihir Bhatia
	Shift4 Payments, Inc	FOUR	FOUR US	Jason Kupferberg
	Telus International	TIXT	TIXT US	Cassie Chan
	Telus International	YTIXT	TIXT CN	Cassie Chan
	Visa Inc.	V	V US	Jason Kupferberg
	WEX Inc.	WEX	WEX US	Mihir Bhatia
NEUTRAL				
	ADP	ADP	ADP US	Jason Kupferberg
	Affirm Holdings	AFRM	AFRM US	Jason Kupferberg
	Bread Financial Holdings Inc	BFH	BFH US	Mihir Bhatia
	DLocal	DLO	DLO US	Jason Kupferberg
	Globant SA	GLOB	GLOB US	Jason Kupferberg
	PayPal Holdings Inc	PYPL	PYPL US	Jason Kupferberg
	SoFi Technologies Inc	SOFI	SOFIUS	Mihir Bhatia

### **US - Payments, Processors, Specialty Finance and IT services Coverage Cluster**

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	Synchrony Financial	SYF	SYF US	Mihir Bhatia
	Thoughtworks	TWKS	TWKS US	Jason Kupferberg
	Toast	TOST	TOST US	Jason Kupferberg
	TTEC Holdings	TTEC	TTEC US	Cassie Chan
UNDERPERFORM				
	CGI Inc.	GIB	GIB US	Jason Kupferberg
	CGI Inc.	YGIBA	GIB/A CN	Jason Kupferberg
	Cognizant Technology Solutions	CTSH	CTSH US	Jason Kupferberg
	Coinbase	COIN	COIN US	Jason Kupferberg
	DXC Technology	DXC	DXC US	Jason Kupferberg
	EPAM Systems	EPAM	EPAM US	Jason Kupferberg
	Paychex	PAYX	PAYX US	Jason Kupferberg
	Radian Group Inc	RDN	RDN US	Mihir Bhatia
	Rocket Companies, Inc.	RKT	RKT US	Mihir Bhatia
	TaskUs	TASK	TASK US	Cassie Chan
	Western Union	WU	WU US	Jason Kupferberg

# *IQ*method<sup>™</sup> Measures Definitions

<b>Business Performance</b>	Numerator	Denominator
Return On Capital Employed	NOPAT = (EBIT + Interest Income) $\times$ (1 - Tax Rate) + Goodwill Amortization	Total Assets – Current Liabilities + ST Debt + Accumulated Goodwill Amortization
Return On Equity	Net Income	Shareholders' Equity
Operating Margin	Operating Profit	Sales
Earnings Growth	Expected 5 Year CAGR From Latest Actual	N/A
Free Cash Flow	Cash Flow From Operations — Total Capex	N/A
Quality of Earnings	Numerator	Denominator
Cash Realization Ratio	Cash Flow From Operations	Net Income
Asset Replacement Ratio	Capex	Depreciation
Tax Rate	Tax Charge	Pre-Tax Income
Net Debt-To-Equity Ratio	Net Debt = Total Debt - Cash & Equivalents	Total Equity
Interest Cover	EBIT	Interest Expense
Valuation Toolkit	Numerator	Denominator
Price / Earnings Ratio	Current Share Price	Diluted Earnings Per Share (Basis As Specified)
Price / Book Value	Current Share Price	Shareholders' Equity / Current Basic Shares
Dividend Yield	Annualised Declared Cash Dividend	Current Share Price
Free Cash Flow Yield	Cash Flow From Operations – Total Capex	Market Cap = Current Share Price × Current Basic Shares
Enterprise Value / Sales	EV = Current Share Price × Current Shares + Minority Equity + Net Debt +	Sales
	Other LT Liabilities	
EV / EBITDA	Enterprise Value	Basic EBIT + Depreciation + Amortization

Mentined 3 is the set of BofA Global Research standard measures that serve to maintain global consistency under three broad headings: Business Performance, Quality of Earnings, and validations. The key features of iQmethod are: A consistently structured, detailed, and transparent methodology. Guidelines to maximize the effectiveness of the comparative valuation process, and to identify some common pitfalls.

\*\*Redatabase\*\* is our real-time global research database that is sourced directly from our equity analysts' earnings models and includes forecasted as well as historical data for income statements, balance sheets, and cash flow statements for companies covered by BofA Global Research.

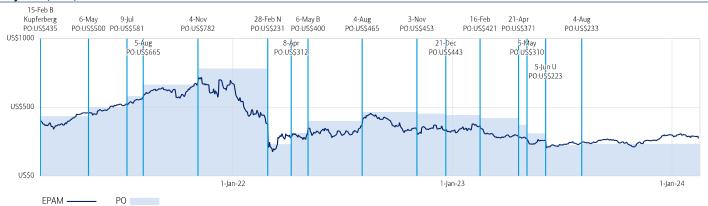
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### **EPAM Systems (EPAM) Price Chart**



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

The Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark grey shading indicates the security is restricted with the opinion suspended. Medium grey shading indicates the security is under review with the opinion withdrawn. Light grey shading indicates the security is not covered. Chart is current as of a date no more than one trading day prior to the date of the report.

### 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%

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# Investment rating Total return expectation (within 12-month period of date of initial rating) Ratings dispersion guidelines for coverage cluster<sup>R2</sup>

Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Inderperform	N/A	≥ 20%

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