

BofA Korean Banks NII Indicator

BofA Korean Banks NII Indicator: a potential rebound for NII ahead

Industry Overview

BofA Korean Banks Net Interest Income (NII) Indicator

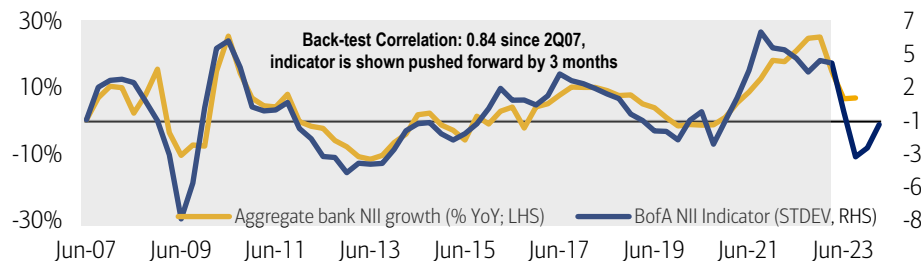
The BofA Korean Banks Net Interest Income (NII) Indicator is a proprietary tool for identifying the direction and major inflection points of aggregated NII growth (YoY) at the Korean banks under our coverage. Our indicator uses five key variables: leading composite index growth (YoY), industrial production growth (YoY), retail (household) delinquency rate, credit card delinquency rate, and loan rate changes (two-quarter). We combine these five factors to forecast our coverage banks' NII growth (YoY). This is a quarterly analysis, and our Indicator leads our coverage banks' NII growth (YoY) by one quarter and has a 0.84 correlation on a back-tested basis since 2Q07; the back-tested correlation between our indicator and market-cap-weighted bank share price stands at 0.61 since 2Q07.

Signals a potential NII rebound ahead

Our indicator suggests the banks' NII growth (YoY) has likely turned the corner. The NII indicator for 4Q23 has continued to rebound, although still in negative territory, mainly on the back of the pick-up in the macro variables such as the leading composite index and industrial production growth. Despite further deterioration in credit card delinquencies in 4Q23, the macro variables have continued to contribute more positively to the indicator. We maintain our relative preference for KBFG, which we believe has better earnings protection given its diversified business portfolio.

Exhibit 2: BofA Korean Banks NII indicator vs. NII growth (% YoY) of the banks under our coverage

Our indicator has 0.84 correlation on a back-tested basis since 2Q07



Source: BofA Global Research estimates, BoK, FSS

Note: The BofA Korean Banks Net Interest Income Indicator is intended to be an indicative metric only and may not be used for reference purposes or as a measure of performance for any financial instrument or contract, or otherwise relied upon by third parties for any other purpose, without the prior written consent of BofA Global Research. The shaded area represents back-tested results from June 2007 to April 2023. The unshaded area represents actual performance since April 2023. This indicator was not created to act as a benchmark. This performance is back-tested and does not represent the actual performance of any account or fund. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Refer to important disclosures on page 13 to 16. Analyst Certification on page 12. Price Objective Basis/Risk on page 12.

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Exhibit 1: Movement of indicator inputs

Most inputs have shown improving trend except credit card delinquency

	3Q 21	4Q 21	1Q 22	2Q 22	3Q 22	4Q 22	1Q 23	2Q 23	3Q 23	4Q 23
Inputs	21	21	22	22	22	22	23	23	23	23
Macro										
Leading composite Index Growth (YoY, %)	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Industrial Production Index Growth (YoY, %)	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Industry Specific										
Retail Delinquency Ratio	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Credit card Delinquency Ratio	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Bank Loan Rate Growth (6m; ppt)	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green

Source: BofA Global Research, BoK

Note: 1) Red indicates the component is negatively contributing to in the indicator. Green indicates the component is positively contributing to the indicator. 2) For Delinquency ratios, the higher, the more negative feed into the indicator, vice versa

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BofA Korean Banks NII Indicator

What it is, how to read it, and why is it useful

What is the indicator?

The BofA Korean Banks NII Indicator is a directional tool that identifies turning points in NII growth (YoY) at Korean banks under our coverage (Woori Financial Group, Hana Financial Group, KB Financial Group, Shinhan Financial Group, the Industrial Bank of Korea, DGB Financial Group, JB Financial Group, and BNK Financial Group). Based on our back-testing, the indicator has 0.84 back-tested correlation with actual NII growth (YoY) of our coverage banks since 2Q07 and leads the NII growth (YoY) by one quarter. In particular, our indicator leads major inflection points and has been able to forecast the direction of the short-term moves (e.g., Apr'07-Jun'09, Jun'09-Jan'10, Jan'10-Dec'12, Dec'12-Aug'14, Mar'15-Mar'16, Jun'17-Dec'19, and Nov'20-Jun'21).

How to read it?

