Result Update

Bank of Baroda



Your success is our success

Refer to important disclosures at the end of this report

Better growth, margin trajectory to

drive RoEs

- Despite lower other income and higher provisions, BOB reported in-line PAT at Rs17.8bn (est.: Rs17.9bn), mainly due to healthy NII growth, lower staff costs and tax provisions. Despite higher slippages, the GNPA ratio rose by 64bps qoq to 6.6% on higher w-
- Credit growth improved to 10% yoy/6% qoq, driven by retail/agri, but corporate/SME growth was sluggish. BOB expects credit growth to be around 10-12% in FY23, which coupled with a higher share of floating rate book, healthy CASA ratio and lower interest reversal on NPAs, should lead to a strong margin trajectory.

offs/recoveries. The standard net restructured book reduced to 2.4% of loans in Q4.

- The bank has utilized one-off gains from Air India (Rs10bn in Q4; Rs13bn in Q4) to ramp up the provision cover to 75%, which should contain incremental LLP. Factoring in better growth/NIMs and lower LLP, we expect the bank's RoE to gradually improve to 11-13% over FY23-25E.
- BOB remains well-capitalized among large PSBs, with a CET-1 ratio of 11.7% post QIP. It is also better-positioned to accelerate profitable growth. Retain Buy/OW in EAP with a revised TP of Rs130 (earlier TP of Rs145), based on 0.7x FY24E ABV (0.9x Dec'23E ABV earlier) due to higher CoE.

Growth trend improving: Overall credit growth improved to 10% yoy/6% qoq, led by retail and agri growth. SME growth was subdued, given the bank's conscious risk-averse stance. Corporate growth was also sub-par. Within retail, growth has improved across segments, with housing growing at 11% yoy after a weak performance in Q3. Gold loans also grew at 25% yoy. The CASA ratio declined marginally, but remained high and healthy at 42%. The bank reported healthy NIMs of 3.1%. It believes that the higher share of floating rate book, healthy CASA ratio and lower interest reversal on NPAs will lead to a robust margin trajectory.

Elevated slippages, but NPAs decline due to higher recoveries/w-offs: Fresh slippages were higher at Rs58bn (3.2% of loans), including Future Retail. However, higher recoveries/woffs, led to a 64bps reduction in the GNPA ratio to 6.6%. The standard net restructured book declined to 2.4% of loans in Q4 from 2.8% in Q3, with a lower relapse rate as of now. The SMA 1 & 2 pool (>Rs50mn) also declined to a low of 0.4% from 1.1% in Q3. BOB has ramped up the provision cover to 75%, utilizing a part of the gains from one-off Air India recovery, which is now on par with peers, and thus should limit incremental provisions in the future.

Outlook and valuations: Factoring in better growth/NIMs and lower LLP, we expect the bank's RoE to gradually improve to 11-13% over FY23-25E from 9% in FY22 and 1% in FY21. BOB is better-positioned to accelerate growth while also maintaining profitability. Retain Buy/OW in EAP revised TP of Rs130 (earlier TP of Rs145), based on 0.7x FY24E ABV (0.9x Dec'23E ABV earlier) due to higher CoE. Key risks: Higher NPA formation, mainly in the corporate/SME book and slower-than-expected growth trajectory.

Please see our sector model portfolio (Emkay Alpha Portfolio): BFSI-Banks (Page 8)

Financial Snapshot (Standalone)

(Rs mn)	FY21	FY22	FY23E	FY24E	FY25E
Net income	4,17,430	4,41,053	4,81,666	5,30,692	5,92,078
Net profit	8,293	72,723	99,385	1,19,192	1,40,639
EPS (Rs)	1.7	14.0	19.2	23.0	27.2
ABV (Rs)	117.3	148.3	164.1	183.5	205.5
RoA (%)	0.1	0.6	0.7	8.0	0.9
RoE (%)	1.1	8.9	10.9	11.8	12.6
PE (x)	56.2	6.8	4.9	4.1	3.5
P/ABV	0.8	0.6	0.6	0.5	0.5

CMP Rs 95 as of (May 14, 2022) **Target Price** Rs 130 (▼)

Rating BUY (■) **Upside** 36.8 %

Change in Estimates	
EPS Chg FY23E/FY24E (%)	4.4/2.2
Target Price change (%)	(10.3)
Target Period (Months)	12
Previous Reco	BUY

Emkay vs Consensus EPS Estimates

	FY23E	FY24E
Emkay	19.2	23.0
Consensus	18.7	22.1
Mean Consensus TP (12M)	Rs 140
Stock Details		
Bloomberg Code		BOB IN
Face Value (Rs)		2
Shares outstanding (m	n)	5 171

race value (RS)	
Shares outstanding (mn)	5,171
52 Week H/L	123 / 73
M Cap (Rs bn/USD bn)	491 / 6.34
Daily Avg Volume (nos.)	395,26,330
Daily Avg Turnover (US\$ mn)	54.9

Shareholding Pattern Mar '22	
Promoters	64.0%
FIIs	9.1%
DIIs	15.1%
Public and Others	11.8%

