

## New year celebration

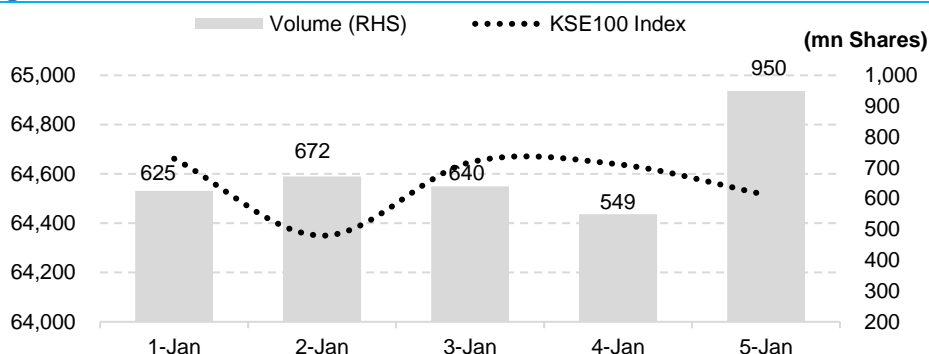
In the first week of the new year, the stock market displayed notable resilience, experiencing a significant surge of 2,211 points on Monday, recording the second-highest absolute point increase and marking the highest surge on the first working day of a new year. Moreover, positive economic indicators were evident as the Federal Board of Revenue achieved a historic one-month tax collection of PKR 984bn, coupled with a substantial 40.1% YoY reduction in the trade deficit for Dec'23. However, an elevated level of headline inflation number of Dec'23 at 29.7% YoY raised some investor concerns. On a positive note, the SBP's reserves reached USD 8.2bn, the highest level since July 14th, 2023. Moreover, PKR/USD strengthened by PKR 0.46 | +0.16%, clocking in at PKR 281.4. Overall, KSE-100 closed at 64,515pts, gaining 2,064pts (+3.3%) WoW.

Sector-wise positive contributions came from i) Oil & Gas Exploration Companies (587pts), ii) Commercial Banks (392pts), iii) Fertilizer (315pts), iv) Cement (185pts), and v) Power Generation & Distribution (166pts). Meanwhile, the sectors which mainly contributed negatively were i) Miscellaneous (13pts), ii) Glass & Ceramics (3.2pts), iii) Inv. Banks (1.3pts), iv) Modarbas (1.0pts), and v) Leasing Companies (0.1pts). Scrip-wise positive contributors were PPL (268pts), OGDC (258pts), FFC (151pts), HUBC (120pts), and UBL (102pts). Meanwhile, scrip-wise negative contributions came from PABC (12pts), AKBL (6pts), GHGL (4.8pts), LCI (4.5pts), and BIPL (3.6pts).

Foreigner selling was witnessed during this week, clocking in at USD 3.1mn compared to a net sell of USD 1.9mn last week. Major selling was witnessed in E&P (USD 1.95mn) and Banks (USD 1.0mn). On the local front, buying was reported by Other Organizations (USD 5.5mn) followed by Banks (USD 5.4mn). Average volumes arrived at 687mn shares (up by 5.4% WoW) while the average value traded settled at USD 69.6mn (up by 11.6% WoW).

Other major news: i) Islamic banking assets grow 22 percent in Q3, deposits cross Rs6 trillion, ii) TOMCL became the first company from South Asia to successfully export cooked/heat-treated frozen beef to China, iii) Refiners cry foul as govt seeks fresh legal advice on upgrade policy, iv) Nepra approves Rs1.72 per unit hike for KE consumers.

**Figure: KSE100 Index and PSX Volume**



Source (s): PSX, AHL Research

## Outlook and Recommendation

Market participants are anticipated to closely observe upcoming economic developments, particularly the scheduled IMF Executive Board meeting on Jan 11<sup>th</sup>, 2024. It is likely that during this meeting, the IMF will provide approval for the disbursement of a USD 700mn tranche under the first review of the SBA program. This disbursement is poised to raise the overall funding to USD 1.9bn. Stocks trading at attractive valuations are likely to draw in the anticipated influx of additional liquidity, presenting potential opportunities for investors. Our preferred stocks are OGDC, PPL, MARI, MCB, UBL, MEBL, FABL, HBL LUCK, MLCF, FCCL, FFC, HUBC, PSO and INDU. The KSE-100 is currently trading at a PER of 4.4x (2024) as compared to its 5-year average of 5.9x offering a dividend yield of ~10.3% as compared to its 5-year average of ~6.0%.

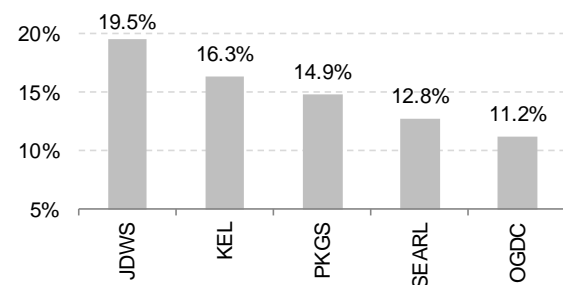
## PSX Indices Performance

Index	Current	WoW (%)	CY24TD (%)
KSE100	64,515	3.3	3.3
KSEAll	43,367	3.5	3.5
KSE30	21,545	3.7	3.7
KMI30	108,509	3.6	3.6
BKTI	15,397	2.9	2.9
OGTI	15,917	7.1	7.1

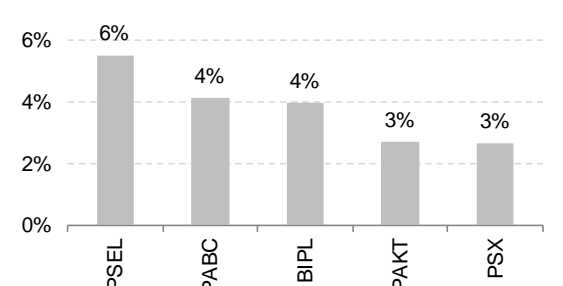
## PSX Volume Leaders

	Avg. Vol. (mn)	Closing
KEL	184.0	6.1
WTL	40.0	1.5
BOP	28.9	6.9
CNERGY	28.7	5.1
PTC	27.5	13.2

## Major Gainers (KSE100 Index)



## Major Losers (KSE100 Index)



## Analyst

AHL Research

research@arifhabibltd.com

+92-21-32462589



Best Brokerage House of the Year 2023

Best Economic Research House of the Year: 2023

Corporate Finance House of the Year: 2023

Best Equity Research Analyst: 2022

Best Equity Sales Person (Runner up): 2023



Best Securities House: 2023  
Best Investment Bank: 2023



Best Equity House: 2022

## Business and Economic News of the Week

### Tariff cut plan requires an IMF nod (BR)

The caretaker government has reportedly prepared a plan to reduce industrial tariff by up to 25 percent but this requires International Monetary Fund's (IMF) approval which was previously denied for the winter package, well-informed sources told Business Recorder. Caretaker Minister for Power and Petroleum, Muhammad Ali, sources said, shared Power Division's plans with the Apex Committee of Special Investment Facilitation Council (SIFC) on Wednesday. The entire industry including five zero-rated industries have already approached the caretaker government to lower electricity tariff across the country to lubricate industry's wheels, render our exports competitive and create jobs.