Signals directionality of banks' NII; 0.84 back-tested correlation

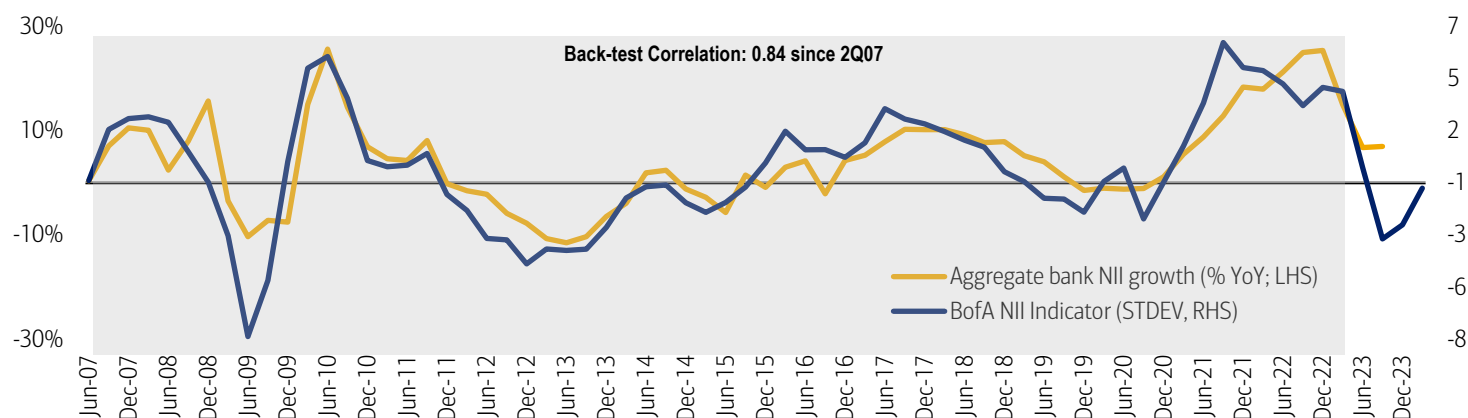
We calculate our Indicator using the equal-weighted sum of five inputs in standardized form, i.e., (1) Korea leading composite index growth (YoY), (2) Korea industrial production growth (YoY), (3) Korea retail (household) delinquency rate, (4) Korea credit card delinquency rate, and (5) Korea loan rate changes (two-quarter) against the aggregate NII growth (YoY) of our coverage banks. Our indicator leads NII growth (YoY) at the banks under our coverage by one quarter and has 0.86 correlation on a back-tested basis since 2Q07. The indicator is seen as a signal of the direction of NII growth; it is not designed to forecast NII growth (YoY) of individual banks, and changes in the indicator do not produce scored values.

NII set for a rebound in 2024

The continuing upturn in our indicator suggests that the bottom for NII has likely passed. The index has been rising given the ongoing strength in the macro variables such as the leading composite index and industrial production, along with a positive contribution from bank loan growth for the first time since 1Q23.

Exhibit 3: BofA Korean Banks NII Indicator vs NII growth (% YoY) of the banks under our coverage

Our indicator has 0.84 correlation on a back-tested basis since 2Q07



Source: BofA Global Research estimates, BoK, FSS

Note: The shaded area represents back-tested results from June 2007 to April 2023. The unshaded area represents actual performance since April 2023. This performance is back-tested and does not represent the actual performance of any account or fund. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein. Our coverage banks are Woori Financial Group, Hana Financial Group, KB Financial Group, Shinhan Financial Group, DGB, JB, Industrial Bank of Korea, and BNK Financial Group.

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Why is the indicator coming up from the lows? What are the inputs saying?

Exhibit 4 shows the current trend for data inputs used in our indicator. Green denotes a positive contribution to our indicator, while red denotes a negative contribution, in the current month. We are observing positive contributions by macro variables starting from 4Q23 driving the turnaround, with the leading composite index steadily reducing the degree of negative contribution and industrial production finally turning positive. In addition, loan growth is also showing signals of slowly recovering and is supporting a positive move in our indicator. Credit card delinquencies remain a key negative contributor, and we believe it was driven by rising interest rates into 4Q23.

Exhibit 5: Movement of indicator inputs (standardized using z-score)

The uptrend for our indicator was driven by improving macro and industry-specific inputs in general

Inputs	2Q21	3Q21	4Q21	1Q22	2Q22	3Q22	4Q22	1Q23	2Q23	3Q23	4Q23
Macro											
Leading composite Index Growth (YoY; %)	2.39	1.71	0.42	-0.37	-1.11	-1.17	-0.80	-1.27	-1.36	-0.88	-0.40
Industrial Production Index Growth (YoY; %)	1.55	0.77	1.05	0.95	0.92	0.83	-0.56	-0.83	-1.00	-0.75	0.22
Industry Specific											
Retail (Household) Delinquency Ratio	-1.38	-1.37	-1.36	-1.32	-1.28	-1.20	-1.06	-0.81	-0.66	-0.60	-0.57
Credit card Delinquency Ratio	-0.60	-0.67	-0.82	-0.73	-0.72	-0.87	-0.55	0.17	0.72	1.10	1.39
Bank Loan Rate Growth (6 month; ppt)	0.31	0.50	1.23	1.62	1.38	2.34	3.64	1.69	-0.76	-0.36	0.25

Source: BofA Global Research, BoK

Note: 1) Red indicates the component is negatively contributing to in the indicator. Green indicates the component is positively contributing to the indicator.

2) For Delinquency ratios (Retail Delinquency and Credit card Delinquency ratios), the higher, the more negative feed into the indicator; the lower, the more positive feed into the indicator.

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Why is it useful?