Price Performance									
(%)	1M	3M	6M	12M					
Absolute	(20)	(16)	(6)	23					
Rel. to Nift	y (12)	(8)	8	14					

Relative price chart



Source: Bloomberg

This report is solely produced by Emkay Global. The following person(s) are responsible for the production of the recommendation:

Anand Dama

anand.dama@emkayglobal.com +91 22 6624 2480

Heet Khimawat

heet.khimawat@emkayglobal.com +91 22 6612 1275

Dixit Sankharva

dixit.sankharva@emkayglobal.com +91 22 6612 1281

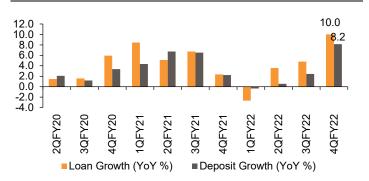
Soumya Jain

soumya.jain@emkayglobal.com +91 22 6612 1262

Solitice:reamphing, Emikagl Researcheam.emkay@whitemarquesolutions.com use and downloaded at 05/16/2022 01:01 PM

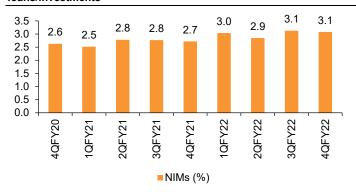
Story in Charts

Exhibit 1: Credit growth picks up, led by retail, but corporate growth was sluggish



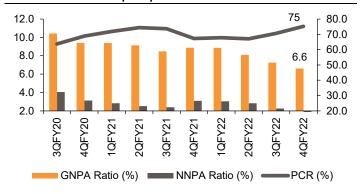
Source: Company, Emkay Research

Exhibit 3: Margin remained stable mainly due to better yields on loans/investments



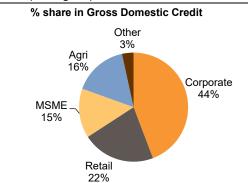
Source: Company, Emkay Research

Exhibit 5: Higher slippages, set off by higher w-offs and healthy recoveries led to a 64bps improvement in GNPA ratio



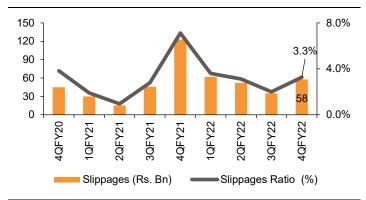
Source: Company, Emkay Research

Exhibit 2: BOB carries a relatively healthy share of retail portfolio among PSBs (barring SBI)



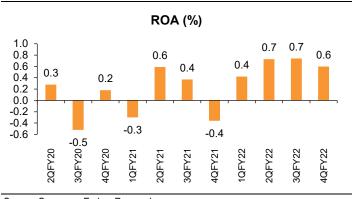
Source: Company, Emkay Research

Exhibit 4: Slippages inched up to 3.3% of loans



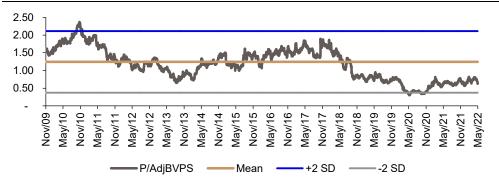
Source: Company, Emkay Research

Exhibit 6: Stable NIMs and higher LLP led to marginal moderation in RoA



Source: Company, Emkay Research

Exhibit 7: The stock currently trades at 0.6x - one-year forward ABV



Source: Bloomberg, Emkay Research

This report is intended for team.emkay@whitemarquesolutions.com use and downloaded at 05/16/2022 01:01 PM

Exhibit 8: Actual vs. Estimates (Q4FY22)

Rs mn	Actuala	Estimates		% Variation		Comments		
NS IIII	Actuals	Emkay	Consensus	Emkay	Consensus			
Net income	1,11,340	1,14,949	1,14,645	-3%	-3%	Lower other income led to a miss		
PPOP	56,351	55,493	58,373	2%	-3%	Lower staff expenses led a beat		
PAT	17,788	17,847	23,986	0%	-26%	Higher LLP offset by lower tax expense led to largely in line PAT		