### ADB to fund climate-resilient housing projects (Dawn)

The Asian Development Bank will assist seven countries of Central and West Asia, including Pakistan, to enhance the role of the private sector in the delivery of inclusive, accessible, adequate, affordable and climate-resilient housing ecosystems that also champion the needs of disadvantaged population groups. Approving the regional technical assistance of \$500,000, the ADB says its team will explore private sector-based solutions and interventions besides identifying potential pilot projects for implementation. The ADB says a high-level housing diagnostic study has been developed besides formulating a strategy for gender and climate-responsive and climate-resilient housing, with development of a plan to engage private sector.

### SBP report keeps GDP growth projection at 2-3% (Tribune)

The economic landscape of Pakistan has faced unprecedented challenges throughout fiscal year 2022-23, as outlined in the 'Governor's Annual Report 2022-23' presented by the State Bank of Pakistan's (SBP) Governor, Jameel Ahmad, on Friday. The comprehensive report not only delves into the challenges faced by the country but also lays out strategies to address them and foster economic resilience. Ahmad opened the report with a cautiously optimistic tone, stating that economic activities seemed to have bottomed out since July 2023. The central bank has maintained its initial GDP growth projection of 2-3%.

### Privatisation of HEC concludes (BR)

The privatisation of Heavy Electrical Complex (HEC) was concluded on Tuesday, with the handing over of the share certificates to the buyer M/S IMS Engineering (Pvt) Limited in the presence of Caretaker Federal Minister for Privatisation Fawad Hasan Fawad. In a final settlement of Rs 1.4 billion transaction, the buyer IMS Engineering has not only made full payment but has also taken over additional liabilities of 752 million rupees payable to the Bank of Khyber. The Bank of Khyber issued an NOC for the conclusion of the transaction.

### Food exports jump 64pc in six months (Dawn)

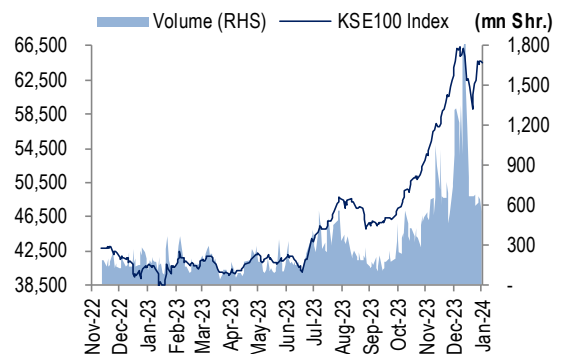
The agriculture and food exports jumped by 64 per cent during the first half of the current fiscal year, helping the country to narrow down its trade deficit. The official data showed the country's total agriculture and food exports reached \$3.847 billion during July-December 2023-24 against \$2.345bn in the same period last year, an increase of \$1.502bn in absolute terms. The overall merchandise exports grew 5.17pc to \$14.98bn in 1HFY24 while the import fell 16.28pc to \$26.13bn from \$31.21bn in the corresponding period last year.

### Fuel oil exports jump 116pc in first half as domestic demand slumps (The News)

Pakistan exported a record amount of fuel oil in the first half of the current financial year, surpassing the total exports of the previous year, as domestic demand plunged due to a shift to cleaner energy sources, data from the oil sector showed on Monday.

The country exported around 600,000 tonnes of fuel oil from July to December 2023, surpassing the total exports of 277,000 tonnes for the entire fiscal year that ended June 30, 2023, the data showed.

### PSX Volume and KSE100 Index



### Top Contributors in KSE100 Index

Companies	Index Contribution
<b>Bullish Companies</b>	
PPL	268.1
OGDC	258.2
FFC	151.0
HUBC	119.8
UBL	101.9
	<b>898.9</b>

### Bearish Companies

PABC	(12.0)
AKBL	(6.0)
GHGL	(4.8)
LCI	(4.5)
BIPL	(3.6)
	<b>(30.8)</b>

### Sectors

Bullish Sectors	Index Contribution
Oil & Gas Exploration Companies	587.1
Commercial Banks	391.7
Fertilizer	314.9
Cement	185.3
Power Generation & Distribution	165.9
	<b>1,644.9</b>

### Bearish Sectors

Miscellaneous	(12.8)
Glass & Ceramics	(3.2)
Inv. Banks / Inv. Cos. / Securities Cos.	(1.3)
Modarabas	(1.0)
Leasing Companies	(0.1)
	<b>(18.4)</b>

