

Volatility Analysis: GCC Markets

December-2025

GCC markets all showed monthly volatility below 10% in November-2025

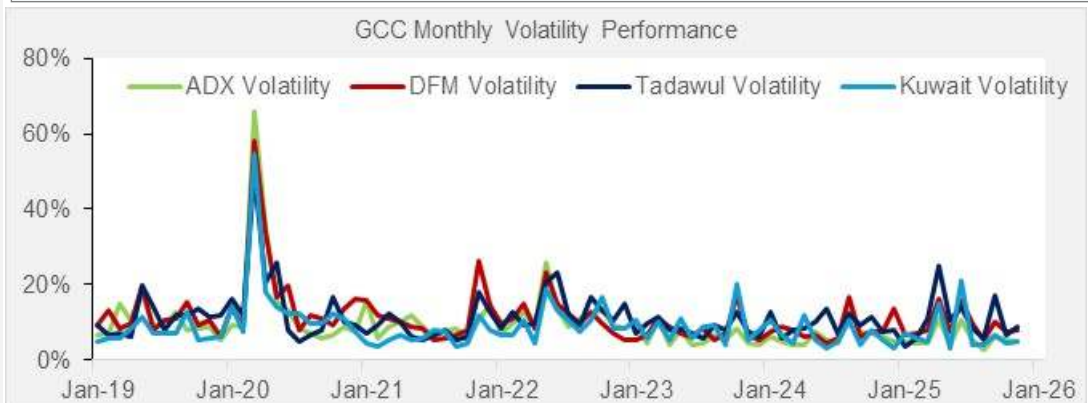
Volatility refers to the measurement of price or index point changes over time. For an asset, it quantifies the magnitude and speed of price fluctuations; for an index, it measures the extent and rapidity of point movements. Consequently, high volatility signifies large price swings, whereas low volatility indicates price stability. Understanding the drivers and key influencing factors of volatility is a primary objective for investors and market analysts. Significant factors affecting asset or index performance and volatility include economic events, interest rates, political developments, and earnings reports.

Volatility can be quantified using statistical techniques, such as calculating the standard deviation of historical prices or points over a period. A higher deviation from the average indicates higher volatility, while a lower deviation signifies lower volatility. Regarding performance, lower volatility suggests lower risk and returns, while higher volatility implies greater risk but the potential for higher returns. Volatility analysis employs several methods, including historical, implied, and statistical volatility analysis. Quantifying, forecasting, and understanding volatility is essential for risk management, portfolio management, stock price analysis, and identifying trading opportunities.

Measuring volatility is a complex endeavor. Different measurement techniques offer distinct advantages and disadvantages. Two of the most widely used methods are Realized Volatility, calculated via standard deviation, and Implied Volatility. Standard deviation quantifies how much an asset's price deviates from its mean over a specific period, relying on historical data that reflects past price movements. In comparison, Implied Volatility depicts the market's expectation of a contract's future price movement until its expiry. It is derived from option prices, reflecting the market's forecast of future price changes.

In November 2025, the Oman 30 Index led GCC markets with the highest average volatility at 9.6%. It was followed closely by the Qatar 20 Index (9.0%) and the Dubai Financial Market (DFM) General Index (7.8%). In contrast, the Bahrain Bourse All Share Index recorded the region's lowest volatility at 4.6%, with the Abu Dhabi Securities Exchange (ADX) General Index slightly higher at 5.1%. Our forecast models indicate moderate positive performance for most GCC markets in December 2025 in terms of expected median price. Overall GCC indices witnessed monthly declines during November-2025, which suggested that the sub-10% volatility figure was a result of orderly and gradual price declines. Moreover, the broad sub-10% volatility, coupled with the overall index slide, showed broad negative sentiment and more selling than buying by investors in the region's financial markets during the month.