Source: Company, Emkay Research

Exhibit 9: Quarterly summary

(Rs mn)	4QFY21	1QFY22	2QFY22	3QFY22	4QFY22	YoY (%)	QoQ (%)	FY22	FY23E	YoY (%)
Interest Earned	1,66,845	1,70,526	1,66,914	1,79,630	1,81,736	9	1	6,98,808	8,07,315	16
Interest Exp	95,779	91,610	91,256	94,110	95,619	0	2	3,72,594	4,38,358	18
Net Interest Income	71,066	78,917	75,659	85,520	86,117	21	1	3,26,213	3,68,958	13
Global NIMs (reported)	2.72	3.04	2.85	3.13	3.08	36bps	-5bps	2.88	2.94	6bps
Non-interest Income	48,174	28,632	35,792	25,193	25,223	-48	0	1,14,840	1,12,708	-2
Operating Expenses	56,894	51,540	54,756	55,880	54,988	-3	-2	2,17,164	2,38,415	10
Pre Provisioning Profit	62,346	56,008	56,695	54,833	56,351	-10	3	2,23,889	2,43,251	9
Provision & Contingencies	35,551	40,054	27,536	25,070	37,364	5	49	1,30,024	1,10,382	-15
PBT	26,796	15,954	29,159	29,763	18,988	-29	-36	93,864	1,32,868	42
Income Tax Expense (Gain)	37,261	3,868	8,281	7,793	1,200	-97	-85	21,142	33,483	58
Net Profit/(Loss)	-10,465	12,086	20,878	21,970	17,788	-270	-19	72,723	99,385	37
Gross NPA (%)	8.87	8.86	8.10	7.25	6.61	-226bps	-64bps	6.61	5.77	-84bps
Net NPA (%)	3.09	3.03	2.83	2.25	1.72	-137bps	-53bps	1.72	1.63	-9bps
Deposits (Rs bn)	9,670	9,313	9,595	9,780	10,459	8	2	10,459	11,361	9
Net Advances (Rs bn)	7,063	6,684	6,938	7,322	7,772	10	6	7,772	8,617	11

Source: Company, Emkay Research

Exhibit 10: Revision in estimates

Y/E Mar (Rs mn)		FY23E			FY24E		FY25E
	Earlier	Revised	% change	Earlier	Revised	% change	Introduced
Net income	4,74,709	4,81,666	1.47%	5,19,411	5,30,692	2.17%	5,92,078
PPOP	2,31,939	2,43,251	4.9%	2,53,460	2,68,014	5.7%	3,03,030
PAT	95,199	99,385	4.4%	1,16,600	1,19,192	2.2%	1,40,639
EPS (Rs)	18.4	19.2	4.4%	22.5	23.0	2.2%	27.2
BV (Rs)	177.3	184.4	4.0%	195.8	204.2	4.3%	227.4

Source: Emkay Research

Exhibit 11: Key assumptions

	FY22A	FY23E	FY24E	FY25E
Loan Growth %	10.0	10.9	12.6	13.7
Deposit Growth %	8.2	8.6	11.8	12.7
NIM %	2.9	2.9	3.0	3.0
GNPA %	6.6	5.8	5.1	4.4
Credit Cost %	1.5	1.1	1.0	1.0

Source: Emkay Research

Exhibit 12: Key ratios and trends

	4QFY20	1QFY21	2QFY21	3QFY21	4QFY21	1QFY22	2QFY22	3QFY22	4QFY22
Balance Sheet									
Loans (Rs bn)	7,379	7,364	7,188	7,452	7,512	7,112	7,337	7,717	8,178
-growth (YoY) %	47.2	8.6	5.3	6.3	1.8	-3.4	2.1	3.6	8.9
-growth (QoQ) %	5.3	-0.2	-2.4	3.7	0.8	-5.3	3.2	5.2	6.0
Liability Profile									
Deposit (Rs bn)	9,460	9,345	9,543	9,546	9,670	9,313	9,595	9,780	10,459
-growth (YoY) %	48.1	4.3	6.7	6.5	2.2	-0.3	0.5	2.5	8.2
-growth (QoQ) %	5.6	-1.2	2.1	0.0	1.3	-3.7	3.0	1.9	6.9
CASA %	35.3	36.2	36.7	37.9	40.2	40.2	39.2	42.0	42.0
Capital Adequacy									
CAR (%)	13.3	12.8	13.3	12.9	15.0	15.4	15.6	15.5	16.0
Tier I (%)	10.7	10.3	10.8	10.6	12.7	13.1	13.1	13.2	13.5
Asset Quality									
GNPA (%)	9.4	9.4	9.1	8.5	8.9	8.9	8.1	7.3	6.6
NNPA (%)	3.1	2.8	2.5	2.4	3.1	3.0	2.8	2.2	1.7
PCR (%)	68.9	71.9	74.4	73.6	67.3	73.6	67.1	70.6	75.3
Slippages %	3.8	1.9	1.0	2.8	7.1	3.0	3.1	2.0	3.3
NIM (%) - Global	2.6	2.5	2.8	2.8	2.7	3.0	2.9	3.1	3.1
NIM (%) - Domestic	2.8	2.6	2.9	3.0	2.7	3.1	2.9	3.2	3.1
Cost/ Income (%)	46.8	50.0	45.7	47.5	47.7	47.9	49.1	50.5	49.4
ROE Decomposition %									
NII	2.8	2.7	3.0	3.1	2.8	3.1	3.0	3.4	3.2
Other Income (Ex Treasury)	0.8	0.5	0.8	0.8	1.6	0.8	0.9	0.8	0.9
Treasury	0.4	0.2	0.4	0.4	0.4	0.4	0.5	0.2	0.1
Орех	1.9	1.7	1.9	2.0	2.3	2.1	2.2	2.2	2.0
PPOP	2.1	1.7	2.3	2.2	2.5	2.2	2.3	2.1	2.1
Provisioning Cost	2.8	2.3	1.1	1.6	1.4	1.6	1.1	1.0	1.4
PBT	-0.7	-0.5	1.1	0.7	1.1	0.6	1.2	1.2	0.7
Tax	-0.9	-0.2	0.3	0.2	1.5	0.2	0.3	0.3	0.0
ROA	0.2	-0.3	0.7	0.4	-0.4	0.4	0.7	0.7	0.6
Leverage (x)	15.8	16.0	15.8	15.8	15.4	14.6	14.4	14.5	14.6
ROE	2.8	-4.8	11.0	5.8	-5.5	6.2	10.5	10.8	8.4