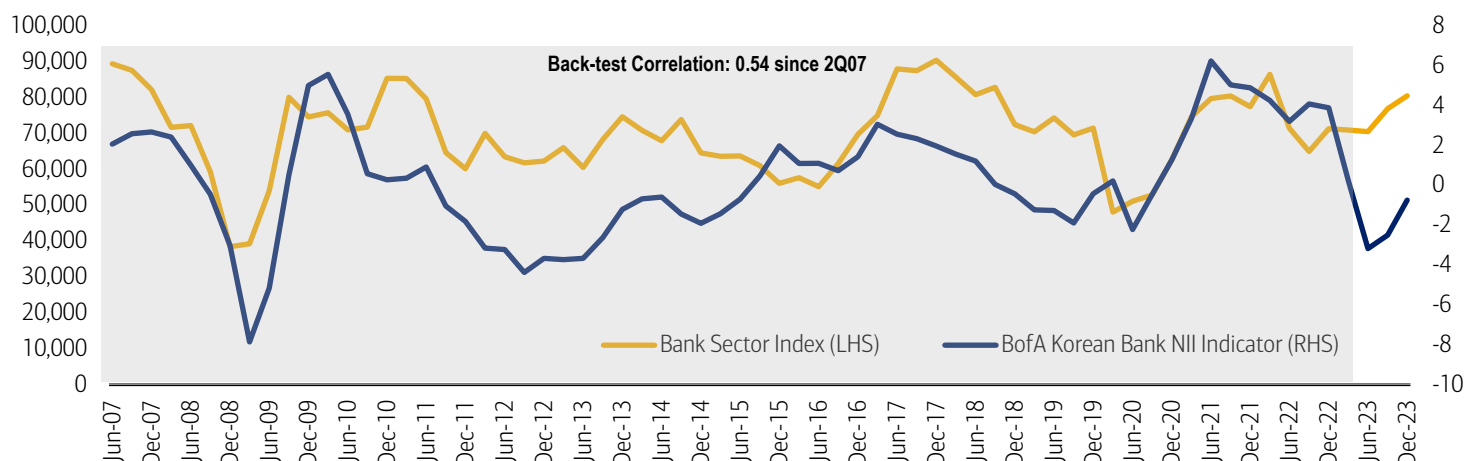
NII, driven by loan growth and interest margins, constitutes 80% of banks' top-line revenue at the banks under our coverage (the banks under our coverage contribute 75% to total sector NII). As NII is a key revenue item in the banks' income statement, it has 0.67 back-tested correlation (since 2Q07) with ordinary operating profit (excluding large non-recurring items that impact earnings, such as securities sale gains, FX-related gains, etc). Hence, identifying the direction and major inflection points of banks' aggregate NII growth provides meaningful signals to banks' earnings trends in the future. The back-tested correlation between NII and operating profit (adjusted for other operating profit and provision expense) stands at 0.67; back-tested correlation between our indicator and adjusted OP stands at 0.45 (see Potential implications section for more details).

Indicator positively correlated with share prices

In addition to forecasting Korean banks' NII, our indicator can provide some implications for share-price dynamics. We see via back-testing that our indicator correlates positively with the Bank Sector Index (market-cap-weighted average share-price performance of banks under our coverage) and Bank Sector Index growth (YoY). We note that our indicator was not intended to forecast share prices.

Exhibit 5: BofA Korean Banks NII Indicator vs the Bank Sector Index

Our indicator has 0.54 correlation on a back-tested basis since 2Q07



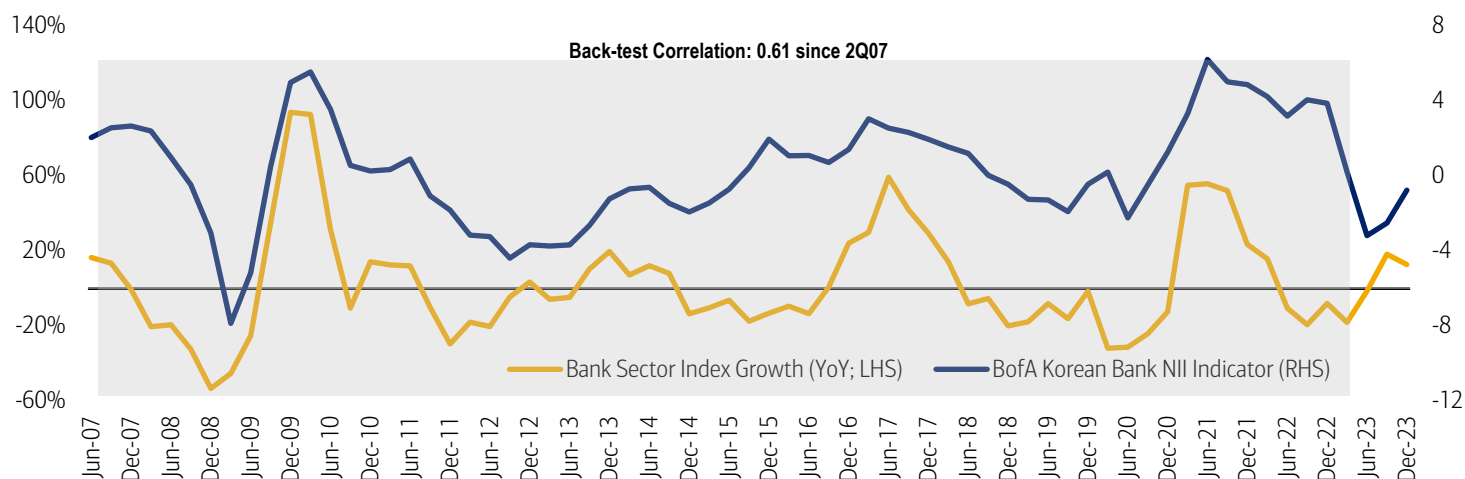
Source: BofA Global Research, BoK, WiseFn

Note: The shaded area represents back-tested results from June 2007 to April 2023. The unshaded area represents actual performance since April 2023. This performance is back-tested and does not represent the actual performance of any account or fund. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Exhibit 6: BofA Korean Banks NII Indicator vs the Bank Sector Index Changes (YoY)

Our indicator has 0.61 correlation on a back-tested basis since 2Q07



Source: BofA Global Research, BoK, WiseFn

Note: The shaded area represents back-tested results from June 2007 to April 2023. The unshaded area represents actual performance since April 2023. This performance is back-tested and does not represent the actual performance of any account or fund. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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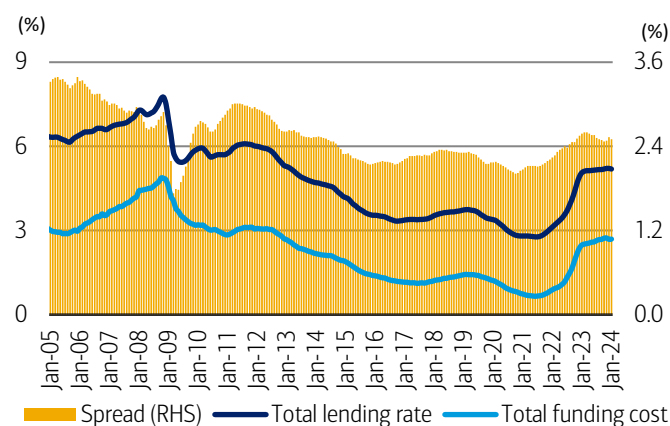
Potential implications

Indicator implies NII rebound ahead

Our indicator implies NII at the banks under our coverage is likely to see some recovery soon. The high frequency data such as the BoK spread data below suggests stabilizing margins in the short-term, which is supportive for NII. For clues to a recovery in NII, a recovery in credit card delinquency would be a key factor to watch as it is the biggest negative contributor to our NII indicator.