In the December-2025 monthly projection, the Dubai Financial Market (DFM) General Index leads regional growth, forecast to rise 0.84% and close near 5,885.2 points. It is followed by the Tadawul All Share Index (+0.78%) and the Qatar Exchange Index (+0.77%). The Abu Dhabi Securities Exchange (ADX) General Index is expected to gain 0.3%, while the Kuwait All Share Index is projected to remain nearly flat, up just 0.03%



Sources : Bloomberg, Kamco Invest Research

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Volatility Modelling

Volatility is critically important for investors and traders. In nearly all major global stock markets, a volatility indicator assesses the risk level for specific instruments, such as indexes. A well-known example is the VIX Index, a real-time measure of the expected future volatility of the S&P 500 Index. Specifically, the VIX measures the market's expectation of 30-day S&P 500 volatility. It is often termed the "Fear Index" as it serves as a key indicator of market sentiment. The VIX is an implied volatility metric, calculated by aggregating the weighted prices of SPX puts and calls across a wide range of strike prices.

The Generalized AutoRegressive Conditional Heteroskedasticity (GARCH) model is a statistical tool commonly used to analyze time-series data where the error variance is serially autocorrelated. It is also employed to forecast the volatility of returns for financial assets, including indexes, and to calculate expected returns for assets displaying clustered volatility periods. The model utilizes two primary inputs: the squared return from the last period and the last period's volatility, enabling it to capture volatility clustering. Volatility clustering refers to the phenomenon where large price or index fluctuations are typically followed by further significant changes (up or down), while small changes tend to be followed by small changes.