Source: Company, Emkay Research

Key Financials (Standalone)

Income Statement

Y/E Mar (Rs mn)	FY21	FY22	FY23E	FY24E	FY25E
Net interest income	2,88,091	3,26,213	3,68,958	4,15,346	4,67,163
Other income	1,29,340	1,14,840	1,12,708	1,15,346	1,24,915
Fee income	25,209	27,710	30,758	34,757	39,970
Net income	4,17,430	4,41,053	4,81,666	5,30,692	5,92,078
Operating expenses	2,05,437	2,17,164	2,38,415	2,62,678	2,89,048
Pre provision profit	2,11,994	2,23,889	2,43,251	2,68,014	3,03,030
PPP excl treasury	1,78,234	1,96,609	2,21,427	2,47,281	2,83,334
Provisions	1,56,430	1,30,024	1,10,382	1,08,666	1,15,010
Profit before tax	55,564	93,864	1,32,868	1,59,348	1,88,020
Tax	47,271	21,142	33,483	40,156	47,381
Tax rate	85	23	25	25	25
Profit after tax	8,293	72,723	99,385	1,19,192	1,40,639

Balance Sheet

Y/E Year End (Rs mn)	FY21	FY22	FY23E	FY24E	FY25E
Equity	10,355	10,355	10,355	10,355	10,355
Reserves	7,60,102	8,57,275	9,44,234	10,46,858	11,66,786
Net worth	7,70,457	8,67,630	9,54,589	10,57,213	11,77,141
Deposits	96,69,968	104,59,386	113,60,718	126,98,910	143,08,364
Borrowings	4,44,344	7,92,444	7,52,822	7,90,463	8,29,986
Total liabilities	115,53,646	127,79,998	139,10,444	154,67,009	173,36,968
Cash and bank	3,88,410	5,51,844	4,74,824	4,45,781	4,14,607
Investments	26,12,201	31,57,954	33,73,060	37,02,200	40,88,605
Loans	70,63,005	77,71,552	86,17,489	97,07,320	110,33,007
Others	5,94,149	5,24,724	5,72,515	6,29,138	6,92,714
Total assets	115,53,645	127,79,998	139,10,444	154,67,009	173,36,968

Key Ratios (%)

Y/E Year End	FY21	FY22	FY23E	FY24E	FY25E
NIM	2.7	2.9	2.9	3.0	3.0
Non-II/avg assets	1.1	0.9	0.8	0.8	0.8
Fee income/avg assets	0.2	0.2	0.2	0.2	0.2
Opex/avg assets	1.8	1.8	1.8	1.8	1.8
Provisions/avg assets	1.4	1.1	0.8	0.7	0.7
PBT/avg assets	0.5	0.8	1.0	1.1	1.1
Tax/avg assets	0.4	0.2	0.3	0.3	0.3
RoA	0.1	0.6	0.7	0.8	0.9
RoAE	1.1	8.9	10.9	11.8	12.6
GNPA (%)	8.9	6.6	5.8	5.1	4.4
NNPA (%)	3.1	1.7	1.6	1.5	1.4

Per Share Data (Rs)	FY21	FY22	FY23E	FY24E	FY25E
EPS	1.7	14.0	19.2	23.0	27.2
BVPS	148.8	167.6	184.4	204.2	227.4
ABVPS	117.3	148.3	164.1	183.5	205.5
DPS	0.0	1.6	2.4	3.2	4.0

		FY23E	FY24E	FY25E
56.2	6.8	4.9	4.1	3.5
8.0	0.6	0.6	0.5	0.5
8.0	0.6	0.6	0.5	0.5
2.3	2.2	2.0	1.8	1.6
0.0	1.7	2.5	3.4	4.2
	0.8 0.8 2.3	0.8 0.6 0.8 0.6 2.3 2.2	0.8 0.6 0.6 0.8 0.6 0.6 2.3 2.2 2.0	0.8 0.6 0.6 0.5 0.8 0.6 0.6 0.5 2.3 2.2 2.0 1.8

Source: Company, Emkay Research
This report is intended for team.emkay@whitemarquesolutions.com use and downloaded at 05/16/2022 01:01 PM

Growth (%)	FY21	FY22	FY23E	FY24E	FY25E
NII	4.9	13.2	13.1	12.6	12.5
PPOP	7.7	5.6	8.6	10.2	13.1
PAT	51.6	776.9	36.7	19.9	18.0
Loans	2.3	10.0	10.9	12.6	13.7