Exhibit 7: Backbook spreads and lending rates

Government pressure to cut lending rates is a risk for a quicker peaking of spreads

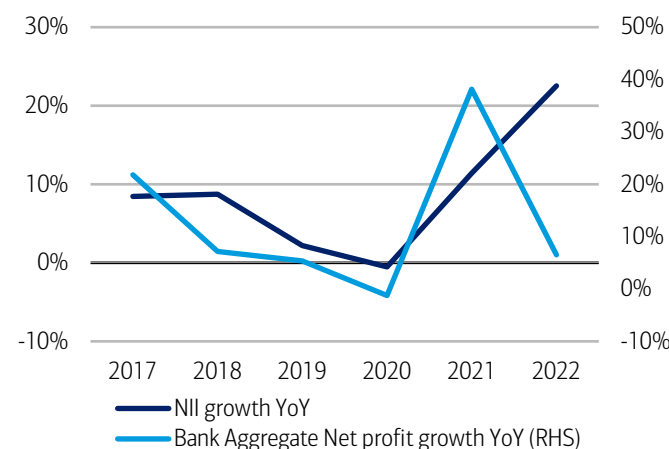


Source: BofA Global Research, BoK

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Exhibit 8: NII and Net profit growth YoY (%)

We recently see divergence between NII and net profit growth YoY as non-interest income and loan loss provisions had a bigger impact on net profit

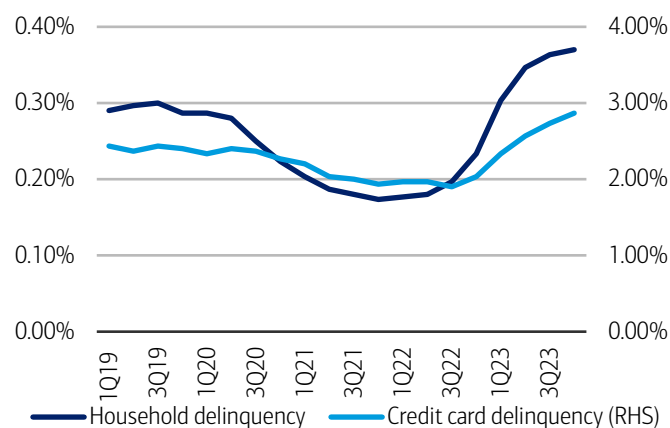


Source: BofA Global Research, Company data

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Exhibit 9: Household and Credit card delinquency rates

We see slowing trend on both household and credit card delinquency rate

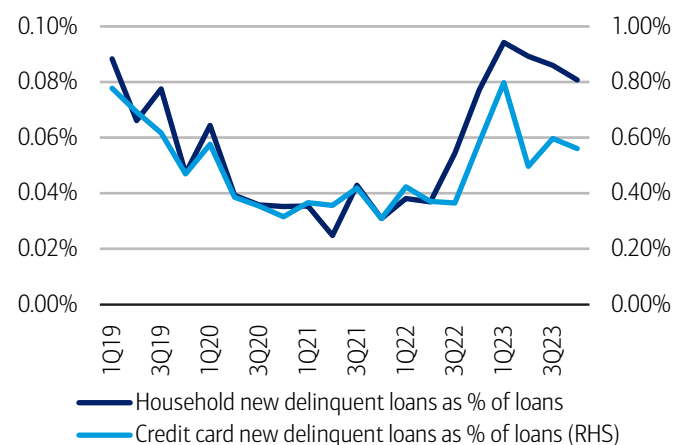


Source: BofA Global Research, BoK

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Exhibit 10: Household and Credit card new delinquent loans as % of loans

New delinquent loans seem to be stabilizing, suggesting delinquency ratio deterioration is slowing



Source: BofA Global Research, Company data

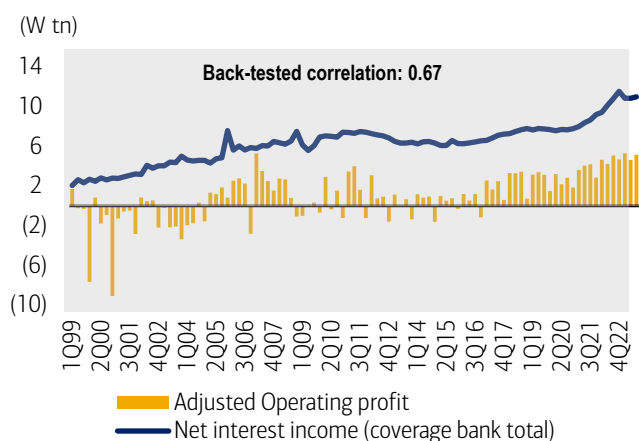
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Interest income – the most important earnings driver

Korean banks under our coverage have generated 80%+ of earnings from interest income since 1990. Non-interest income contribution to earnings has increased due to the banking group's expansion into non-banking businesses, but interest income continues to be the bread-and-butter earnings generator. NII slowdown could weaken earnings generating power, in general, if it is not compensated by bigger non-interest income. In addition, as the delinquency rate, one of the major explaining variables for interest income, is on a modest uptrend, this could have an impact on banks' earnings (i.e., operating profit), via smaller interest income. The correlation between NII and operating profit (adjusted for other operating profit and provision expenses) stands at 0.67. The back-tested correlation between the BofA Korean Banks NII Indicator and adjusted OP stands at 0.45, suggesting the BofA Korean Banks NII Indicator also provides an indication of operating profit growth (YoY) of the banks under our coverage.