**FinanceAsia**

Best Investment Bank: 2022



Excellence Award Leading  
Brokerage House for RDA2021



Best Equity Advisor: 2021



Best Money Market  
Broker- (Islamic) 2021

## AHL Universe - Recommendation Summary

Code	Company	Price	TP	Total Return (%)	Stance	EPS (PKR)			DPS (PKR)			P/E (x)		DY (%)		P/B (x)		ROE (%)		Indices	
		5-Jan-24	Dec-24			2023	2024	2025	2023	2024	2025	2023	2024	2023	2024	2023	2024	2023	2024		
Exploration & Production																					
PPL	Pakistan Petroleum Ltd.	127.4	129.61	1.7	Hold	37.4	39.5	37.4	2.50	3.50	3.50	3.4	3.2	2.0	2.7	0.6	0.5	20.9	18.3	KSE100, KSE30, KMI & MSCI	
OGDC	Oil and Gas Dev Co.	125.0	165.6	32.5	Buy	52.2	45.2	43.5	8.55	9.00	8.75	2.4	2.8	6.8	7.2	0.5	0.4	22.9	17.0	KSE100, KSE30, KMI & MSCI	
POL	Pakistan Oilfields Ltd.	431.6	554.82	28.6	Buy	128.4	120.4	110.8	80.00	76.00	70.00	3.4	3.6	18.5	17.6	1.8	1.7	61.4	49.2	KSE100, KSE30 & MSCI	
MARI	Mari Petroleum Ltd	2,127.4	2,711.4	27.5	Buy	420.7	553.3	609.1	147.00	235.00	280.00	5.1	3.8	6.9	11.0	1.7	1.3	37.5	38.9	KSE100, KSE30, KMI & MSCI	
Commercial Banks																					
UBL	United Bank Ltd.*	183.7	276.0	50.3	Buy	46.7	56.1	52.3	43.00	42.00	39.00	3.9	3.3	23.4	22.9	1.0	0.9	24.9	28.7	KSE100, KSE30 & MSCI	
BAFL	Bank Alfalah*	49.6	69.1	39.5	Buy	21.8	25.9	23.9	6.00	8.00	7.00	2.3	1.9	12.1	16.1	0.6	0.5	30.1	29.1	KSE100 & MSCI	
MCB	MCB Bank Ltd.*	177.1	294.1	66.0	Buy	53.6	61.4	58.7	30.00	34.00	33.00	3.3	2.9	16.9	19.2	1.0	0.8	30.6	30.9	KSE100, KSE30 & MSCI	
HBL	Habib Bank Ltd.*	117.4	158.3	34.8	Buy	41.0	50.2	43.5	8.00	10.00	10.00	2.9	2.3	6.8	8.5	0.5	0.4	19.4	20.3	KSE100, KSE30 & MSCI	
ABL	Allied Bank Ltd.*	84.0	148.8	77.2	Buy	32.8	38.6	33.3	11.00	14.00	12.00	2.6	2.2	13.1	16.7	0.6	0.5	26.4	26.3	KSE100	
NBP	National Bank of Pakistan.*	32.7	47.6	45.8	Buy	23.5	26.0	22.4	-	3.00	2.00	1.4	1.3	-	9.2	0.2	0.2	15.0	14.6	KSE100	
AKBL	Askari Bank Ltd.*	24.3	33.7	38.7	Buy	12.7	15.0	13.8	3.00	5.00	4.00	1.9	1.6	12.4	20.6	0.4	0.3	22.4	22.1	KSE100	
BOP	The Bank of Punjab*	6.9	7.9	13.9	Hold	2.8	3.2	2.9	0.50	0.75	0.50	2.4	2.1	7.2	10.8	0.3	0.3	13.4	13.4	KSE100 & MSCI	
MEBL	Meezan Bank Ltd.*	162.8	240.0	47.4	Buy	47.5	57.7	54.9	18.00	22.00	21.00	3.4	2.8	11.1	13.5	1.7	1.2	58.5	50.7	KSE100, KSE30 & KMI	
FABL	Faysal Bank Ltd.*	33.4	53.4	60.0	Buy	12.0	16.1	14.9	4.00	6.00	6.00	2.8	2.1	12.0	18.0	0.6	0.5	24.0	27.9	KSE100, KMI & MSCI	
Fertilizer																					
ENGRO	Engro Corporation*	296.1	372.1	25.7	Buy	63.2	76.0	85.6	54.00	61.00	69.00	4.7	3.9	18.2	20.6	0.5	0.5	12.1	12.2	KSE100, KSE30, KMI & MSCI	
FFBL	Fauji Fert. Bin Qasim	31.7	29.9	(5.6)	Hold	2.1	4.6	5.5	-	-	1.00	15.0	6.9	-	-	1.6	1.3	11.4	20.8	KSE100, KMI & MSCI	
EFERT	Engro Fertilizer	117.4	110.2	(6.1)	Hold	16.4	17.5	18.1	18.00	20.00	20.00	7.2	6.7	15.3	17.0	3.7	4.0	49.7	56.7	KSE100, KSE30, KMI & MSCI	
FFC	Fauji Fertilizer Co.	118.5	152.3	28.5	Buy	25.6	27.7	28.3	20.00	21.00	22.00	4.6	4.3	16.9	17.7	2.6	2.3	59.8	56.7	KSE100, KSE30 & MSCI	
FATIMA	Fatima Fertilizer Co.	36.0	na	na	na	na	na	na	na	na	na	Group Company: No estimates are given									KSE100 & KMI
AHCL	Arif Habib Corp. Ltd.	36.4	na	na	na	8.4	na	na	-	na	na	Group Company: No estimates are given									KSEALL
Cement																					
LUCK	Lucky Cement Ltd.*	789.8	1,148.9	45.5	Buy	166.4	217.6	232.7	18.00	20.00	43.00	4.7	3.6	2.3	2.5	0.9	0.7	21.2	21.8	KSE100, KSE30, KMI & MSCI	
FCCL	Fauji Cement Co.	19.9	35.0	75.9	Buy	3.0	3.8	7.0	-	-	2.00	6.6	5.2	-	-	0.7	0.7	12.1	13.5	KSE100, KMI & MSCI	
ACPL	Attock Cement Ltd.	97.3	155.1	59.4	Buy	11.0	22.2	30.4	6.00	10.00	12.00	8.8	4.4	6.2	10.3	0.2	0.2	4.0	4.9	KSEALL, KMI & MSCI	
