

# Quant Research

India

NIFTY-50: 24,011

July 01, 2024

## Alphabet Factor Portfolios

Our Alphabet Factor Portfolios had an impressive performance in the last month, with the multifactor approach offering a good hedge against the volatile first week while participating in the sentiment ride thereafter. We show our model results aren't a mere luck but are backed by substance, with strong outperformance not only during the back-test period but also out of sample since the go-live date.

### Traversing through the initial volatility

The juggernaut of exit poll predictions and the subsequent blow of less than expected seats for the NDA resulted in extremely volatile sessions during the first week for Indian markets. While the momentum stocks were bruised, less volatile and fundamentally stable names offered a good hedge against the see-sawing markets. Absorbing the shock of the election results, investors with renewed sentiment continued to prefer stocks with good ratings from sell-side analysts.

### All-Season portfolio outperforms Nifty-50

Our All-Season portfolio, with exposure to all individual factors discussed above in a multifactor framework, outperformed the Nifty-50 benchmark, both on an absolute basis and a risk-adjusted basis during last month. The diversified broad-based portfolio was a clear winner compared to the concentrated version, even if we compare the performance in the last year. With markets trading at stretched valuations and uncertainty around the upcoming budget on whether the government engages in populist versus prudent measures, we recommend investors follow a blended multifactor approach rather than style timing.

### Sectors that matter

The All-Season broad portfolio benefitted from overweight exposure to Technology and Materials in last month. For July 2024, the model has turned underweight on Technology and further increased the overweight exposure on Non-Durables. We continue the underweight exposure to Financials, although, relative to last month, the exposure to Financials has increased for July 2024.

### Quick Numbers

Concentrated and Broad-based All-Season portfolios outperform Nifty by 6.7% and 3.3%, respectively, in the last 12 months.

We turn underweight on Technology and increase exposure to Financials and Non-Durables.

[Full sector coverage on KINSITE](#)

## The Alphabet Suite of Factor Portfolios

Alphabet is a suite of four single-factor portfolios and a multifactor portfolio based on the Nifty-50 index universe. Each month, top 15 ranking stocks based on the respective factor scores form the Broad portfolio while the top 5 stocks form the Concentrated portfolio for the said factor. Given the nature of construction of these portfolios, it is highly likely that Alphabet portfolio recommendations may differ from KIE analyst ratings for the same set of stocks.

Alphabet can be used both by quantitative and fundamental managers for portfolio construction as well as a screening tool to filter down the investment universe. The factor scores may also be used as an overlay on the existing stock selection process in a multifactor framework by investment managers.

Our Alphabet portfolios show strong performance both on an absolute and risk-adjusted basis, not only during the back-test period but also after the model went live (out of sample).

### Broad-based Alphabet portfolios outperform Nifty-50 benchmark across investment horizons

Exhibit 1: Performance summary of Alphabet portfolios over different horizons

	Jun24	Last 1 Year			Out of Sample (Since Mar24)					Full Backtest (Since Jan04)									
	Return	Return	Risk (Stdev)	Sharpe	Return	Risk (Stdev)	Sharpe	Active Return	Active Risk	IR	Return	Risk (Stdev)	Sharpe	Active Return	Active Risk	IR	Avg. Turnover	Max DD	Hit Rate
<b>Concentrated</b>																			
All-Season	7.30%	26.38%	18.31%	1.44	21.58%	20.63%	1.05	1.29%	13.54%	0.10	26.31%	21.05%	1.25	9.59%	14.77%	0.65	73.44%	-28.13%	60.32%
Fundamental	5.92%	37.92%	13.89%	2.73	20.87%	14.71%	1.42	-0.19%	12.16%	(0.02)	22.25%	18.35%	1.21	5.50%	14.29%	0.38	11.09%	-27.44%	58.70%
Momentum	7.98%	57.92%	14.40%	4.02	22.26%	24.94%	0.89	2.77%	15.84%	0.17	19.26%	24.94%	0.77	4.39%	14.95%	0.29	72.23%	-54.40%	56.68%
Sentiment	6.52%	54.24%	15.42%	3.52	43.77%	21.75%	2.01	20.56%	11.99%	1.72	27.95%	24.78%	1.13	12.26%	13.15%	0.93	88.26%	-43.54%	60.32%
Low Vol	9.93%	10.81%	15.57%	0.69	15.52%	19.37%	0.80	-3.74%	10.48%	(0.36)	17.84%	20.20%	0.88	2.19%	13.12%	0.17	11.98%	-37.94%	51.42%
<b>Broad</b>																			
All-Season	8.85%	43.20%	14.94%	2.89	28.79%	17.55%	1.64	7.46%	7.79%	0.96	23.75%	19.89%	1.19	7.78%	9.59%	0.81	54.74%	-36.86%	62.35%
Fundamental	6.97%	32.69%	12.73%	2.57	24.44%	15.66%	1.56	3.33%	8.45%	0.39	19.17%	18.99%	1.01	3.55%	9.49%	0.37	8.88%	-38.82%	55.47%
Momentum	5.55%	50.93%	13.51%	3.77	29.35%	21.68%	1.35	8.89%	8.72%	1.02	21.68%	22.07%	0.98	6.57%	9.21%	0.71	56.01%	-50.23%	62.35%
Sentiment	8.02%	33.18%	12.89%	2.57	33.04%	18.17%	1.82	11.02%	8.82%	1.25	22.06%	22.03%	1.00	6.85%	8.65%	0.79	69.18%	-46.54%	59.92%
Low Vol	7.69%	31.99%	13.57%	2.36	21.67%	16.18%	1.34	1.15%	7.71%	0.15	19.18%	18.85%	1.02	3.54%	9.33%	0.38	8.10%	-37.71%	58.70%
<b>Benchmark</b>																			
Nifty 50	6.57%	25.13%	11.65%	2.16	19.24%	19.32%	1.00				14.01%	21.48%	0.65						