Exhibit 11: Bank total NII vs. adjusted operating profits

The back-tested correlation stands at 0.67



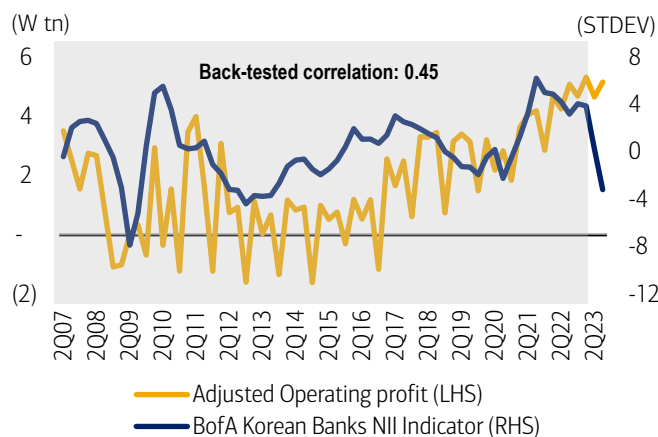
Source: BofA Global Research, FSS

Note: The shaded area represents back-tested results from January 1999 to April 2023. The unshaded area represents actual performance since April 2023. This performance is back-tested and does not represent the actual performance of any account or fund. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Exhibit 12: BofA NII indicator vs. adjusted operating profits

The back-tested correlation stands at 0.45



Source: BofA Global Research, FSS

Note: The shaded area represents back-tested results from June 2007 to April 2023. The unshaded area represents actual performance since April 2023. This performance is back-tested and does not represent the actual performance of any account or fund. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Methodology and inputs

Construction of the BofA Korean Banks NII indicator

The BofA Korean Banks Net Interest Income (NII) Indicator is a proprietary tool that seeks to identify turning points in NII growth at Korean banks under our coverage (Woori Financial Group, Hana Financial Group, KB Financial Group, Shinhan Financial Group, the Industrial Bank of Korea, DGB Financial Group, JB Financial Group, and BNK Financial Group). It incorporates input variables that relate to (1) macro dynamics (leading composite index growth [YoY], and industrial production index growth [YoY]); and (2) banks' dynamics (retail [household] delinquency ratio, credit card delinquency ratio, and loan rate changes [two-quarter]).

Tested exhaustive list of macro and industry-specific inputs

Working closely with our APAC & GEMs Equity Strategist, Ritesh Samadhiya, we began with an exhaustive list of macroeconomic variables, including housing, sentiment, interest rates, inflation, labor, spending and borrowing, and external balances. For sector-specific data series, we explored data, including 3-10yr Treasury bond yield spreads, loan growth, total liquidity, etc.

Why we selected five variables as inputs to our indicator

As our aim was to create a forward-looking indicator, we were interested in only those data series that were leading in nature, taking into account their release times, e.g., if a data series leads the target variable by one quarter, but is released with a delay of two quarters, it would not be considered a leading indicator. Unsurprisingly, most of the data turned out to be coincident/lagging and/or not related to the dependent variable (NII growth [YoY] of banks under our coverage). Since NII data for Korean banks are available only on a quarterly basis, we ran our back-tested correlation analysis on a quarterly frequency.

Input factors used in the indicator

Normalization of the inputs for the sake of comparability

We normalized all the macroeconomic and sector-specific data series via z-score (i.e., adjusting inputs for their historical average and standard deviation) for the sake of comparability. We then narrowed the list of inputs to those that: (1) showed a high back-tested correlation with our target variable, NII growth (YoY) of the banks under our coverage, and (2) have predictive power.

Macro inputs

1. Industrial production index growth
2. Korea leading composite index growth

Industry-specific inputs

1. Korea retail (household) delinquency ratio
2. Korea credit card delinquency ratio
3. Loan rate growth (HoH)

Exhibit 14: BofA Korean Banks Net Interest Income Indicator inputs

Macro and Industry specific inputs used to calculate our indicator

Inputs	Source	Description
Macro		
Leading composite Index Growth (YoY; %)	Bank of Korea	Monthly reported BoK composite economic index, incorporating 8 factors: (1) Inventory cycle indicator, (2) consumer expectation index, (3) Value of construction orders received, (4) Domestic Machinery Shipment index, (5) Export and import price index, (6) Job search ratio, (7) KOSPI, and (8) Term spread
Industrial Production Index Growth (YoY; %)	Bank of Korea	Monthly reported Industrial production index, covering 19 out of 21 categories based on Korean Standard Classification
Industry Specific		
Household Delinquency Rate	Bank of Korea	Bank's delinquency rate on Household loans (at least 1 day delinquent on principal)
Credit card Delinquency Rate	Bank of Korea	Bank's delinquency rate on Credit card loans (at least 1 day delinquent on principal)
Bank Loan Rate Growth (6 month; ppt)	Bank of Korea	6-month growth of Banks' weighted average lending rate on newly extended loans

Source: BofA Global Research, BoK

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We note that not all variables are available from the same date, and thus began our analysis when the entire set of inputs is available. We believe the period since 2Q07 is comprehensive enough to support the robustness of the indicator as it spans several business cycles at Korean banks. The back-tested correlations (over the entire range of available data) of the above variables with NII growth (YoY) at Korean banks under our coverage range from -0.04 to 0.63, with Korea leading composite Index growth (YoY) having the lowest back-tested correlation and Bank loan rate growth the highest. To avoid over-fitting the indicator, we restricted the input variables to only those factors that have historically been able to identify most of the inflection points for NII growth (YoY) of the banks under our coverage. Over-fitting occurs when noise rather than underlying trends become the focus, to the point where there is no longer a clear relationship between the dependent and the independent variables.