DGKC	D.G. Khan Cement Co.	81.2	98.7	21.6	Buy	(8.3)	9.8	16.2	-	-	4.00	(9.8)	8.3	-	-	0.6	0.5	(5.4)	6.5	KSE100, KSE30, KMI & MSCI	
KOHC	Kohat Cement Co.	249.1	322.1	29.3	Buy	29.7	38.6	37.3	-	11.58	11.18	8.4	6.5	-	4.7	1.5	1.2	19.4	20.8	KSE100, KMI & MSCI	
MLCF	Maple Leaf Cement.*	40.6	59.4	46.4	Buy	5.4	6.7	8.2	-	2.00	3.00	7.5	6.0	-	4.9	1.0	4.5	13.2	26.5	KSE100, KMI & MSCI	
POWER	Power Cement	5.8	na	na	na	0.2	na	na	-	na	na	Group Company: No estimates are given									KMI
Oil & Gas Marketing																					
PSO	Pakistan State Oil	183.1	258.8	41.4	Buy	12.1	65.9	73.7	7.50	10.00	12.00	15.2	2.8	4.1	5.5	0.4	0.4	2.6	13.7	KSE100, KSE30, KMI & MSCI	
APL	Attock Petroleum Ltd.	384.41	398.20	3.6	Hold	100.2	97.3	110.6	27.50	57.50	67.50	3.8	4.0	7.2	15.0	1.1	1.0	30.2	25.4	KSE100 & KMI	
SNGP	Sui Northern Gas Pipeline Ltd.	79.1	84.3	6.6	Hold	18.8	23.3	25.6	8.00	7.00	8.00	4.2	3.4	10.1	8.9	1.0	0.8	149.7	249.7	KSE100, KSE30, KMI & MSCI	
Automobile Assemblers																					
PSMC	Pak Suzuki Motor Co.	672.9				Coverage Restricted due to Advisory Mandate													KSE100 & KMI		
INDU	Indus Motor Co.	1,280.8	1,571.0	22.7	Buy	123.0	186.1	227.1	71.80	109.00	133.00	10.4	6.9	5.6	8.5	1.7	1.5	16.9	23.2	KSE100	
HCAR	Honda Atlas Cars (Pak)	243.9	248.1	1.7	Hold	1.8	19.4	27.8	-	8.00	11.00	133.9	12.6	-	3.3	1.8	1.7	1.3	13.8	KSE100 & KMI	
MTL	Millat Tractors Ltd.	585.0	661.2	13.0	Hold	17.6	48.6	59.0	25.00	49.00	53.00	33.2	12.0	4.3	8.4	14.5	14.7	45.8	121.4	KSE100, KSE30, KMI & MSCI	
Power Generation & Distribution																					
HUBC	Hub Power Company*	120.6	170.7	41.6	Buy	44.4	53.4	57.5	30.00	30.00	24.25	2.7	2.3	24.9	24.9	1.0	0.8	40.6	39.4	KSE100, KSE30, KMI & MSCI	
NCPL	Nishat Chu. Power Ltd.	27.5	29.6	7.4	Hold	10.8	12.7	10.3	-	4.00	2.75	2.6	2.2	-	14.5	0.4	0.4	16.4	18.1	KMI & MSCI	
NPL	Nishat Power Ltd.	30.4	35.8	17.6	Buy	11.6	13.6	9.9	7.00	6.00	4.00	2.6	2.2	23.0	19.7	0.4	0.3	14.1	15.4	KSEALL & MSCI	
Textile Composite																					
NML	Nishat Mills Ltd.	80.7	107.3	33.0	Buy	34.6	41.3	44.4	5.00	6.00	6.50	2.3	2.0	6.2	7.4	0.3	0.3	14.4	15.2	KSE100, KMI & MSCI	
NCL	Nishat (Chunian) Ltd.	27.5	39.0	42.1	Buy	(4.2)	10.8	11.5	-	4.00	4.00	(6.6)	2.5	-	14.6	0.3	0.3	(4.4)	12.1	KSEALL	
ILP	Interloop Ltd.	74.8	99.2	32.7	Buy	14.4	16.2	20.1	5.00	5.50	8.00	5.2	4.6	6.7	7.4	2.4	1.8	52.2	44.3	KSE100 & KMI	
Chemicals																					
LOTCEM	Lotte Chemical Pak Ltd.	27.54	27.90	1.3	Hold	4.5	4.5	4.9	3.50	2.00	2.50	6.1	6.2	12.7	7.3	1.7	1.5	28.8	25.6	KSE100 & KMI	
EPCL	Engro Polymer & Chem.	47.7	56.8	19.1	Buy	6.6	8.6	10.6	5.50	6.00	7.50	7.2	5.5	11.5	12.6	1.6	1.5	22.1	27.8	KSE100, KSE30 & KMI	
LCI	Lucky Core Industries Ltd.	764.1	937.1	22.6	Buy	191.1	86.8	113.1	43.00	40.00	50.00	4.0	8.8	5.6	5.2	1.6	1.1	45.7	14.6	KSE100 & KMI	
Leather & Tanneries																					
SGF	Service Global Footwear Ltd.	60.13	76.40	27.1	Buy	4.9	8.8	14.3	3.00	3.50	5.50	12.3	6.8	5.0	5.8	1.9	1.6	15.9	25.6	KMI	
Engineering																					
ASTL	Amreli Steels Ltd.	23.6	27.4	16.2	Buy	(2.3)	1.5	5.7	-	-	2.00	(10.3)	15.6	-	-	0.5	0.5	(4.6)	3.0	KSEALL	
AGHA	Agha Steel Industries Ltd.	14.5	26.7	84.6	Buy	1.5	1.1	5.1	-	-	-	9.7	13.4	-	-	0.5	0.5	5.6	3.9	KMI	
ASL	Aisha Steel Mills Ltd.	8.4	na	na	na	(3.5)	na	na	-	na	na	Group Company: No estimates are given									KSEALL
Technology & Communication																					
SYS	Systems Ltd.	430.5	614.0	42.6	Buy	31.7	35.7	43.1	5.00	6.75	12.50	13.6	12.1	1.2	1.6	3.8	2.9	33.3	27.5	KSE100, KSE30, KMI & MSCI	