Source: Kotak Institutional Equities, FactSet

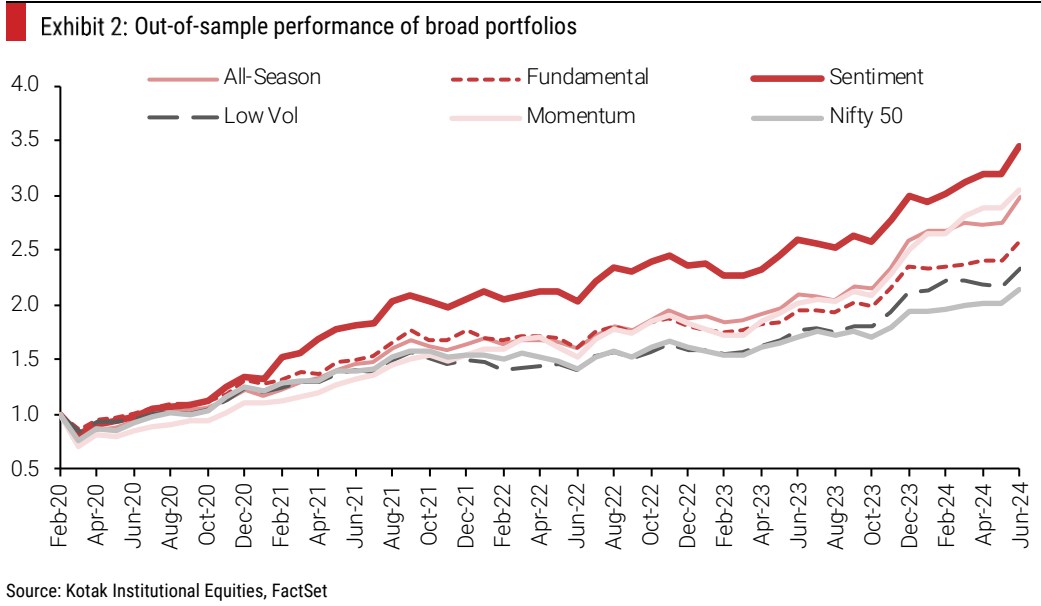
### Is Alphabet a datamining exercise?

A common criticism of quantitative strategies is that they are a result of datamining. Datamining, in quantitative finance refers to a process of repeatedly exploring and over analyzing the available dataset to fit patterns even in the absence of any economic rationale. As a result, these overfitted models exhibit exemplary performance in the back-test window; however, they fail miserably as they go live on the real-world data.

We address the datamining concern with three counter arguments:

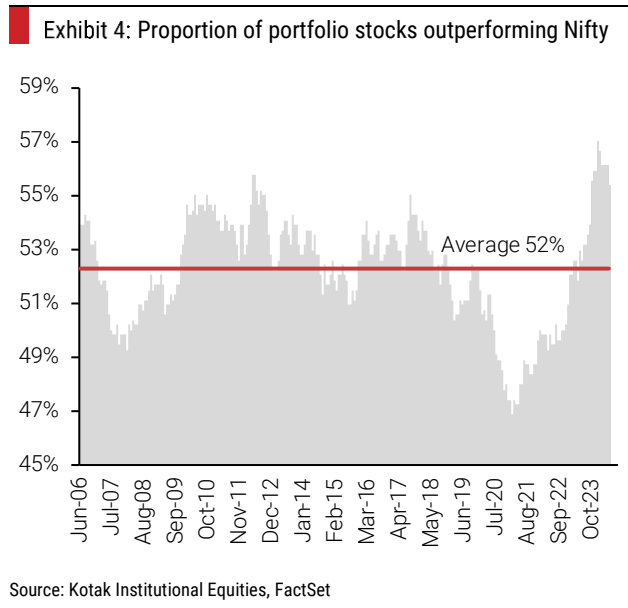
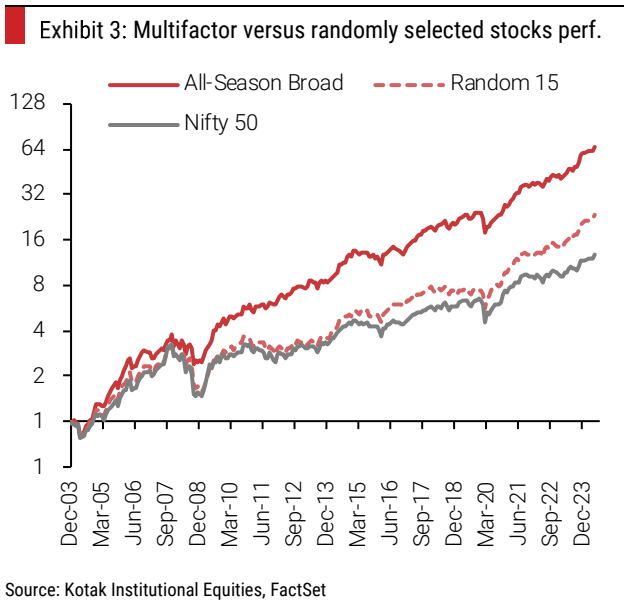
**Economic rationale:** The individual factors used for constructing composite factors are backed by strong academic literature and are commonly used by industry practitioners to evaluate firms. Moreover, we first establish the economic efficacy of the underlying factors and thereafter use them in portfolio construction to monitor the performance and not vice-versa. For instance, all else equal, it is economically intuitive to buy cheaply valued and less risky stocks. Hence, we give a higher rank to stocks with relatively low P/E ratio while we give a lower rank to more volatile names. Had it been datamining, the process would have first monitored the performance of stocks in different buckets and formed portfolios based on the past performance, even if it would have meant buying expensive or more volatile names based on performance in the testing period.