Quarterly (Rs mn)	Q4FY21	Q1FY22	Q2FY22	Q3FY22	Q4FY22
NII	71,066	78,917	75,659	85,520	86,117
NIM(%)	2.7	3.0	2.9	3.1	3.1
PPOP	62,346	56,008	56,695	54,833	56,351
PAT	(10,465)	12,086	20,878	21,970	17,788
EPS (Rs)	(2.02)	2.33	4.03	4.24	3.44

Source: Company, Emkay Research

Shareholding Pattern (%)	Mar-21	Jun-21	Sep-21	Dec-21	Mar-22
Promoters	64.0	64.0	64.0	64.0	64.0
FIIs	6.9	7.9	7.8	7.4	9.1
DIIs	15.9	14.5	14.7	14.7	15.1
Public and Others	13.2	13.6	13.5	14.0	11.8

Source: Capitaline

RECOMMENDATION HISTORY TABLE

Date	Closing Price	TP	Period (months)	Rating	Analyst
08-Feb-22	118	145	12m	Buy	Anand Dama
11-Nov-21	101	130	12m	Buy	Anand Dama
08-Aug-21	83	122	12m	Buy	Anand Dama
31-May-21	81	110	12m	Buy	Anand Dama
28-May-21	84	85	12m	Buy	Anand Dama
28-Jan-21	67	85	12m	Buy	Anand Dama
20-Jan-21	79	85	12m	Buy	Anand Dama
29-Oct-20	43	55	12m	Buy	Anand Dama
11-Aug-20	47	55	12m	Hold	Anand Dama
25-Jun-20	52	58	12m	Hold	Anand Dama
11-Apr-20	51	62	12m	Hold	Anand Dama
27-Jan-20	92	95	12m	Hold	Anand Dama
09-Nov-19	94	100	12m	Hold	Anand Dama
09-Oct-19	91	100	12m	Hold	Anand Dama
23-Sep-19	101	130	12m	Hold	Anand Dama
03-Sep-19	91	130	12m	Hold	Anand Dama
26-Jul-19	113	130	12m	Hold	Anand Dama
24-May-19	137	140	12m	Hold	Anand Dama

Source: Company, Emkay Research

RECOMMENDATION HISTORY CHART



Source: Bloomberg, Company, Emkay Research

Emkay Alpha Portfolio - BFSI-Banks

EAP sector portfolio



Analyst: Anand Dama

Contact Details

anand.dama@emkayglobal.com +91 22 6624 2480

Sector

Banks

Analyst bio

Anand Dama is a CA, CPM (ICFAI) with total 13 years of research experience, in addition to 3 years in the finance/rating industry. His team currently covers 21 banks and 15 stocks in the NBFC/Insurance space.

Company Name	BSE200 Weight	EAP Weight	OW/UW (%)	OW/UW (bps)	EAP Weight based on Current NAV	vs last
BFSI-Banks	19.51	19.51	0.0%	0	100.00	
Axis Bank	1.92	1.96	2%	4	10.03	0
AU Small Finance Bank	0.30	0.25	-17%	-5	1.28	0
Bandhan Bank	0.22	0.26	15%	3	1.32	0
Bank of Baroda	0.19	0.19	0%	0	0.99	0
Canara Bank	0.12	0.05	-54%	-6	0.28	0
City Union Bank	0.00	0.04	NA	4	0.19	0
DCB Bank	0.00	0.00	NA	0	0.00	0
Equitas Small Finance Bank	0.00	0.00	NA	0	0.00	0
Federal Bank	0.18	0.22	21%	4	1.15	0
HDFC Bank	6.17	6.24	1%	6	31.97	0
ICICI Bank	5.23	5.36	3%	13	27.48	0
Indian Bank	0.00	0.00	NA	0	0.00	0
Indusind Bank	0.57	0.67	18%	10	3.43	0
Karur Vysya Bank	0.00	0.00	NA	0	0.00	0
Kotak Mahindra Bank	2.50	2.22	-11%	-27	11.40	0
Punjab National Bank	0.09	0.00	-100%	-9	0.00	0
RBL Bank	0.00	0.00	NA	0	0.00	0
State Bank of India	1.92	2.05	7%	13	10.49	0
Ujjivan Small Finance Bank	0.00	0.00	NA	0	0.00	0
Union Bank of India	0.04	0.00	-100%	-4	0.00	0
Yes Bank	0.04	0.00	-100%	-4	0.00	0
Cash	0.00	0.00	NA	0	0.00	0

Source: Emkay Research

Sector portfolio NAV

	Base				_	Latest
	1-Apr-19	12-May-21	12-Nov-21	11-Feb-22	12-Apr-22	12-May-22
EAP - BFSI-Banks	100.0	111.2	132.6	131.8	127.4	115.0
BSE200 Neutral Weighted Portfolio (ETF)	100.0	109.1	130.1	129.2	124.9	112.8