Source: Bloomberg, AHL Research, \*Earnings Consolidated Basis

## AHL Universe - Performance

Code	Closing	WoW (%)	MTD (%)	CYTD (%)	90-Days		180-Days		365-Days	
					High	Low	High	Low	High	Low
PSMC	672.85	20.50	20.50	20.50	607.99	132.49	672.85	102.53	672.85	82.38
HCAR	243.91	14.13	14.13	14.13	232.13	133.16	243.91	102.63	243.91	82.41
OGDC	125.04	11.20	11.20	11.20	126.75	91.39	127.39	80.55	127.39	67.70
PPL	127.43	10.78	10.78	10.78	129.59	77.48	129.59	64.82	129.59	55.25
SNGP	79.07	7.55	7.55	7.55	78.47	46.48	79.07	41.02	79.07	34.15
BOP	6.92	6.79	6.79	6.79	7.57	3.94	7.57	3.42	7.57	3.19
INDU	1,280.83	6.74	6.74	6.74	1,292.53	869.18	1,292.53	864.68	1,292.53	731.72
KOHC	249.06	6.33	6.33	6.33	234.23	173.46	249.06	151.84	249.06	115.77
HBL	117.41	5.93	5.93	5.93	129.52	91.48	129.52	74.74	129.52	56.54
NCL	27.47	5.86	5.86	5.86	29.99	22.03	29.99	19.98	29.99	19.98
NML	80.70	5.19	5.19	5.19	83.64	57.68	83.64	53.08	83.64	45.52
FCCL	19.90	5.18	5.18	5.18	20.51	11.90	20.51	10.54	20.51	10.51
FFC	118.49	4.68	4.68	4.68	120.77	90.34	120.77	87.50	120.77	86.42
EFERT	117.35	4.56	4.56	4.56	114.72	76.75	117.42	70.50	117.42	61.97
MLCF	40.55	4.19	4.19	4.19	42.71	31.95	42.71	27.05	42.71	19.34
KAPCO	29.52	3.83	3.83	3.83	31.99	21.95	31.99	19.04	31.99	16.48
ILP	74.75	3.82	3.82	3.82	75.25	44.51	75.25	34.93	75.25	28.44
PSO	183.06	3.59	3.59	3.59	217.22	116.04	217.22	103.66	217.22	93.36
UBL	183.65	3.27	3.27	3.27	190.05	138.63	190.05	113.79	190.05	67.60
ITTEFAQ	8.04	3.21	3.21	3.21	8.62	5.61	8.62	4.75	8.62	4.20
DGKC	65.79	2.99	22.58	(15.14)	82.43	47.15	82.50	41.54	82.50	39.44
HUBC	120.56	2.96	2.96	2.96	123.69	80.45	123.69	69.33	123.69	45.65
MCB	177.11	2.64	2.64	2.64	191.57	129.29	191.57	115.66	191.57	87.67
FABL	33.35	2.36	2.36	2.36	33.41	23.09	33.76	20.42	33.76	18.37
EPCL	47.69	2.36	2.36	2.36	51.25	39.15	51.25	37.08	51.25	34.95
POL	431.55	2.28	2.28	2.28	451.57	387.84	451.57	361.06	451.57	326.66
BAFL	49.56	2.16	2.16	2.16	53.19	38.31	53.19	31.97	53.19	24.29
ASTL	23.55	2.12	2.12	2.12	27.53	20.17	27.53	18.29	27.53	14.99
LOTCHEM	27.54	2.04	2.04	2.04	28.59	24.50	29.18	22.60	29.81	20.52
AGHA	14.48	1.76	1.76	1.76	16.16	10.79	16.16	9.19	16.16	9.11
NBP	32.67	1.74	1.74	1.74	37.46	22.77	37.46	20.22	37.46	18.89
APL	384.41	1.56	1.56	1.56	403.54	295.67	403.54	269.21	403.54	264.37
MARI	2,127.39	1.49	1.49	1.49	2,191.83	1,528.65	2,191.83	1,474.96	2,191.83	1,260.12
FATIMA	35.96	1.32	1.32	1.32	35.89	28.98	37.01	25.44	37.01	23.90
AHCL	36.39	1.31	1.31	1.31	38.79	24.50	38.79	24.35	38.79	23.25
ABL	83.99	1.19	1.19	1.19	90.51	67.29	90.51	64.67	90.51	54.84
ACPL	97.33	1.15	1.15	1.15	107.42	79.87	107.42	73.13	107.42	48.59
MEBL	162.83	0.91	0.91	0.91	175.04	116.53	175.04	102.17	175.04	77.46
MTL	584.97	0.64	0.64	0.64	655.84	427.10	655.84	382.07	655.84	284.76
ENGRO	296.11	0.41	0.41	0.41	325.10	250.59	325.10	236.68	325.10	223.97
LUCK	789.75	0.35	0.35	0.35	818.48	580.18	818.48	514.35	818.48	371.22
FML	90.00	(0.28)	(0.28)	(0.28)	93.00	81.00	93.00	61.56	93.00	48.22
FFBL	31.67	(0.72)	(0.72)	(0.72)	32.08	15.10	32.43	12.94	32.43	11.11
NCPL	27.54	(1.54)	(1.54)	(1.54)	32.23	21.59	32.23	17.91	32.23	13.60
AKBL	24.29	(1.74)	(1.74)	(1.74)	25.18	15.57	25.18	13.95	25.18	12.12
NPL	30.40	(1.78)	(1.78)	(1.78)	33.85	23.40	33.85	18.20	33.85	13.66
LCI	764.06	(1.87)	(1.87)	(1.87)	799.01	571.11	799.01	554.30	799.01	485.52
POWER	5.83	(2.18)	(2.18)	(2.18)	6.43	4.06	6.43	3.49	6.43	3.49
HUMNL	6.70	(2.19)	(2.19)	(2.19)	8.04	5.47	8.04	5.35	8.04	5.30

Source (s): Bloomberg, AHL Research

/

# Pakistan Weekly Update

Pakistan

Stock Market



January 8, 2024

## Forward Estimates

Country	Indonesia	India	Vietnam	Philippines	Sri Lanka	Thailand	China	Taiwan	S.Korea	Peer Avg	Pakistan	Prem/(Disc)
DY (%)	3.9	1.4	3.1	2.6	3.6	3.4	3.7	3.5	2.0	3.1	10.3	-70.5%
P/E (x)	14.1	18.4	9.9	11.5	7.7	14.8	9.7	15.8	9.1	12.6	4.4	-65.5%
P/B (x)	2.0	2.9	1.5	1.4	1.0	1.3	1.1	2.1	0.9	1.4	0.7	-45.3%

Source: Bloomberg, AHL Research

## Local & Foreign Investors Portfolio Investment (USD mn)

### LIPI Normal

#### Current Week

Category	Gross Buy	Gross Sell	Net	Net
Individuals	335.43	346.06	SELL	(10.63)
Companies	9.07	15.22	SELL	(6.15)
Banks / DFIs	12.80	7.42	BUY	5.38
NBFC	0.24	0.24	BUY	0.00
Mutual Funds	11.50	6.85	BUY	4.64
Other Organizations	7.59	2.11	BUY	5.49
Broker Proprietary Trading	69.35	65.07	BUY	4.28
Insurance Companies	3.90	3.79	BUY	0.11
<b>Total</b>	<b>449.87</b>	<b>446.74</b>	<b>BUY</b>	<b>3.12</b>

#### Last Week

Category	Gross Buy	Gross Sell	Net	Net
Individuals	290.30	296.81	SELL	(6.51)
Companies	19.43	20.57	SELL	(1.14)
Banks / DFIs	19.76	16.85	BUY	2.91
NBFC	0.14	0.07	BUY	0.07
Mutual Funds	11.58	11.43	BUY	0.15
Other Organizations	4.43	3.73	BUY	0.70
Broker Proprietary Trading	75.58	74.15	BUY	1.44
Insurance Companies	7.18	2.91	BUY	4.26
<b>Total</b>	<b>428.41</b>	<b>426.52</b>	<b>BUY</b>	<b>1.89</b>

### LIPI Sector Wise

#### Current Week

Sector	Gross Buy	Gross Sell	Net	Net
Commercial Banks	21.09	20.10	BUY	0.99
Fertilizer	12.94	13.72	SELL	(0.78)
Cement	34.34	33.99	BUY	0.34
Power Generation & Distribution	33.34	32.65	BUY	0.69
Exploration & Production	100.35	98.40	BUY	1.95
Oil & Gas Marketing Companies	40.16	40.26	SELL	(0.10)
Food and Personal Care Products	20.89	20.88	BUY	0.01
Textile Composite	4.03	3.65	BUY	0.38
Technology and Communication	53.13	52.99	BUY	0.14
Debt	0.06	0.06	SELL	-
All other Sectors	128.91	129.42	SELL	(0.51)
<b>Total</b>	<b>449.25</b>	<b>446.13</b>	<b>BUY</b>	<b>3.12</b>