**Out-of-sample performance:** As highlighted earlier, overfitted strategies, though do well in back-test, fail miserably out of sample. All of our broad-based Alphabet portfolios have performed really well after they went live in the beginning of March 2020, beating the benchmark both on an absolute and risk-adjusted basis.



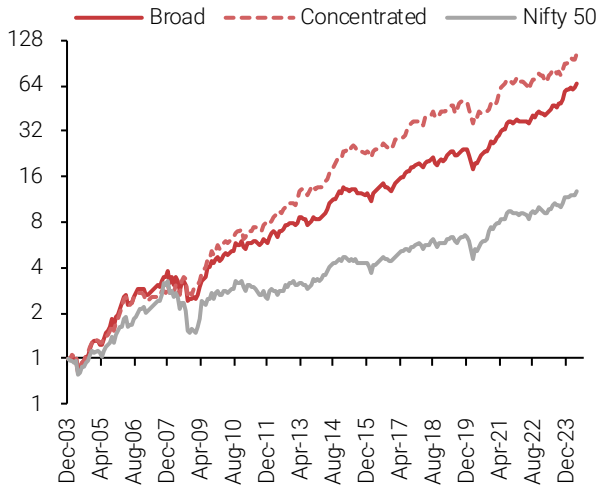
**Luck by Chance?** Here we address the question on whether the Alphabet enhances stock selection or is the performance just a luck by chance. We answer this by inspecting our portfolios on two parameters:

- ▶ Each month we form a portfolio of randomly selected stocks of the same size as our Broad portfolio and compare the results over the back-test window. Our All-Season Broad portfolio outperforms the random portfolio over the back-test window, thus establishing the long-term efficacy of our factor models.
- ▶ We also inspect whether the outperformance of Alphabet portfolios is due to the skewed performance of one or two stocks or a good chunk of portfolio outperforms the benchmark. As seen in Exhibit 4, on average, half of the portfolio outperforms the benchmark.



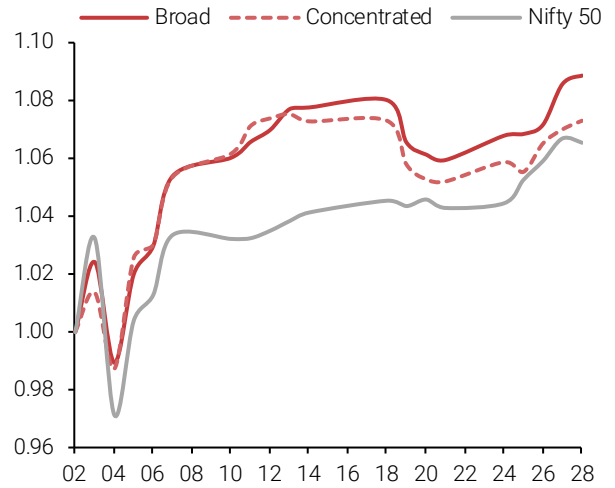
## All-Season portfolio

Exhibit 5: Cumulative performance since January'04



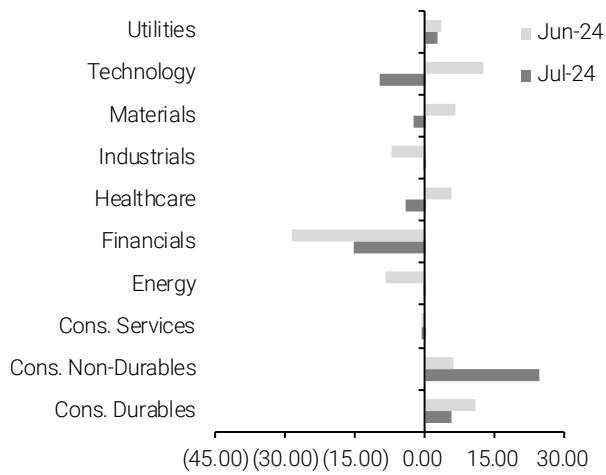
Source: Kotak Institutional Equities, FactSet

Exhibit 6: Performance in last month



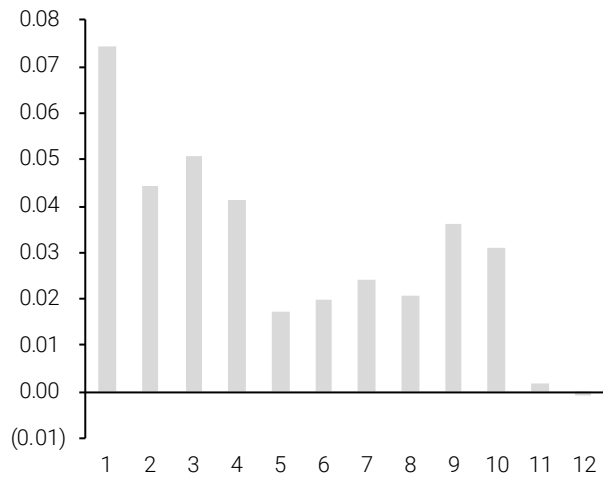
Source: Kotak Institutional Equities, FactSet

Exhibit 7: Sector exposure



Source: Kotak Institutional Equities, FactSet

Exhibit 8: Avg. information coefficient decay profile over 12M



Source: Kotak Institutional Equities, FactSet

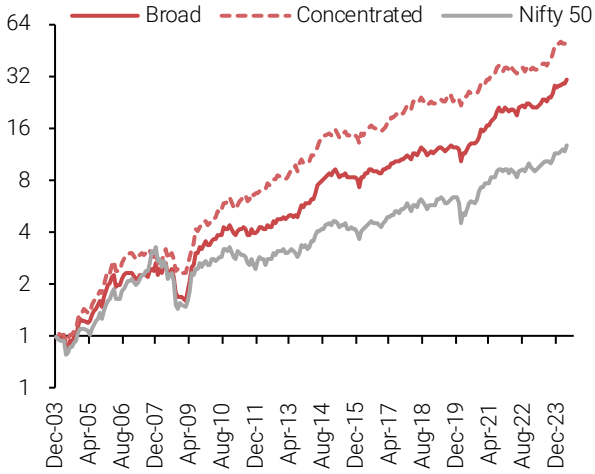
**Exhibit 9: All-Season portfolio constituents for July'24**