^{*}Performance measurement base date 1st April 2019

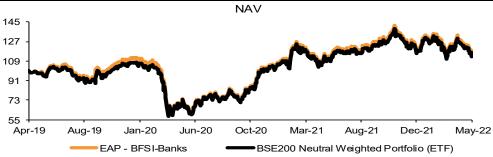
Source: Emkay Research

Price Performance (%)

	1m	3m	6m	12m
EAP - BFSI-Banks	-9.7%	-12.7%	-13.2%	3.5%
BSE200 Neutral Weighted Portfolio (ETF)	-9.6%	-12.7%	-13.3%	3.5%

Source: Emkay Research

NAV chart



Source: Emkay Research

Please see our model portfolio (Emkay Alpha Portfolio): Nifty

Please see our model portfolio (Emkay Alpha Portfolio): SMID

"Emkay Alpha Portfolio – SMID and Nifty are a supporting document to the Emkay Alpha

This report is intended for team.emkay@wRectfelies Report and is updated on regular intervals 2022 01:01 PM

[■] High Conviction/Strong Over Weight ■ High Conviction/Strong Under Weight

Emkay Rating Distribution

Ratings	Expected Return within the next 12-18 months.
BUY	Over 15%
HOLD	Between -5% to 15%
SELL	Below -5%

Completed Date: 14 May 2022 19:19:42 (SGT) Dissemination Date: 14 May 2022 19:20:42 (SGT)

Sources for all charts and tables are Emkay Research unless otherwise specified.

GENERAL DISCLOSURE/DISCLAIMER BY EMKAY GLOBAL FINANCIAL SERVICES LIMITED (EGFSL):

Emkay Global Financial Services Limited (CIN-L67120MH1995PLC084899) and its affiliates are a full-service, brokerage, investment banking, investment management and financing group. Emkay Global Financial Services Limited (EGFSL) along with its affiliates are participants in virtually all securities trading markets in India. EGFSL was established in 1995 and is one of India's leading brokerage and distribution house. EGFSL is a corporate trading member of Bombay Stock Exchange Limited (BSE), National Stock Exchange of India Limited (NSE), MCX Stock Exchange Limited (MCX-SX). EGFSL along with its subsidiaries offers the most comprehensive avenues for investments and is engaged in the businesses including stock broking (Institutional and retail), merchant banking, commodity broking, depository participant, portfolio management, insurance broking and services rendered in connection with distribution of primary market issues and financial products like mutual funds, fixed deposits. Details of associates are available on our website i.e. www.emkavolobal.com

EGFSL is registered as Research Analyst with SEBI bearing registration Number INH000000354 as per SEBI (Research Analysts) Regulations, 2014. EGFSL hereby declares that it has not defaulted with any stock exchange nor its activities were suspended by any stock exchange with whom it is registered in last five years, except that NSE had disabled EGFSL from trading on October 05, October 08 and October 09, 2012 for a manifest error resulting into a bonafide erroneous trade on October 05, 2012. However, SEBI and Stock Exchanges have conducted the routine inspection and based on their observations have issued advice letters or levied minor penalty on EGFSL for certain operational deviations in ordinary/routine course of business. EGFSL has not been debarred from doing business by any Stock Exchange / SEBI or any other authorities; nor has its certificate of registration been cancelled by SEBI at any point of time.

EGFSL offers research services to clients as well as prospects. The analyst for this report certifies that all of the views expressed in this report accurately reflect his or her personal views about the subject company or companies and its or their securities, and no part of his or her compensation was, is or will be, directly or indirectly related to specific recommendations or views expressed in this report.

Other disclosures by Emkay Global Financial Services Limited (Research Entity) and its Research Analyst under SEBI (Research Analyst) Regulations, 2014 with reference to the subject company(s) covered in this report

EGFSL and/or its affiliates may seek investment banking or other business from the company or companies that are the subject of this material. Our salespeople, traders, and other professionals may provide oral or written market commentary or trading strategies to our clients that reflect opinions that are contrary to the opinions expressed herein, and our proprietary trading and investing businesses may make investment decisions that may be inconsistent with the recommendations expressed herein. In reviewing these materials, you should be aware that any or all of the foregoing, among other things, may give rise to real or potential conflicts of interest including but not limited to those stated herein. Additionally, other important information regarding our relationships with the company or companies that are the subject of this material is provided herein. This report is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would subject EGFSL or its group companies to any registration or licensing requirement within such jurisdiction. Specifically, this document does not constitute an offer to or solicitation to any U.S. person for the purchase or sale of any financial instrument or as an official confirmation of any transaction to any U.S. person. Unless otherwise stated, this message should not be construed as official confirmation of any transaction. No part of this document may be used by private customers in United Kingdom. All material presented in this report, unless specifically indicated otherwise, is under copyright to Emkay. None of the material, nor its content, nor any copy of it, may be altered in any way, transmitted to, copied or distributed to any other party, without the prior express written permission of EGFSL. All trademarks, service marks and logos used in this report are trademarks or registered trademarks of EGFSL or its Group Companies. The information contained herein is not intended for publication or distribution or circulation in any manner whatsoever and any unauthorized reading, dissemination, distribution or copying of this communication is prohibited unless otherwise expressly authorized. Please ensure that you have read "Risk Disclosure Document for Capital Market and Derivatives Segments" as prescribed by Securities and Exchange Board of India before investing in Indian Securities Market. In so far as this report includes current or historic information, it is believed to be reliable, although its accuracy and completeness cannot be guaranteed.