How we constructed the indicator: equal-weighted sum of inputs

Our indicator is constructed in an equally weighted manner, with the above five variables (see Exhibit 13). After deciding on the set of input data series to be used, we explored multiple ways to aggregate them to create an indicator for our target dependent variable. We decided to equally weight the variables to form the aggregate indicator, as the increase in complexity of the other approaches did not justify the marginal increase in accuracy. Moreover, this approach also helped to avoid the aforementioned over-fitting issues.

What key factors are not included in the indicator

For completeness, we list the key factors (Exhibit 14), commonly associated with Korean banks' NII that we tested, but which we concluded were of either limited or no value for our predictive indicator.

Exhibit 15: Key factors that were tested but not included

There were either limited or no correlation with our indicator

Inputs	Source	Comment as to why the input was not included in the indicator
3yr Corporate bond and treasury bond spread	Bank of Korea	Coincidental; with a back-tested correlation of 0.26
Corporate delinquency rate	Bank of Korea	Coincidental; with back tested correlation of 0.42; Delinquency dynamics captured by other two delinquency rates
Loan Growth (YoY)	Bank of Korea	Coincidental; with a back-tested correlation of 0.04; loan growth reflects economic cycle and business cycle incorporated with two macro variables
Deposit rate	Bank of Korea	Coincidental; with a back-tested correlation of 0.11
Unsold housing units	Bank of Korea	No back-tested correlation found; back-tested correlation of -0.08; economic cycle better captured with two macro variables
Korea Net Interest Spread	Bank of Korea	Coincidental with a back-tested correlation of 0.14
Money supply (M1) growth (YoY)	Bank of Korea	No clear back-tested correlation found; back-tested correlation of -0.30

Source: BofA Global Research, BoK

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Limitations and risks

Directional indications only

Note this quantitative framework provides likely directional indications for the target variables (i.e., NII growth [YoY] of the banks under our coverage) based on historical data of macro and industry-specific variables. Thus, there is no guarantee the estimated implied gains or declines in the target variables will be realized. While this indicator looks to infer information from our selected independent variables and their historical relationship to the target variables over time, historical back-tested correlation is not a guarantee of predictability.

Data availability: Analysis from 2Q07

While other inputs have a longer history (i.e., leading composite index, Korean banks' lending rate growth, and Industrial production), our target variable, NII growth (YoY) at our coverage banks, limits the length of our back-tested period. One of our key coverage banks, Shinhan Financial Group, went through major M&A with Choheung Bank in Apr'06, along with restructuring measures (of Choheung Bank) and thus the NII of the banks under our coverage prior to 2Q06 are not comparable with the figure post-2Q06. Given we are analyzing Korean banks' NII growth (YoY), our indicator begins from 2Q07.

Regulatory developments

As the banking industry is a heavily regulated sector, the regulators' policies regarding loan control, pricing control, corporate bailout, etc., can heavily affect banks' operations. Regulatory developments affecting the banking industry may make the indicator less predictive in the future.

Back-testing disclaimer

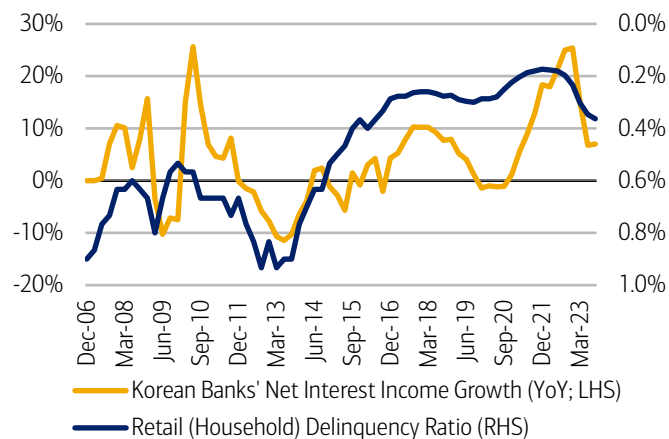
The analysis of our Indicator in this report is back-tested and does not represent the actual performance of any account or fund. Back-tested performance depicts the hypothetical back-tested performance of a particular strategy over the time period indicated. In future periods, market and economic conditions will differ and the same strategy will not necessarily produce the same results. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein. In fact, there are frequently sharp differences between back-tested returns and the actual results realized in the actual management of a portfolio. Back-tested performance results are created by applying an investment strategy or methodology to historical data and attempts to indicate how a strategy might have performed during a certain period in the past if the product had been in existence during such time. Back-tested results have inherent limitations including the fact they are calculated with the full benefit of hindsight, which allows the security selection methodology to be adjusted to maximize the returns. Further, the results shown do not reflect actual trading or the impact material economic and market factors might have had on a portfolio manager's decision-making under actual circumstances. Back-tested returns do not reflect advisory fees, trading costs, or other fees or expenses.

Components of the indicator

Industry-specific variables

Exhibit 15: Korean banks' NII growth vs banks' household delinquency ratio

NII growth and household delinquency are going in the same direction



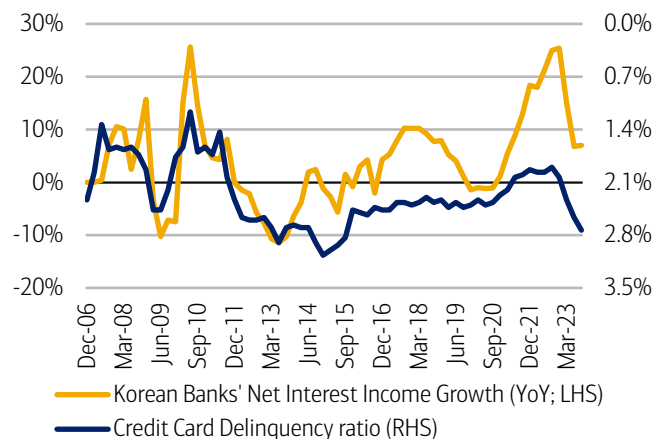
Source: BofA Global Research, BoK

Note: Retail (Household) Delinquency Ratio axis is in reverse order

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Exhibit 16: Korean banks' NII growth vs banks' credit card delinquency ratio