Sedol	Name	ISIN	Sector	Weight			KIE Analyst Recommendation
				Nifty 50	Broad Portfolio	Concentrated Portfolio	
B611LV1	Tata Motors Limited	INE155A01022	Cons. Durables	1.62%	3.57%	12.16%	ADD
B4Z9XF5	Coal India Ltd.	INE522F01014	Energy	1.01%	4.03%	13.73%	SELL
6099723	Bharat Petroleum Corporation Limited	INE029A01011	Energy	0.55%	4.38%	14.95%	SELL
6261674	Hindustan Unilever Limited	INE030A01027	Cons. Non-Durables	2.08%	8.55%	29.15%	ADD
BQB8GH3	Nestle India Ltd.	INE239A01024	Cons. Non-Durables	0.85%	12.61%	30.00%	ADD
6139362	Oil & Natural Gas Corp. Ltd.	INE213A01029	Energy	0.98%	3.93%		REDUCE
B0GWF48	Hindalco Industries Limited	INE038A01020	Materials	0.94%	2.87%		ADD
B0166K8	Larsen & Toubro Limited	INE018A01030	Industrials	3.98%	6.75%		SELL
BGSQG47	Britannia Industries Ltd	INE216A01030	Cons. Non-Durables	0.61%	11.41%		ADD
BMW4CV8	Eicher Motors Limited	INE066A01021	Cons. Durables	0.61%	4.30%		SELL
BSZ2BY7	ICICI Bank Limited	INE090A01021	Financials	8.09%	9.94%		BUY
B01NPJ1	Tata Consultancy Services Limited	INE467B01029	Technology	3.76%	6.21%		ADD
B037HF1	NTPC Limited	INE733E01010	Utilities	1.69%	6.09%		SELL
B2QKXW0	Bajaj Auto Limited	INE917I01010	Cons. Durables	1.01%	7.53%		SELL
BZ60N32	SBI Life Insurance Co. Ltd.	INE123W01016	Financials	0.62%	7.83%		BUY

Source: Kotak Institutional Equities, FactSet

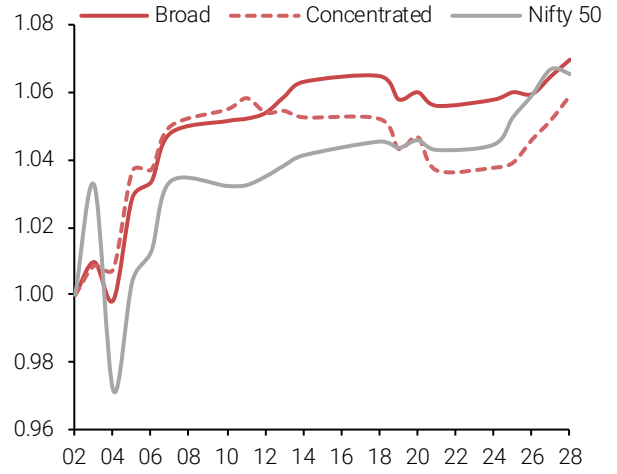
## Fundamental portfolio

Exhibit 10: Cumulative performance Since January'04



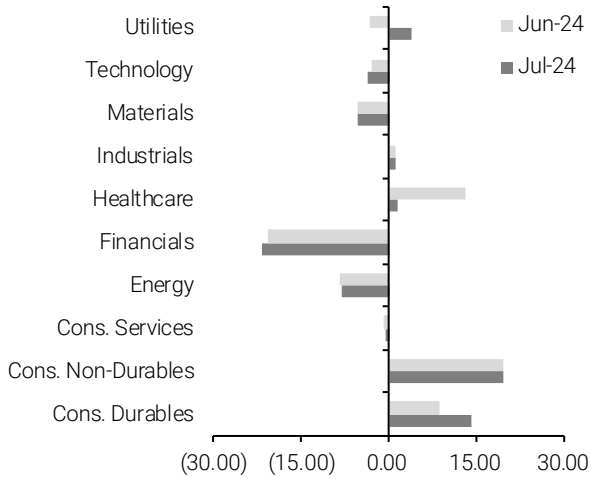
Source: Kotak Institutional Equities, FactSet

Exhibit 11: Performance in last month



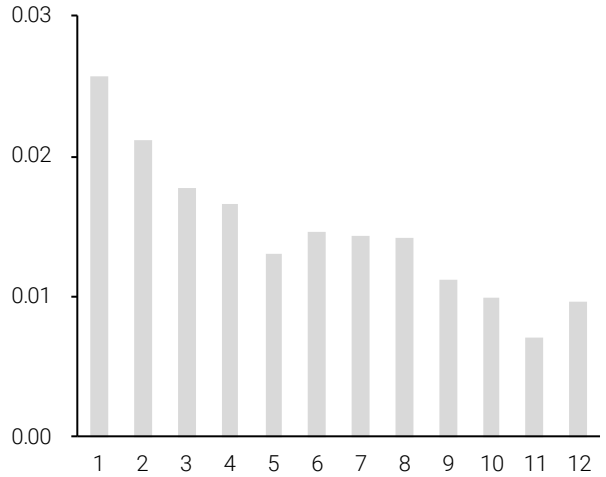
Source: Kotak Institutional Equities, FactSet