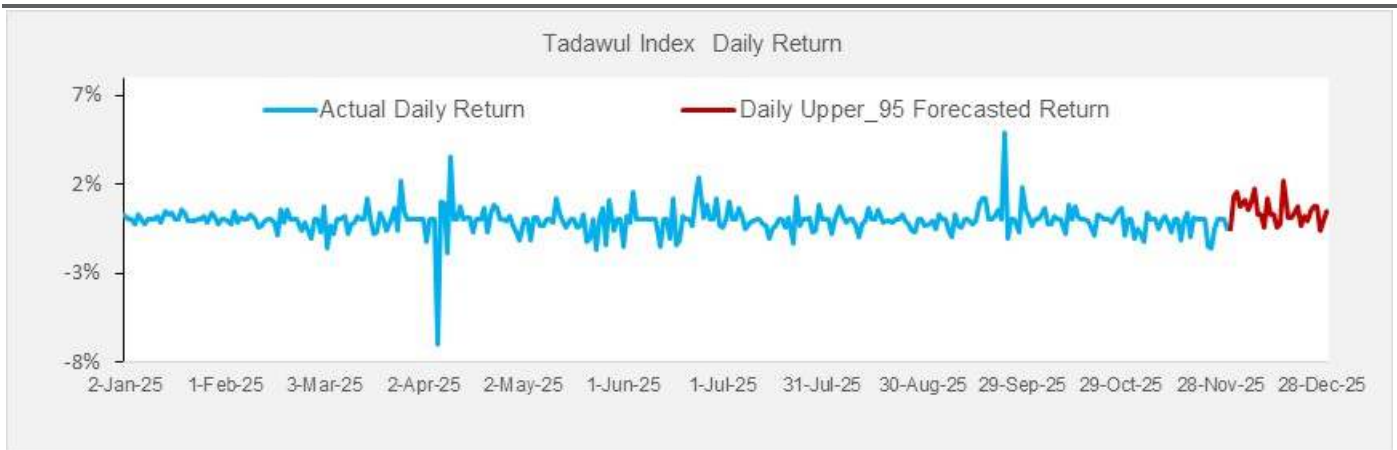
Tadawul Index

The Tadawul Index is a free-float weighted equity index representing Saudi equity performance. Calculating its annualized or monthly volatility enables the use of a GARCH model to model and forecast this volatility. There is a known inverse relationship between price performance and volatility; rising prices typically decrease volatility, while declines increase it significantly. Consequently, forecasting volatility is a crucial gauge of future market sentiment. The GARCH model is one method for calculating Tadawul Index volatility. Successfully modeling it allows for gauging and forecasting both near- and long-term index volatility, providing useful information for market participants. However, the GARCH model must meet specific requirements. After modeling the data, we validated the model's proper fit through various diagnostic tests. Results from the Ljung-Box test, ARCH LM test, and sign bias test confirmed a good fit to the Tadawul index data. The exponential GARCH (eGARCH) model with a Student's t-distribution is a sophisticated, widely used tool. It combines asymmetric volatility modeling with a fat-tailed error distribution for a realistic, robust financial market risk analysis framework. Based on the model forecasts, we anticipate moderate Tadawul Index growth in December-2025. Among the five projected price paths, the highest indicates growth exceeding 18.3%, while the lowest within the 95% confidence interval shows a -14.5% change from the last index point.