NII growth and credit card delinquency are going in the same direction



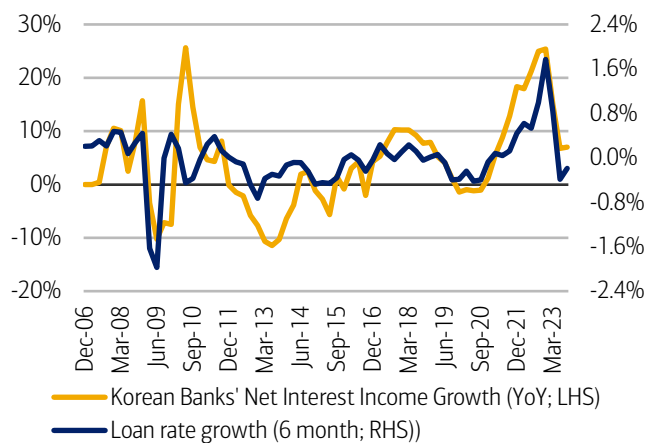
Source: BofA Global Research, BoK

Note: Credit Card Delinquency Ratio axis is in reverse order

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Exhibit 17: Korean banks' NII growth vs banks' loan rate growth (6 months) ratio

We could expect NII growth to follow the direction of loan rate growth



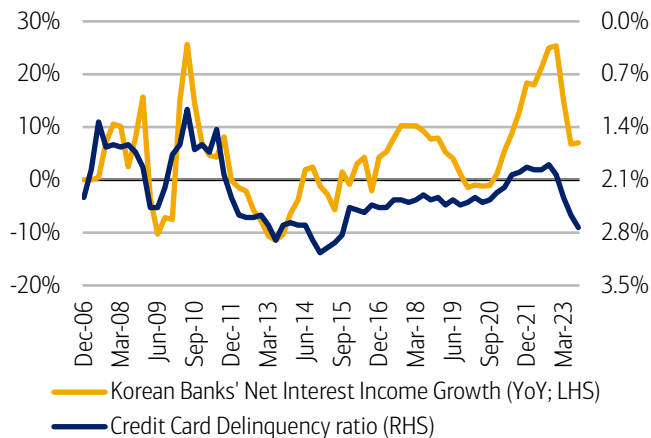
Source: BofA Global Research, BoK

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Macro-specific variables

Exhibit 18: Korean banks' NII growth vs Korea Leading Composite Index growth (YoY)

The big divergence between NII growth and Korea Leading Composite Index growth suggests NII growth is likely to roll over

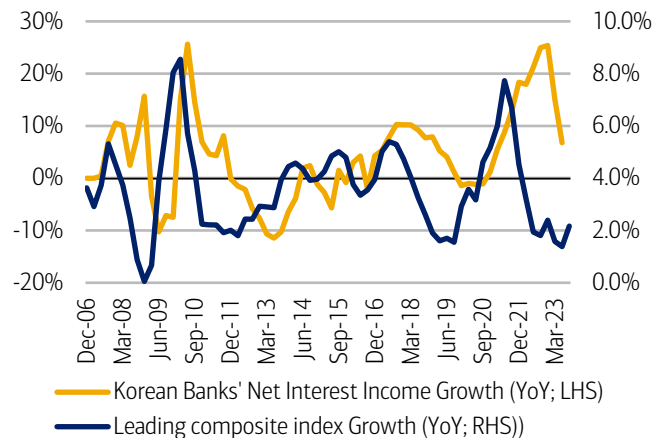


Source: BofA Global Research, BoK

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Exhibit 19: Korean banks' NII growth vs Korea Industrial Production Index Growth (YoY)

The big divergence between NII growth and Korea Industrial Production Index growth suggests NII growth is likely to roll over



Source: BofA Global Research, BoK

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Exhibit 21: Stocks mentioned

Prices and ratings for stocks mentioned in this report

BofA Ticker	Bloomberg ticker	Company name	Price	Rating
XSBBF	138930 KS	BNK FG	W8340	A-3-7
DGBFF	139130 KS	DGB FG	W9300	A-3-7
HNFGF	086790 KS	Hana FG	W64600	B-1-7
IBOKF	024110 KS	IBK	W15700	A-3-7
XMFFF	175330 KS	JB FG	W13330	B-2-7
KB	KB US	KB FG	US\$58.09	B-1-7
XKBGF	105560 KS	KB FG	W78600	B-1-7
SFLGF	055550 KS	Shinhan FG	W51500	A-1-7
SHG	SHG US	Shinhan FG	US\$34.14	B-1-7
WF	WF US	Woori FG	US\$34.68	B-1-7
XSLOF	316140 KS	Woori FG	W15160	A-1-7

Source: BofA Global Research

BofA GLOBAL RESEARCH

Price objective basis & risk

KB Financial Group (XKBGF / KB)

We derive our price objective of W90,000 (\$69.23) using a target P/B multiple of 0.58x derived by the Gordon Growth Model. Our assumptions are 9.3% sustainable RoE (from 24-month average return on equity-RoE), 10% cost of equity, and 2% terminal growth. We then apply a ca. 28% discount to the sustainable RoE assumption, derived by regression analysis of historical RoE discount assuming the same cost of equity and terminal growth, combined with our view of the economic cycle.

Upside risks to our price objective are (1) higher interest rates leading to further expansion of NIM, (2) stronger revenues from non-bank affiliates and (3) regulators becoming supportive of bigger shareholder returns.

Downside risks are (1) economic slowdown leading to higher credit cost (2) lower revenues from non-bank affiliates due to increased market risk, (3) economic slowdown resulting in lower rates and lower NIM, and (4) stronger demands for social contribution due to pressure on economic entities from high inflation.