Exhibit 12: Sector exposure



Source: Kotak Institutional Equities, FactSet

Exhibit 13: Avg information coefficient decay profile over 12M



Source: Kotak Institutional Equities, FactSet

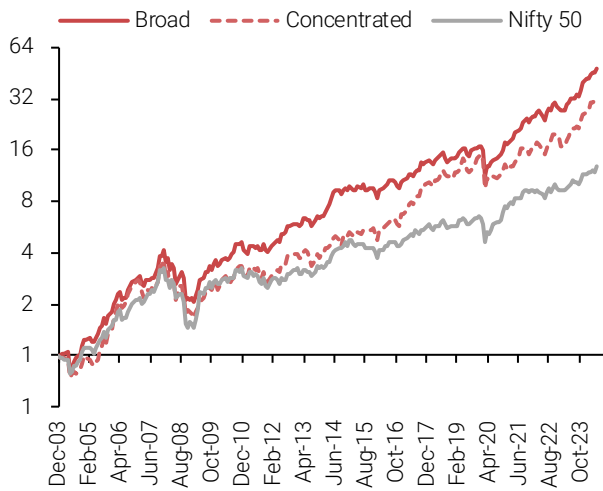
**Exhibit 14: Fundamental portfolio constituents for July'24**

Sedol	Name	ISIN	Sector	Weight			KIE Analyst Recommendation
				Nifty 50	Broad Portfolio	Concentrated Portfolio	
B611LV1	Tata Motors Limited	INE155A01022	Cons. Durables	1.62%	4.09%	10.33%	ADD
B4Z9XF5	Coal India Ltd.	INE522F01014	Energy	1.01%	4.61%	11.67%	SELL
B01NPJ1	Tata Consultancy Services Limited	INE467B01029	Technology	3.76%	7.11%	18.00%	ADD
BQB8GH3	Nestle India Ltd.	INE239A01024	Cons. Non-Durables	0.85%	14.44%	30.00%	ADD
BGSQG47	Britannia Industries Ltd	INE216A01030	Cons. Non-Durables	0.61%	13.07%	30.00%	ADD
6410959	Dr. Reddy's Laboratories Ltd.	INE089A01023	Healthcare	0.72%	5.62%		REDUCE
BK1N461	HDFC Bank Limited	INE040A01034	Financials	12.04%	7.59%		BUY
6327327	Hero Motocorp Limited	INE158A01026	Cons. Durables	0.67%	5.98%		SELL
6205122	Infosys Limited	INE009A01021	Technology	5.30%	5.10%		BUY
BCRWL65	Asian Paints Ltd.	INE021A01026	Industrials	1.23%	4.90%		REDUCE
BMW4CV8	Eicher Motors Limited	INE066A01021	Cons. Durables	0.61%	4.93%		SELL
6802608	Shriram Finance Limited	INE721A01013	Financials	0.77%	3.77%		BUY
B037HF1	NTPC Limited	INE733E01010	Utilities	1.69%	6.97%		SELL
B2QKXW0	Bajaj Auto Limited	INE917I01010	Cons. Durables	1.01%	8.62%		SELL
BD6F8V6	LTIMindtree Limited	INE214T01019	Industrials	0.47%	3.20%		REDUCE

Source: Kotak Institutional Equities, FactSet

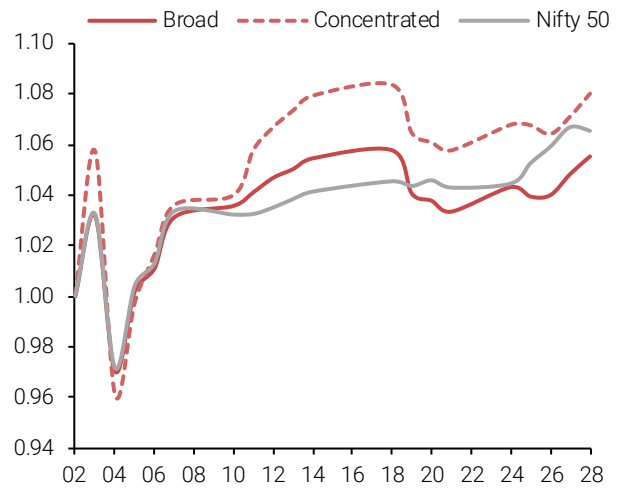
## Momentum portfolio

Exhibit 15: Cumulative performance since January'04



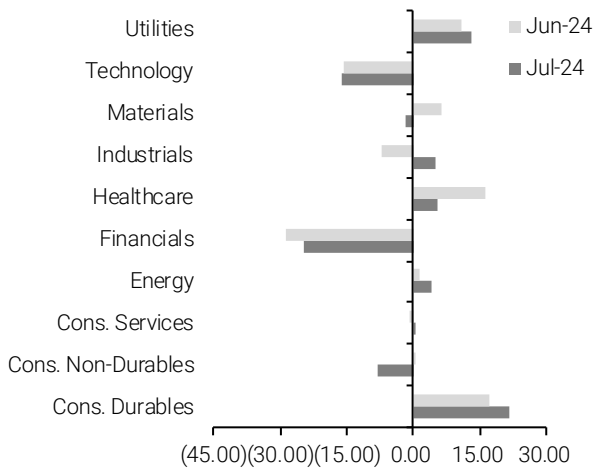
Source: Kotak Institutional Equities, FactSet

Exhibit 16: Performance in last month



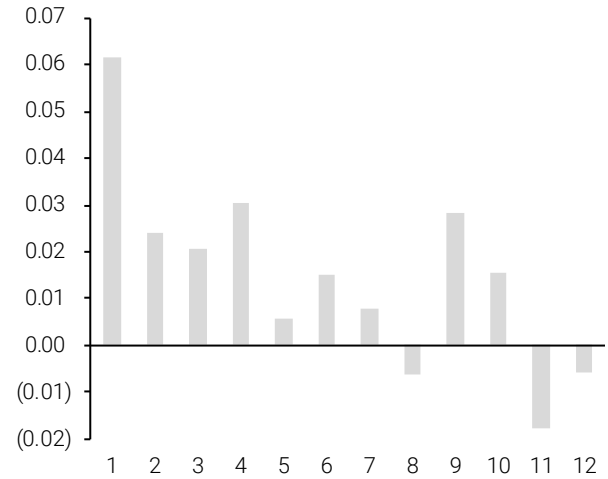
Source: Kotak Institutional Equities, FactSet