Successfully modeling the Tadawul Index volatility would allow us to gauge and forecast the volatility of the index's long and near term. This is useful information for market participants. However, our GARCH model must meet certain requirements. After modeling our Tadawul Index data in we checked if our GARCH model fitted properly by checking various tests of our result. Our test results, including the Ljung-Gox test, the ARCH LM test and the sign bias test, showed that our model fitted well into our Tadawul index data. The exponential GARCH model or the eGARCH model with student's t Distribution. The model is a sophisticated and widely used tool that combines asymmetric volatility modelling with a fat-tailed error distribution to provide a realistic and robust framework for analyzing financial market risk. Based on the forecasts generated by our model, we anticipate moderate growth for the Tadawul Index in December-2025. The highest price index path growth out of the five-price index paths the projected depict an increase of over 18.3% while the lowest on the upper 95% confidence intervals reached -14.5% as compared to the last index point.



Sources : Bloomberg, Kamco Invest Research

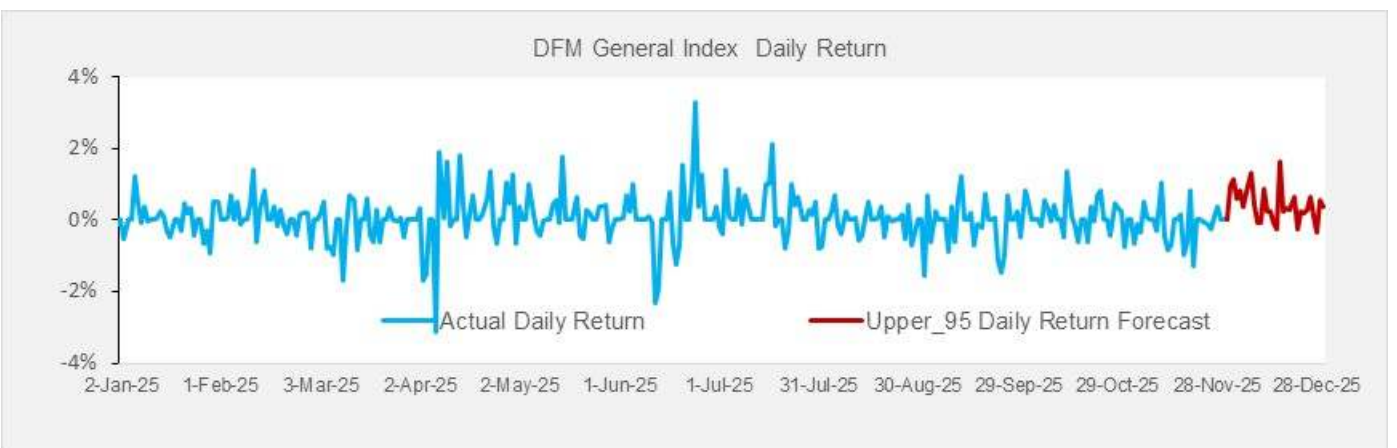
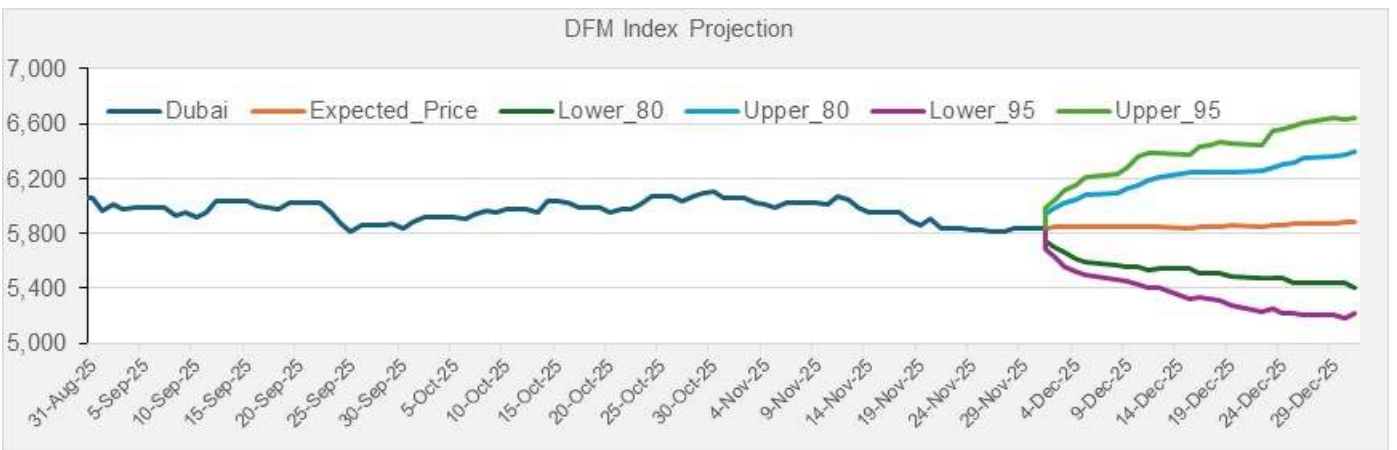