#### Last Week

Sector	Gross Buy	Gross Sell	Net	Net
Commercial Banks	32.71	31.15	BUY	1.56
Fertilizer	18.41	18.46	SELL	(0.05)
Cement	27.26	27.49	SELL	(0.23)
Power Generation & Distribution	23.97	23.92	BUY	0.05
Exploration & Production	73.61	73.44	BUY	0.17
Oil & Gas Marketing Companies	36.40	36.06	BUY	0.34
Food and Personal Care Products	23.05	23.26	SELL	(0.21)
Textile Composite	8.57	8.08	BUY	0.49
Technology and Communication	67.75	67.82	SELL	(0.07)
Debt	0.00	0.00	SELL	-
All other Sectors	114.68	114.85	SELL	(0.16)
<b>Total</b>	<b>426.42</b>	<b>424.53</b>	<b>BUY</b>	<b>1.89</b>

### FIPI Normal

#### Current Week

Category	Gross Buy	Gross Sell	Net	Net
Foreign Individuals	0.01	0.02	SELL	(0.01)
Foreign Corporates	2.88	3.57	SELL	(0.69)
Overseas Pakistani	28.86	31.28	SELL	(2.43)
<b>Total</b>	<b>31.75</b>	<b>34.87</b>	<b>SELL</b>	<b>(3.12)</b>

#### Last Week

Category	Gross Buy	Gross Sell	Net	Net
Foreign Individuals	2.72	2.67	BUY	0.05
Foreign Corporates	4.10	6.87	SELL	(2.77)
Overseas Pakistani	24.22	23.39	BUY	0.83
<b>Total</b>	<b>31.04</b>	<b>32.92</b>	<b>SELL</b>	<b>(1.89)</b>

### FIPI Sector Wise

#### Current Week

Sector	Gross Buy	Gross Sell	Net	Net
Commercial Banks	1.18	2.17	SELL	(0.99)
Fertilizer	2.34	1.56	BUY	0.78
Cement	3.07	3.41	SELL	(0.34)
Power Generation & Distribution	2.13	2.83	SELL	(0.69)
Exploration & Production	5.21	7.16	SELL	(1.95)
Oil & Gas Marketing Companies	2.40	2.31	BUY	0.10
Food and Personal Care Products	1.65	1.67	SELL	(0.02)
Textile Composite	0.16	0.54	SELL	(0.38)
Technology and Communication	4.11	4.24	SELL	(0.14)
All other Sectors	9.40	8.89	BUY	0.51
<b>Total</b>	<b>31.65</b>	<b>34.77</b>	<b>SELL</b>	<b>(3.12)</b>

#### Last Week

Sector	Gross Buy	Gross Sell	Net	Net
Commercial Banks	1.49	3.05	SELL	(1.56)
Fertilizer	2.21	2.16	BUY	0.05
Cement	2.57	2.34	BUY	0.23
Power Generation & Distribution	2.24	2.29	SELL	(0.05)
Exploration & Production	4.40	4.57	SELL	(0.17)
Oil & Gas Marketing Companies	1.59	1.93	SELL	(0.34)
Food and Personal Care Products	1.93	1.72	BUY	0.21
Textile Composite	0.26	0.75	SELL	(0.49)
Technology and Communication	7.00	6.93	BUY	0.07
All other Sectors	7.34	7.17	BUY	0.16
<b>Total</b>	<b>31.04</b>	<b>32.92</b>	<b>SELL</b>	<b>(1.89)</b>



## World's Major Stock Market Performance (\$ based return)

Country	Index	Index Closing*	WTD (%)	MTD (%)	CY24TD (%)	Country	Index	Index Closing*	WTD (%)	MTD (%)	CY24TD (%)
Zimbabwe	ZHIALSH Index	253,618	13.7	13.7	13.7	Croatia	CRO Index	2,548	(1.0)	(1.0)	(1.0)
Argentina	MERVAL Index	1,004,790	7.6	7.6	7.6	Bulgaria	SOFIX Index	768	(1.1)	(1.1)	(1.1)
Nigeria	NGSEINDX Index	79,693	4.4	4.4	4.4	Thailand	SET Index	1,428	(1.1)	(1.1)	(1.1)
<b>Pakistan</b>	<b>KSE100 Index</b>	<b>64,515</b>	<b>3.5</b>	<b>3.5</b>	<b>3.5</b>	Latvia	RIGSE Index	1,340	(1.2)	(1.2)	(1.2)
Egypt	EGX30 Index	25,350	3.1	3.1	3.1	Serbia	BELEX15 Index	878	(1.4)	(1.4)	(1.4)
Philippines	PCOMP Index	6,630	2.3	2.3	2.3	Qatar	DSM Index	10,434	(1.5)	(1.5)	(1.5)
Oman	MSM30 Index	4,577	2.0	2.0	2.0	Canada	SPTSX Index	20,871	(1.5)	(1.5)	(1.5)
Iceland	ICEXI Index	2,202	2.0	2.0	2.0	Spain	IBEX Index	10,095	(1.6)	(1.6)	(1.6)
Kazakhstan	KZKAK Index	4,247	2.0	2.0	2.0	USA	SPX Index	4,689	(1.7)	(1.7)	(1.7)
Vietnam	VNIndex Index	1,155	1.8	1.8	1.8	Romania	BET Index	15,326	(1.8)	(1.8)	(1.8)
Saudi Arabia	SASEIDX Index	12,145	1.8	1.8	1.8	Switzerland	SMI Index	11,134	(1.9)	(1.9)	(1.9)
Sri Lanka	CSEALL Index	10,762	1.5	1.5	1.5	Italy	FTSEMIB Index	30,234	(1.9)	(1.9)	(1.9)
Estonia	TALSE Index	1,819	1.3	1.3	1.3	Norway	OBXP Index	577	(1.9)	(1.9)	(1.9)
Mongolia	MSETOP Index	41,577	1.1	1.1	1.1	UK	UKX Index	7,659	(2.0)	(2.0)	(2.0)
Jordan	JOSMGNFF Index	2,452	1.0	1.0	1.0	Austria	ATX Index	3,405	(2.3)	(2.3)	(2.3)
Uae	ADSMI Index	9,661	0.9	0.9	0.9	New Zealand	NZSE Index	1,775	(2.5)	(2.5)	(2.5)
Malaysia	FBMKLCI Index	1,488	0.8	0.8	0.8	Singapore	FSSTI Index	3,184	(2.8)	(2.8)	(2.8)
Dubai	DFMGI Index	4,088	0.7	0.7	0.7	Luxembourg	LUXXX Index	1,503	(2.9)	(2.9)	(2.9)
Czech Republic	PX Index	1,439	0.6	0.6	0.6	Germany	DAX Index	16,500	(3.0)	(3.0)	(3.0)
Denmark	KFX Index	2,334	0.6	0.6	0.6	Hong Kong	HSI Index	16,535	(3.0)	(3.0)	(3.0)
Bahrain	BHSEASI Index	1,973	0.6	0.6	0.6	Netherland	AEX Index	774	(3.1)	(3.1)	(3.1)
Turkey	XU100 Index	7,570	0.3	0.3	0.3	USA	NDX Index	16,282	(3.2)	(3.2)	(3.2)
Hungary	BUX Index	60,954	0.1	0.1	0.1	Tunisia	TUSISE Index	8,554	(3.3)	(3.3)	(3.3)
Ukraine	PFTS Index	507	0.1	0.1	0.1	Europe	SX5E Index	4,435	(3.4)	(3.4)	(3.4)
Indonesia	JCI Index	7,351	0.1	0.1	0.1	Brazil	IBOV Index	131,024	(3.5)	(3.5)	(3.5)
Ghana	GGSECI Index	3,129	(0.0)	(0.0)	(0.0)	Ireland	ISEQ Index	8,577	(3.6)	(3.6)	(3.6)
Russia	RTSI\$ Index	1,083	(0.0)	(0.0)	(0.0)	Taiwan	TWSE Index	17,519	(3.6)	(3.6)	(3.6)
Belgium	BEL20 Index	3,699	(0.1)	(0.1)	(0.1)	Japan	NKY Index	33,377	(3.6)	(3.6)	(3.6)
Belgium	BEL20 Index	3,699	(0.1)	(0.1)	(0.1)	France	CAC Index	7,373	(3.7)	(3.7)	(3.7)
Kenya	NSEASI Index	93	(0.2)	(0.2)	(0.2)	China	SHSZ300 Index	3,329	(3.8)	(3.8)	(3.8)
India	SENSEX Index	72,026	(0.3)	(0.3)	(0.3)	Australia	AS51 Index	7,489	(3.9)	(3.9)	(3.9)
Greece	ASE Index	1,309	(0.3)	(0.3)	(0.3)	Mexico	MEXBOL Index	55,407	(4.1)	(4.1)	(4.1)
Mauritius	SEMDEX Index	2,045	(0.6)	(0.6)	(0.6)	Chile	IPSA Index	6,037	(4.5)	(4.5)	(4.5)
Portugal	PSI20 Index	6,452	(0.7)	(0.7)	(0.7)	Sweden	OMX Index	2,338	(5.2)	(5.2)	(5.2)
USA	INDU Index	37,440	(0.7)	(0.7)	(0.7)	South Korea	KOSPI Index	2,578	(5.4)	(5.4)	(5.4)
Finland	HEX Index	10,172	(0.8)	(0.8)	(0.8)	Poland	WIG20 Index	2,236	(6.3)	(6.3)	(6.3)
Russia	IMOEX Index	3,132	(0.8)	(0.8)	(0.8)	South Africa	JALSH Index	74,087	(7.0)	(7.0)	(7.0)
Slovenia	SBITOP Index	1,261	(0.9)	(0.9)	(0.9)	Lebanon	BLOM Index	1,853	(7.1)	(7.1)	(7.1)
Lithuania	VILSE Index	952	(0.9)	(0.9)	(0.9)						