Exhibit 17: Sector exposure



Source: Kotak Institutional Equities, FactSet

Exhibit 18: Avg information coefficient decay profile over 12M



Source: Kotak Institutional Equities, FactSet



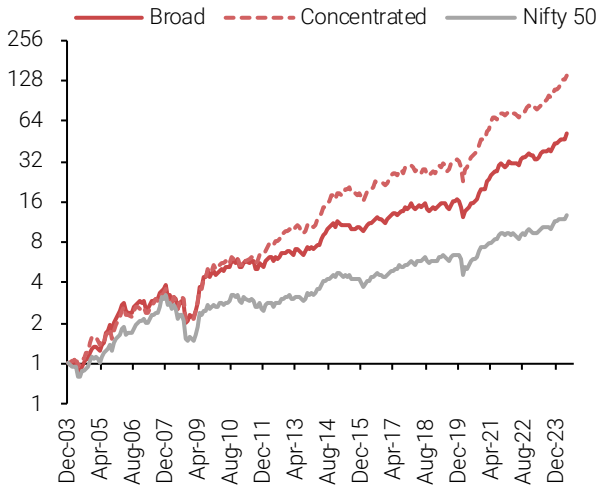
**Exhibit 19: Momentum portfolio constituents for July'24**

Sedol	Name	ISIN	Sector	Weight			KIE Analyst Recommendation
				Nifty 50	Broad Portfolio	Concentrated Portfolio	
B01VRK0	Adani Enterprises Limited	INE423A01024	Cons. Services	0.79%	1.27%	5.73%	—
B28XXH2	Adani Ports & Special Economic Zone Limited	INE742F01042	Industrials	1.03%	2.87%	12.93%	BUY
B4Z9XF5	Coal India Ltd.	INE522F01014	Energy	1.01%	5.47%	24.58%	SELL
6099723	Bharat Petroleum Corporation Limited	INE029A01011	Energy	0.55%	5.95%	26.76%	SELL
B037HF1	NTPC Limited	INE733E01010	Utilities	1.69%	8.27%	30.00%	SELL
B011108	Cipla Ltd	INE059A01026	Healthcare	0.73%	9.60%		ADD
BSQCB24	State Bank of India	INE062A01020	Financials	3.06%	8.56%		BUY
6327327	Hero Motocorp Limited	INE158A01026	Cons. Durables	0.67%	7.09%		SELL
6139362	Oil & Natural Gas Corp. Ltd.	INE213A01029	Energy	0.98%	5.34%		REDUCE
B0GWF48	Hindalco Industries Limited	INE038A01020	Materials	0.94%	3.90%		ADD
B0166K8	Larsen & Toubro Limited	INE018A01030	Industrials	3.98%	9.16%		SELL
BMW4CV8	Eicher Motors Limited	INE066A01021	Cons. Durables	0.61%	5.84%		SELL
6633712	Maruti Suzuki India Limited	INE585B01010	Cons. Durables	1.52%	8.22%		SELL
B233HS6	Power Grid Corporation of India Limited	INE752E01010	Utilities	1.43%	8.24%		SELL
B2QKXW0	Bajaj Auto Limited	INE917I01010	Cons. Durables	1.01%	10.22%		SELL

Source: Kotak Institutional Equities, FactSet

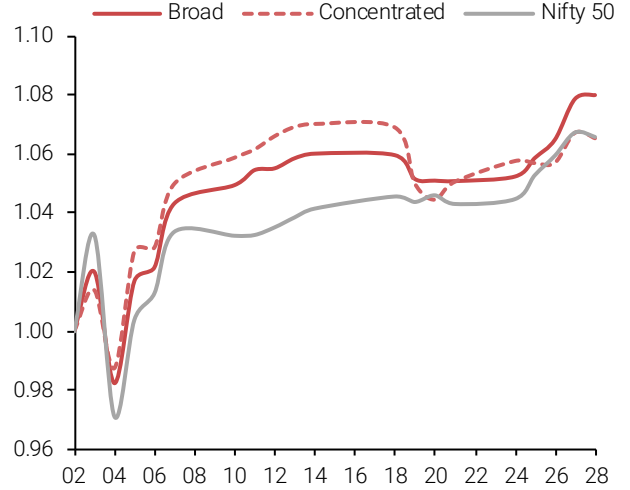
## Sentiment portfolio

Exhibit 20: Cumulative performance since January'04



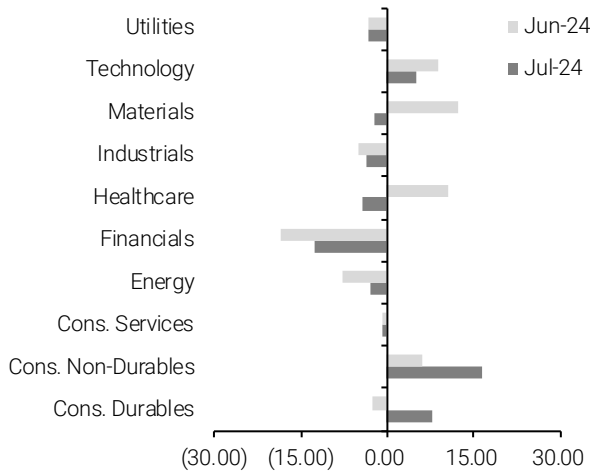
Source: Kotak Institutional Equities, FactSet