Analyst Certification

We, Jeehoon Park and Jisun Lee, hereby certify that the views each of us has expressed in this research report accurately reflect each of our respective personal views about the subject securities and issuers. We also certify that no part of our respective compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

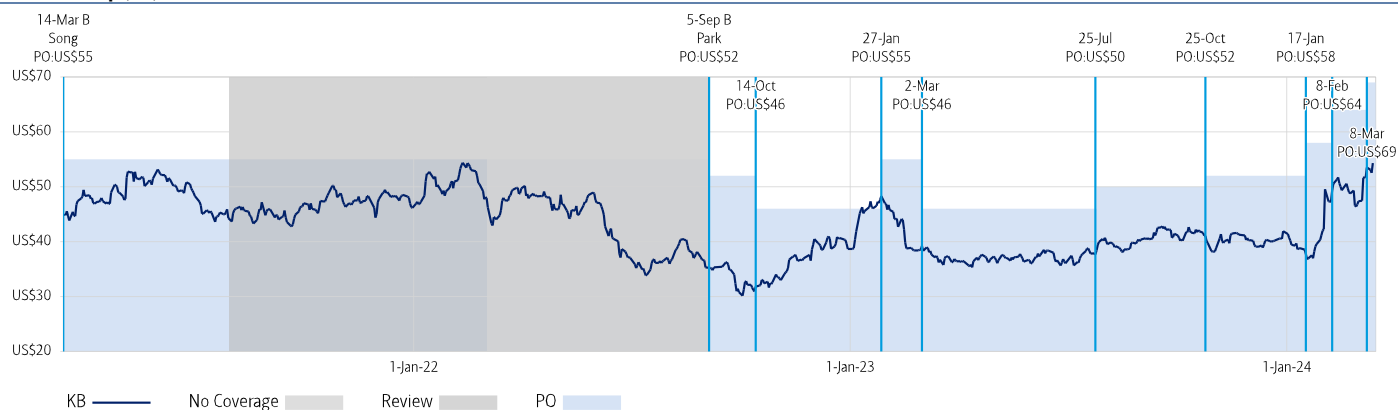
Korea - Financials Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY	DB Insurance	DGBUF	005830 KS	Jeehoon Park
	Hana Financial Group	HNFGF	086790 KS	Jeehoon Park
	Hyundai Marine & Fire	HYMRF	001450 KS	Jeehoon Park
	KakaoBank Corp	XDFSF	323410 KS	Jeehoon Park
	Kakaopay Corp	XDISF	377300 KS	Jeehoon Park
	KB Financial Group	XKBGF	105560 KS	Jeehoon Park
	KB Financial Group	KB	KB US	Jeehoon Park
	Samsung Fire & Marine	SZVZF	000810 KS	Jeehoon Park
	Samsung Life Insurance	SSMMF	032830 KS	Jeehoon Park
	Shinhan Financial Group	SFLGF	055550 KS	Jeehoon Park
	Shinhan Financial Group	SHG	SHG US	Jeehoon Park
	Woori Financial Group	XSLOF	316140 KS	Jeehoon Park
NEUTRAL	Woori Financial Group	WF	WF US	Jeehoon Park
	JB Financial Group	XMxFF	175330 KS	Jeehoon Park
UNDERPERFORM	BNK Financial Group	XSBFF	138930 KS	Jeehoon Park
	DGB Financial Group	DGBFF	139130 KS	Jeehoon Park
	Industrial Bank of Korea	IBOKF	024110 KS	Jeehoon Park

Disclosures

Important Disclosures

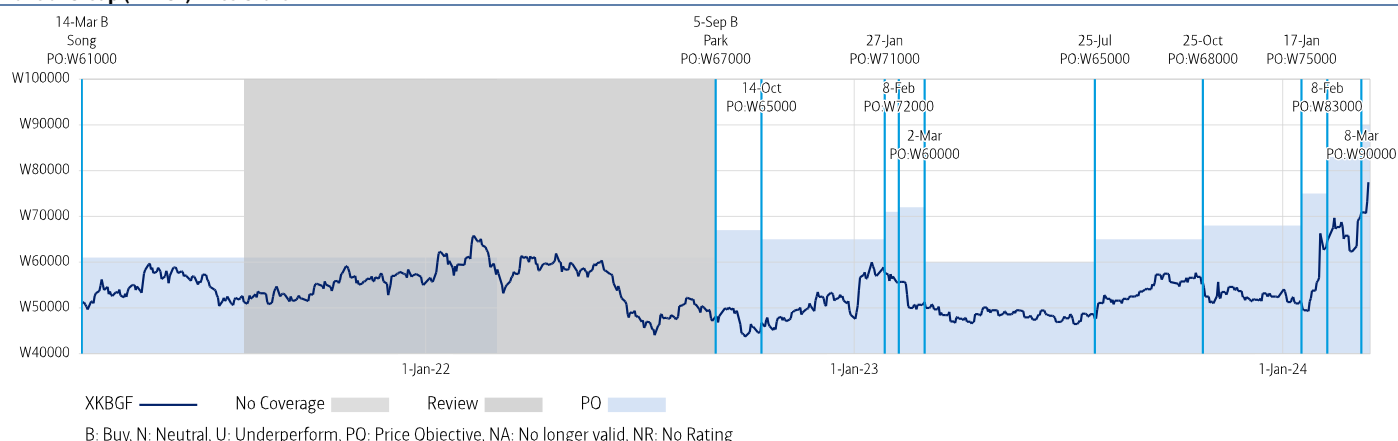
KB Financial Group (KB) Price Chart



KB ——— No Coverage ——— Review ——— PO ———

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

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

KB Financial Group (XKBGF) Price Chart

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

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

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	100	49.75%	Buy	84	84.00%
Hold	54	26.87%	Hold	41	75.93%
Sell	47	23.38%	Sell	35	74.47%

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

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	156	53.79%	Buy	94	60.26%
Hold	72	24.83%	Hold	48	66.67%
Sell	62	21.38%	Sell	35	56.45%

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

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

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

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

^{R2} Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

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