- This publication has not been reviewed or authorized by any regulatory authority. There is no planned schedule or frequency for updating research publication relating to any issuer.
- Please contact the primary analyst for valuation methodologies and assumptions associated with the covered companies or price targets

Disclaimer for U.S. persons only: This research report is a product of Emkay Global Financial Services Limited (Emkay), which is the employer of the research analyst(s) who has prepared the research report. The research analyst(s) preparing the research report is/are resident outside the United States (U.S.) and are not associated persons of any U.S. regulated broker-dealer and therefore the analyst(s) is/are not subject to supervision by a U.S. broker-dealer, and is/are not required to satisfy the regulatory licensing requirements of Financial Institutions Regulatory Authority (FINRA) or required to otherwise comply with U.S. rules or regulations regarding, among other things, communications with a subject company, public appearances and trading securities held by a research analyst account. This report is intended for distribution to "Major Institutional Investors" as defined by Rule 15a-6(b)(4) of the U.S. Securities and Exchange Act, 1934 (the Exchange Act) and interpretations thereof by U.S. Securities and Exchange Commission (SEC) in reliance on the sender. Further, this report is not a Major Institutional Investor as specified above, then it should not act upon this report and return the same to the sender. Further, this report may not be copied, duplicated and/or transmitted onward to any U.S. person, which is not the Major Institutional Investor. In reliance on the exemption from registration provided by Rule 15a-6 of the Exchange Act and interpretations thereof by the SEC in order to conduct certain business with Major Institutional Investors.

ANALYST CERTIFICATION BY EMKAY GLOBAL FINANCIAL SERVICES LIMITED (EGFSL)

The research analyst(s) primarily responsible for the content of this research report, in part or in whole, certifies that the views about the companies and their securities expressed in this report accurately reflect his/her personal views. The analyst(s) also certifies that no part of his/her compensation was, is, or will be, directly or indirectly, related to specific recommendations or views expressed in the report. The research analyst (s) primarily responsible of the content of this research report, in part or in whole, certifies that he or his associate does not serve as an officer, director or employee of the issuer or the new listing applicant (which includes in the case of a real estate investment trust, an officer of the management company of the real estate investment trust; and in the case of any other entity, an officer or its equivalent counterparty of the entity who is responsible for the management of the issuer or the new listing applicant). The research analyst(s) primarily responsible for the content of this research report or his associate does not have financial interests in relation to an issuer or a new listing applicant that the analyst reviews. EGFSL has procedures in place to eliminate, avoid and manage any potential conflicts of interests that may arise in connection with the production of research reports. The research analyst(s) responsible for this report operates as part of a separate and independent team to the investment banking function of the EGFSL and procedures are in place to ensure that confidential information held by either the research or investment banking function is handled appropriately. There is no direct link of EGFSL compensation to any specific investment banking function of the EGFSL.

¹ An associate is defined as (i) the spouse, or any minor child (natural or adopted) or minor step-child, of the analyst; (ii) the trustee of a trust of which the analyst, his spouse, minor child (natural or adopted) or minor step-child, is a beneficiary or discretionary object; or (iii) another person accustomed or obliged to act in accordance with the directions or instructions of the analyst.

COMPANY-SPECIFIC / REGULATORY DISCLOSURES BY EMKAY GLOBAL FINANCIAL SERVICES LIMITED (EGFSL):

Disclosures by Emkay Global Financial Services Limited (Research Entity) and its Research Analyst under SEBI (Research Analyst) Regulations, 2014 with reference to the subject company(s) covered in this report-:

- 1. EGFSL, its subsidiaries and/or other affiliates do not have a proprietary position in the securities recommended in this report as of May 14, 2022
- 2. EGFSL, and/or Research Analyst does not market make in equity securities of the issuer(s) or company(ies) mentioned in this Research Report Disclosure of previous investment recommendation produced:
- 3. EGFSL may have published other investment recommendations in respect of the same securities / instruments recommended in this research report during the preceding 12 months. Please contact the primary analyst listed in the first page of this report to view previous investment recommendations published by EGFSL in the preceding 12 months.
- 4. EGFSL, its subsidiaries and/or other affiliates and Research Analyst or his/her relative's does not have any material conflict of interest in the securities recommended in this report as of May 14, 2022.
- 5. EGFSL, its subsidiaries and/or other affiliates and Research Analyst or his/her relative's does not have actual/beneficial ownership of 1% or more securities of the subject company at the end of the month immediately preceding the May 14, 2022
- 6. EGFSL, its subsidiaries and/or other affiliates and Research Analyst have not received any compensation in whatever form including compensation for investment banking or merchant banking or brokerage services or for products or services other than investment banking or merchant banking or brokerage services from securities recommended in this report (subject company) in the past 12 months.
- 7. EGFSL, its subsidiaries and/or other affiliates and/or and Research Analyst have not received any compensation or other benefits from securities recommended in this report (subject company) or third party in connection with the research report.
- 8. Securities recommended in this report (Subject Company) has not been client of EGFSL, its subsidiaries and/or other affiliates and/or and Research Analyst during twelve months preceding the May 14, 2022