Exhibit 21: Performance in last month



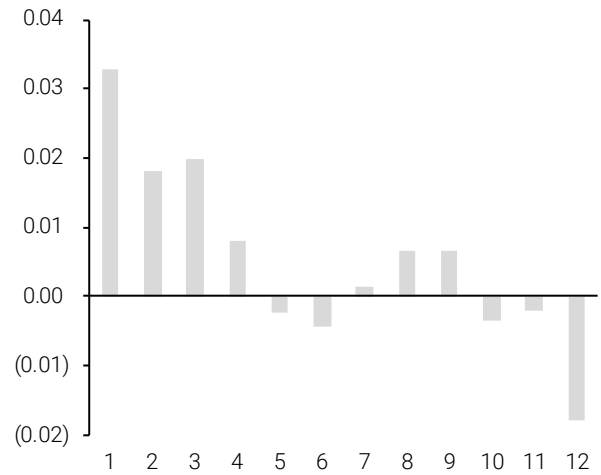
Source: Kotak Institutional Equities, FactSet

Exhibit 22: Sector exposure



Source: Kotak Institutional Equities, FactSet

Exhibit 23: Avg information coefficient decay profile over 12M



Source: Kotak Institutional Equities, FactSet

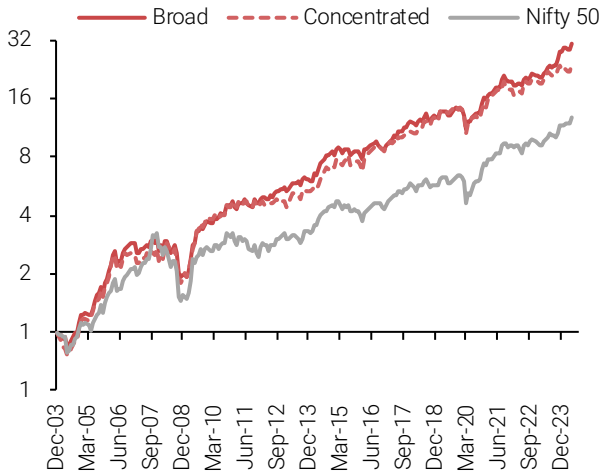
**Exhibit 24: Sentiment portfolio constituents for July'24**

Sedol	Name	ISIN	Sector	Weight			KIE Analyst Recommendation
				Nifty 50	Broad Portfolio	Concentrated Portfolio	
B611LV1	Tata Motors Limited	INE155A01022	Cons. Durables	1.62%	4.12%	8.39%	ADD
BZ60N32	SBI Life Insurance Co. Ltd.	INE123W01016	Financials	0.62%	9.04%	18.43%	BUY
6261674	Hindustan Unilever Limited	INE030A01027	Cons. Non-Durables	2.08%	9.87%	20.12%	ADD
BSZ2BY7	ICICI Bank Limited	INE090A01021	Financials	8.09%	11.47%	23.39%	BUY
BQB8GH3	Nestle India Ltd.	INE239A01024	Cons. Non-Durables	0.85%	14.56%	29.67%	ADD
B0GWF48	Hindalco Industries Limited	INE038A01020	Materials	0.94%	3.32%		ADD
6100186	Mahindra & Mahindra Ltd.	INE101A01026	Cons. Durables	2.61%	8.48%		ADD
6099723	Bharat Petroleum Corporation Limited	INE029A01011	Energy	0.55%	5.06%		SELL
BMW4CV8	Eicher Motors Limited	INE066A01021	Cons. Durables	0.61%	4.97%		SELL
6206051	Wipro Limited	INE075A01022	Technology	0.68%	5.06%		SELL
6294896	HCL Technologies Limited	INE860A01027	Technology	1.45%	5.20%		ADD
B01NPJ1	Tata Consultancy Services Limited	INE467B01029	Technology	3.76%	7.17%		ADD
BWFGD63	Tech Mahindra Limited	INE669C01036	Technology	0.86%	3.80%		REDUCE
B4Z9XF5	Coal India Ltd.	INE522F01014	Energy	1.01%	4.65%		SELL
BD6F8V6	LTIMindtree Limited	INE214T01019	Industrials	0.47%	3.22%		REDUCE

Source: Kotak Institutional Equities, FactSet

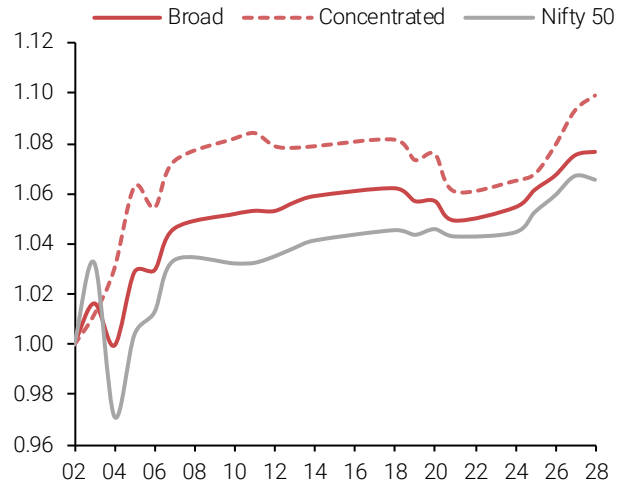
## Low-volatility portfolio

**Exhibit 25: Cumulative performance since January'04**



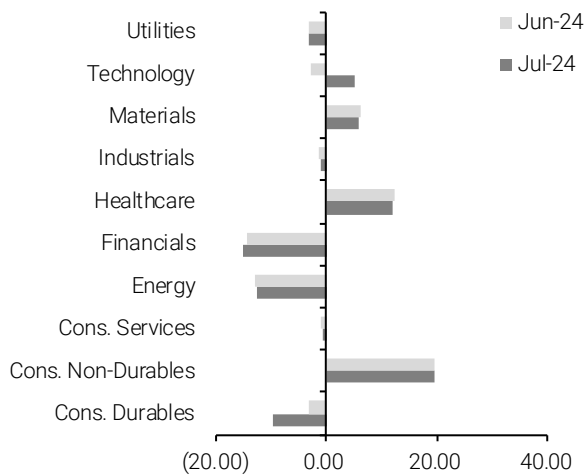
Source: Kotak Institutional Equities, FactSet