Sources : Bloomberg, Kamco Invest Research

DFM

The Dubai Financial Market Index (DFMGI), commonly termed the DFM Index or "the DFM," is the principal benchmark for the Dubai Financial Market (DFM). It tracks the performance of the exchange's most liquid and influential listed companies, acting as a key gauge of investor sentiment and economic health in Dubai and the broader UAE. The DFM General Index is a market capitalization-weighted index, meaning each constituent's influence on the index's movement is proportional to its total market value, granting larger companies greater impact. An exponential GARCH model with a Student's t-distribution (eGARCH-STD) best captured the volatility of the DFM General Index.

The exponential GARCH model with the student's t distribution, the eGARCH-STD, was the model that captured the volatility performance of the DFM General Index. The model projects that the DFM General Index remains moderately subdued for next month penciling a 0.8% increase for the December-2025 projection expecting to close the month at 5,885.2 points. However, in its upper_95 confidence level projection the model forecasts that the index might growth to as high as 6,647.1 points at the end of December-2025 or in its lower_95 confidence level as low as 5,406.4 points during the similar period.

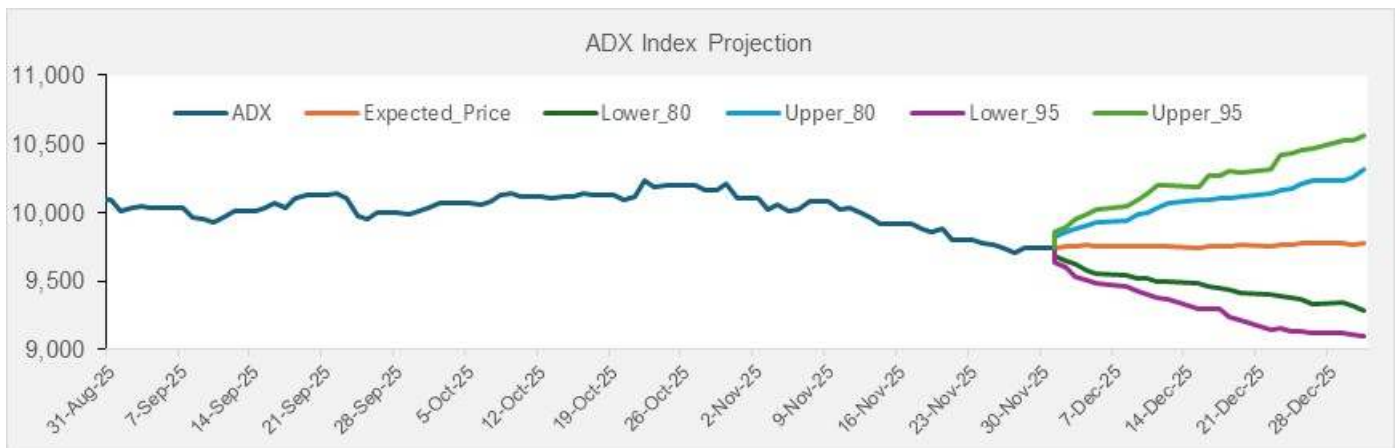


Sources : Bloomberg, Kamco Invest Research

ADX

The FTSE ADX General Index is the primary broad-market benchmark for the Abu Dhabi Securities Exchange (ADX), constructed and maintained under the global, rules-based methodology of FTSE Russell. It serves as the definitive performance measure of the investable Abu Dhabi equity market for the international investment community. While technically all listed companies are eligible, they must first pass FTSE’s global standard screening criteria, such as meeting median daily traded value requirements over a review period to ensure sufficient liquidity. Additionally, the index excludes government stakes, strategic holdings, and locked-in shares, assigning a free float factor based on the proportion of shares publicly available. For example, a company must have approximately 25% of its shares publicly traded.

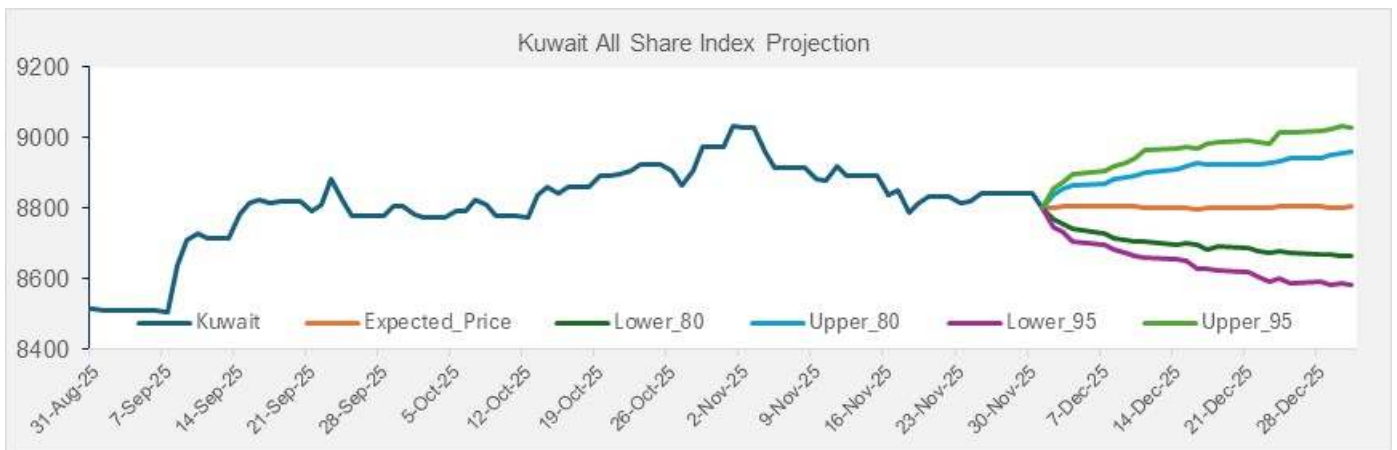
A standard GARCH model with a Student’s t-distribution best captured the volatility of the FTSE ADX General Index. Using this model, we generated a 22-day daily index projection. It indicates a moderately subdued index for the coming month, anticipating a 0.3% increase in the December-2025 projection, with an expected month-end close of 9,774.1 points. However, within its upper_95 confidence level, the model forecasts potential growth to 10,560.6 points by end-December 2025, while its lower_95 confidence level suggests a possible decline to 9,286.3 points in the same period.