Source (s): Bloomberg, AHL Research, \* Last Closing

## Key Economic Data &amp; Commodities Prices

Month end	Units	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Current*
<b>Money Market Data</b>														
03-M T-Bill	%	17.75	19.53	21.60	21.90	22.09	22.65	22.95	23.13	22.46	21.65	21.33	21.28	21.04
06-M T-Bill	%	17.87	19.82	21.32	21.80	22.00	22.87	22.99	23.20	22.81	21.70	21.33	21.37	21.26
12-M T-Bill	%	17.95	19.93	21.39	21.76	22.00	22.93	23.02	23.28	22.90	21.76	21.30	21.32	21.21
03-Y PIB	%	16.83	18.20	18.33	18.30	19.10	19.47	19.46	20.57	19.11	17.82	16.50	16.54	16.51
05-Y PIB	%	15.48	15.80	15.23	15.00	15.10	16.08	16.86	17.22	17.23	15.46	15.90	15.90	16.07
10-Y PIB	%	14.45	15.50	15.22	15.10	15.10	15.32	15.96	16.31	16.12	15.15	14.97	14.91	14.89
06-M KIBOR	%	17.97	20.06	22.03	22.06	22.18	22.97	23.22	23.21	22.95	22.00	21.47	21.49	21.41
Policy Rate	%	17.00	17.00	20.00	21.00	21.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00
<b>Inflation (YoY)</b>														
Headline (CPI New Base)	%	27.6	31.6	35.4	36.4	38.0	29.4	28.3	27.4	31.4	26.8	29.2	29.7	29.7
<b>Monetary Sector</b>														
M1	PKR bn	22,798	23,131	24,074	24,802	25,017	26,157	25,857	25,964	26,184	26,403	26,717	n.a	26,717
M2	PKR bn	27,292	27,878	28,732	29,433	29,859	31,280	30,966	31,209	31,425	31,722	32,000	n.a	32,000
M3	PKR bn	30,688	31,241	32,070	32,743	33,140	34,545	34,246	34,483	34,287	34,906	35,180	n.a	35,180
<b>Banking Sector</b>														
Deposits	PKR bn	22,754	22,921	23,562	23,429	24,388	25,508	25,702	26,110	26,318	26,398	26,798	n.a	26,798
Advances	PKR bn	11,659	11,723	11,836	12,111	12,072	12,202	11,898	11,775	11,857	11,898	11,964	n.a	11,964
Investment	PKR bn	19,293	18,993	19,236	19,695	20,144	20,896	21,468	22,016	22,622	23,232	24,587	n.a	24,587
WALR	%	15.0	15.5	16.3	17.6	17.7	18.2	18.4	18.9	19.3	19.3	19.3	n.a	19.3
WADR	%	8.0	8.7	8.7	9.7	10.2	10.5	11.3	11.3	11.4	11.6	11.7	n.a	11.7
Spread	%	7.0	6.8	7.5	7.9	7.6	7.7	7.1	7.6	7.9	7.7	7.6	n.a	7.6
<b>External Sector</b>														
Forex Reserves	USD bn	8.4	9.3	9.8	10.0	9.5	9.2	13.5	13.2	12.5	12.0	12.0	13.2	13.2
With SBP	USD bn	3.1	3.8	4.2	4.5	4.1	4.4	8.2	7.8	7.6	7.4	7.4	8.2	8.2
With Banks	USD bn	5.3	5.5	5.6	5.6	5.4	4.7	5.3	5.3	4.9	4.6	4.6	5.0	5.0
Exchange rate	PKR/USD	267.9	261.5	283.7	283.8	285.5	286.0	286.6	305.5	287.7	281.5	285.2	281.9	281.4
C/A Balance	USD mn	(230.0)	(36.0)	750.0	78.0	220.0	504.0	(775.0)	(160.0)	(46.0)	(184.0)	9.0	n.a	9.0
Exports	USD bn	2.2	2.2	2.4	2.1	2.6	2.1	2.1	2.5	2.5	2.8	2.7	n.a	2.7
Imports	USD bn	3.9	3.9	4.0	3.7	3.8	3.2	4.2	4.0	4.0	4.4	4.5	n.a	4.5
Trade Balance	USD bn	(1.7)	(1.7)	(1.6)	(1.6)	(1.2)	(1.1)	(2.1)	(1.5)	(1.5)	(1.6)	(1.7)	n.a	(1.7)
Remittances	USD bn	1.9	2.0	2.5	2.2	2.1	2.2	2.0	2.1	2.2	2.5	2.3	n.	2.3
<b>Key Commodities Prices</b>														
<b>International</b>														
Coal	USD/ton	141.7	143.1	132.5	127.9	100.2	100.3	102.7	113.1	122.5	120.9	108.0	101.0	100.5
Steel (HRC)	USD/ton	635.9	628.8	636.2	574.0	519.9	531.7	569.1	543.3	532.3	526.8	560.2	574.4	574.1
PTA	USD/ton	830.0	785.0	840.0	875.0	780.0	770.0	825.0	800.0	830.0	790.0	765.0	780.0	780.0
Gold	USD/oz	1,928.4	1,826.9	1,980.4	1,990.0	1,962.7	1,913.7	1,965.1	1,940.2	1,864.9	1,983.9	2,036.4	2,063.0	2,043.7
Cotton (COTLOOK A)	USD/lb	102.0	99.4	96.5	93.2	93.8	89.3	94.9	97.0	98.4	95.0	89.7	91.4	90.3
Crude oil (WTI)	USD/bbl	78.9	77.1	74.4	76.8	68.1	67.7	81.8	83.6	91.7	81.0	76.0	71.7	72.2
Crude oil (Arab Light)	USD/bbl	82.9	83.4	78.8	80.9	74.7	77.8	88.8	90.5	97.7	91.2	87.7	80.4	82.1
Crude oil (Brent)	USD/bbl	84.5	83.9	79.3	79.5	72.7	72.3	85.6	86.9	95.4	87.4	82.8	77.0	77.6
<b>Local</b>														
Cotton	PKR/maund	21,000.0	20,000.0	18,700.0	20,000.0	20,000.0	17,500.0	17,935.0	20,100.0	17,700.0	17,000.0	17,200.0	17,300.0	17,800.0
Cement	PKR/bag	1,043.0	1,109.9	1,125.8	1,120.9	1,121.4	1,144.7	1,140.8	1,177.0	1,196.1	1,195.9	1,241.3	1,232.5	1,226.5
Gold	PKR/10 grms	173,190	166,580	178,160	188,230	197,620	185,270	190,590	207,050	176,270	185,530	186,474	187,930	188,020