² Financial interest is defined as interest that are commonly known financial interest, such as investment in the securities in respect of an issuer or a new listing applicant, or financial accommodation arrangement between the issuer or the new listing applicant and the firm or analysis. This term does not include commercial lending conducted at the arm's length, or investments in any collective investment scheme other than an issuer or new listing applicant notwithstanding the fact that the scheme has investments in securities in respect of an issuer or a new listing applicant.

RESTRICTIONS ON DISTRIBUTION

INECTINIC HONO CITE	SIGHT ADD THOM
General	This report is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation.
Australia	This report is not for distribution into Australia.
Hong Kong	This report is not for distribution into Hong Kong.
Indonesia	This report is being distributed in Indonesia by PT DBS Vickers Sekuritas Indonesia.
Malaysia	This report is not for distribution into Malaysia.
Singapore	This report is distributed in Singapore by DBS Bank Ltd (Company Regn. No. 16800306E) or DBSVS (Company Regn. No. 1860024G) both of which are Exempt Financial Advisers as defined in the Financial Advisers Act and regulated by the Monetary Authority of Singapore. DBS Bank Ltd and/or DBSVS, may distribute reports produced by its respective foreign entities, affiliates or other foreign research houses pursuant to an agreement under Regulation 32C of the financial Advisers Regulations. Singapore recipients should contact DBS Bank Ltd at 6327 2288 for matters arising from, or in connection with the report.
Thailand	This report is being distributed in Thailand by DBS Vickers Securities (Thailand) Co Ltd.
United Kingdom	This report is disseminated in the United Kingdom by DBS Vickers Securities (UK) Ltd, ("DBSVUK"). DBSVUK is authorised and regulated by the Financial Conduct Authority in the United Kingdom. In respect of the United Kingdom, this report is solely intended for the clients of DBSVUK, its respective connected and
	associated corporations and affiliates only and no part of this document may be (i) copied, photocopied or duplicated in any form or by any means or (ii) redistributed without the prior written consent of DBSVUK. This communication is directed at persons having professional experience in matters relating to investments. Any investment activity following from this communication will only be engaged in with such persons. Persons who do not have professional experience in matters relating to investments should not rely on this communication.
Dubai International Financial Centre	This research report is being distributed by DBS Bank Ltd., (DIFC Branch) having its office at units 608-610, 6 th Floor, Gate Precinct Building 5, PO Box 506538, Dubai International Financial Centre (DIFC), Dubai, United Arab Emirates. DBS Bank Ltd., (DIFC Branch) is regulated by The Dubai Financial Services Authority. This research report is intended only for professional clients (as defined in the DFSA rulebook) and no other person may act upon it.
United Arab Emirates	This report is provided by DBS Bank Ltd (Company Regn. No. 196800306E) which is an Exempt Financial Adviser as defined in the Financial Advisers Act and regulated by the Monetary Authority of Singapore. This report is for information purposes only and should not be relied upon or acted on by the recipient or considered as a solicitation or inducement to buy or sell any financial product. It does not constitute a personal recommendation or take into account the particular investment objectives, financial situation, or needs of individual clients. You should contact your relationship manager or investment adviser if you need advice on the merits of buying, selling or holding a particular investment. You should note that the information in this report may be out of date and it is not represented or warranted to be accurate, timely or complete. This report or any portion thereof may not be reprinted, sold or redistributed without our written consent.
United States	DBSVUSA did not participate in its preparation. The research analyst(s) named on this report are not registered as research analysts with FINRA and are not associated persons of DBSVUSA. The research analyst(s) are not subject to FINRA Rule 2241 restrictions on analyst compensation, communications with a subject company, public appearances and trading securities held by a research analyst. This report is being distributed in the United States by DBSVUSA, which accepts responsibility for its contents. This report may only be distributed to Major U.S. Institutional Investors (as defined in SEC Rule 15a-6) and to such other institutional investors and qualified persons as DBSVUSA may authorize. Any U.S. person receiving this report who wishes to effect transactions in any securities referred to herein should contact DBSVUSA directly and not its affiliate.
Other jurisdictions	In any other jurisdictions, except if otherwise restricted by laws or regulations, this report is intended only for qualified, professional, institutional or sophisticated investors as defined in the laws and regulations of such jurisdictions.

Emkay Global Financial Services Ltd.

CIN - L67120MH1995PLC084899

7th Floor, The Ruby, Senapati Bapat Marg, Dadar - West, Mumbai - 400028. India Tel: +91 22 66121212 Fax: +91 22 66121299 Web: www.emkayglobal.com