**Exhibit 26: Performance in last month**



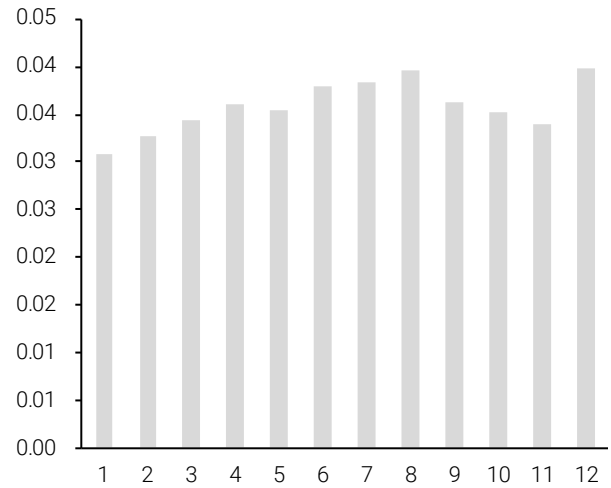
Source: Kotak Institutional Equities, FactSet

**Exhibit 27: Sector exposure**



Source: Kotak Institutional Equities, FactSet

**Exhibit 28: Avg information coefficient decay profile over 12M**



Source: Kotak Institutional Equities, FactSet

**Exhibit 29: Low Volatility portfolio constituents for July'24**

Sedol	Name	ISIN	Sector	Weight			KIE Analyst Recommendation
				Nifty 50	Broad Portfolio	Concentrated Portfolio	
6206051	Wipro Limited	INE075A01022	Technology	0.68%	3.71%	10.05%	SELL
B01GZF6	UltraTech Cement Limited	INE481G01011	Materials	1.28%	5.67%	15.35%	SELL
6261674	Hindustan Unilever Limited	INE030A01027	Cons. Non-Durables	2.08%	7.23%	19.58%	ADD
BGSQG47	Britannia Industries Ltd	INE216A01030	Cons. Non-Durables	0.61%	9.66%	26.15%	ADD
BQB8GH3	Nestle India Ltd.	INE239A01024	Cons. Non-Durables	0.85%	10.67%	28.88%	ADD
B011108	Cipla Ltd	INE059A01026	Healthcare	0.73%	5.99%		ADD
BK1N461	HDFC Bank Limited	INE040A01034	Financials	12.04%	5.61%		BUY
6205122	Infosys Limited	INE009A01021	Technology	5.30%	3.77%		BUY
BYQKH33	Grasim Industries Ltd.	INE047A01021	Materials	0.92%	5.61%		REDUCE
B0166K8	Larsen & Toubro Limited	INE018A01030	Industrials	3.98%	5.71%		SELL
6582483	Sun Pharmaceutical Industries Limited	INE044A01036	Healthcare	1.55%	10.23%		ADD
BSZ2BY7	ICICI Bank Limited	INE090A01021	Financials	8.09%	8.41%		BUY
6442327	Bharti Airtel Limited	INE397D01024	Technology	3.62%	8.43%		ADD
B01NPJ1	Tata Consultancy Services Limited	INE467B01029	Technology	3.76%	5.26%		ADD
BF0TRG6	HDFC Life Insurance Co. Ltd.	INE795G01014	Financials	0.59%	4.03%		BUY

Source: Kotak Institutional Equities, FactSet

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**BUY.** We expect this stock to deliver more than 15% returns over the next 12 months.

**ADD.** We expect this stock to deliver 5-15% returns over the next 12 months.

**REDUCE.** We expect this stock to deliver -5+5% returns over the next 12 months.

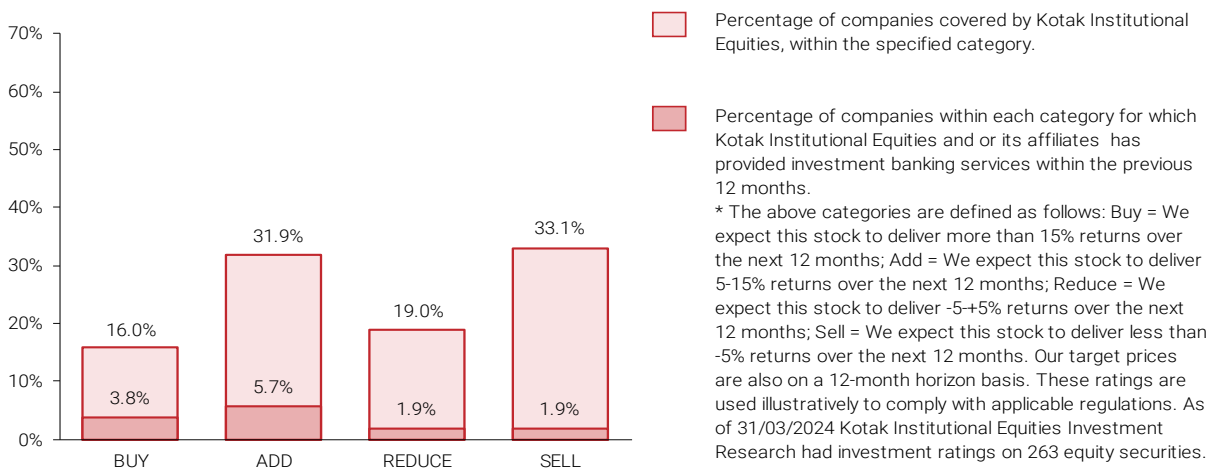
**SELL.** We expect this stock to deliver <-5% returns over the next 12 months.

Our Fair Value estimates are also on a 12-month horizon basis.

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Kotak Institutional Equities Research coverage universe



Source: Kotak Institutional Equities

As of March 31, 2024

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