\*Current Price



## Disclaimer

**Analyst Certification:** The research analyst(s) is (are) principally responsible for preparation of this report. The views expressed in this research report accurately reflect the personal views of the analyst(s) about the subject security (ies) or sector (or economy), and no part of the compensation of the research analyst(s) was, is, or will be directly or indirectly related to the specific recommendations and views expressed by research analyst(s) in this report. In addition, we currently do not have any interest (financial or otherwise) in the subject security (ies). Furthermore, compensation of the Analyst(s) is not determined nor based on any other service(s) that AHL is offering. Analyst(s) are not subject to the supervision or control of any employee of AHL's non-research departments, and no personal engaged in providing non-research services have any influence or control over the compensatory evaluation of the Analyst(s).

### Equity Research Ratings

Arif Habib Limited (AHL) uses three rating categories, depending upon return form current market price, with Target period as Dec'24 for Target Price. In addition, return excludes all type of taxes. For more details kindly refer the following table;

Rating	Description
BUY	Upside* of subject security(ies) is more than +15% from last closing of market price(s)
HOLD	Upside* of subject security(ies) is between -15% and +15% from last closing of market price(s)
SELL	Upside* of subject security(ies) is less than -15% from last closing of market price(s)

\* Upside for Power Generation Companies is upside plus dividend yield.

### Equity Valuation Methodology

AHL Research uses the following valuation technique(s) to arrive at the period end target prices;

- **Discounted Cash Flow (DCF)**
- **Dividend Discounted Model (DDM)**
- **Sum of the Parts (SoTP)**
- **Justified Price to Book (JPTB)**
- **Reserved Base Valuation (RBV)**

### Risks

The following risks may potentially impact our valuations of subject security (ies);

- **Market risk**
- **Interest Rate Risk**
- **Exchange Rate (Currency) Risk**

This document has been prepared by Research analysts at Arif Habib Limited (AHL). This document does not constitute an offer or solicitation for the purchase or sale of any security. This publication is intended only for distribution to the clients of the Company who are assumed to be reasonably sophisticated investors that understand the risks involved in investing in equity securities. The information contained herein is based upon publicly available data and sources believed to be reliable. While every care was taken to ensure accuracy and objectivity, AHL does not represent that it is accurate or complete and it should not be relied on as such. In particular, the report takes no account of the investment objectives, financial situation and particular needs of investors. The information given in this document is as of the date of this report and there can be no assurance that future results or events will be consistent with this information. This information is subject to change without any prior notice. AHL reserves the right to make modifications and alterations to this statement as may be required from time to time. However, AHL is under no obligation to update or keep the information current. AHL is committed to providing independent and transparent recommendation to its client and would be happy to provide any information in response to specific client queries. Past performance is not necessarily a guide to future performance. This document is provided for assistance only and is not intended to be and must not alone be taken as the basis for any investment decision. The user assumes the entire risk of any use made of this information. Each recipient of this document should make such investigation as it deems necessary to arrive at an independent evaluation of an investment in the securities of companies referred to in this document (including the merits and risks involved), and should consult his or her own advisors to determine the merits and risks of such investment. AHL or any of its affiliates shall not be in any way responsible for any loss or damage that may be arise to any person from any inadvertent error in the information contained in this report.

© 2023 Arif Habib Limited: Corporate Member of the Pakistan Stock Exchanges. No part of this publication may be copied, reproduced, stored or disseminated in any form or by any means without the prior written consent of Arif Habib Limited.

### Disclosure required under Research Analyst Regulations, 2015:

In order to avoid any conflict of interest, we hereby disclosed that;

Arif Habib Limited (AHL) has a shareholding in NBP, BOP, MLCF, and FCCL.