Sources : Bloomberg, Kamco Invest Research

Kuwait

The Kuwait All Share Index (Kuwait Stock Exchange Index) tracks the performance of all listed companies on the Kuwait Stock Exchange. It serves as a benchmark for the Kuwaiti equity market, encompassing sectors such as finance, telecommunications, and oil. Boursa Kuwait categorizes listed companies into three tiers—Premier Market, Main Market, and Auction Market—based on liquidity, size, and governance. The All-Share Index includes all ordinary listed shares across these three market subindices. A standard GARCH model with a Student’s t-distribution best captured the volatility of the Kuwait All-Share Index. Using this model, we generated a 22-day daily index projection. It indicates the index will remain largely unchanged for the coming month, anticipating a minimal 0.03% increase in the December-2025 projection, with an expected month-end close at 8,805.9 points. However, within its upper_95 confidence level, the model forecasts potential growth to 8,805.9 points by end-December 2025, while its lower_95 confidence level suggests a possible decline to 8,663.5 points in the same period.



Sources : Bloomberg, Kamco Invest Research

Qatar

The QE Index is a capitalization weighted index of the 20 most highly capitalized and liquid companies that are traded on the Qatar Exchange. There is a maximum weight of 15% which a stock may hold, and the index is rebalanced semi-annually. The exponential GARCH model with the student's t distribution, the eGARCH-STD, was the model that captured the volatility performance of the QE 20 Index. The model projects that the QE 20 index to remain moderately subdued for next month penciling a 0.8% increase for the December-2025 projection expecting to close the month at 10,703 points. However, in its upper_95 confidence level projection the model forecasts that the index might growth to as high as 12,267 points at the end of December-2025 or in its lower_95 confidence level as low as 9,226 points during the similar period.



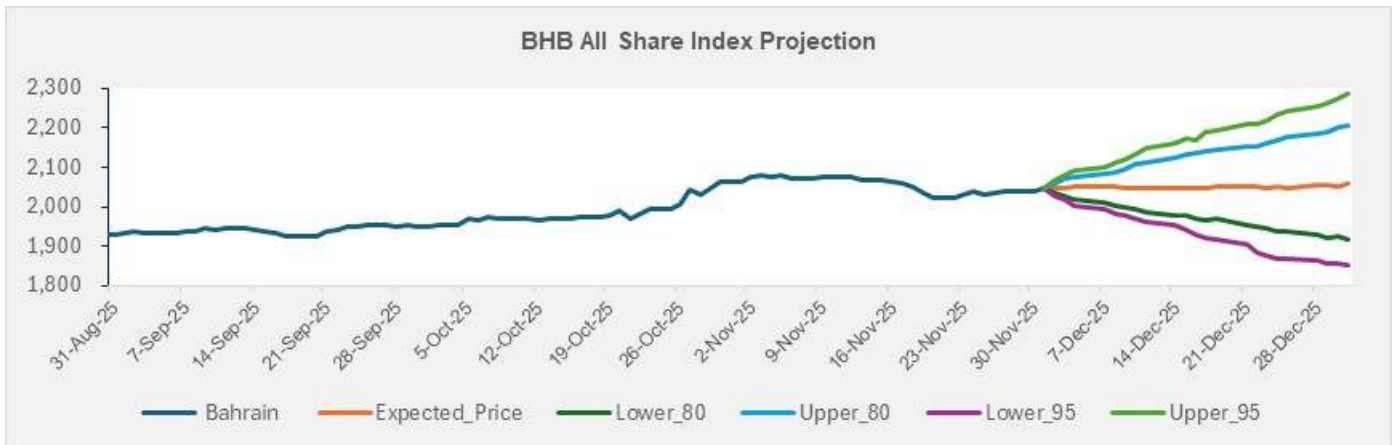
Sources : Bloomberg, Kamco Invest Research



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Bahrain

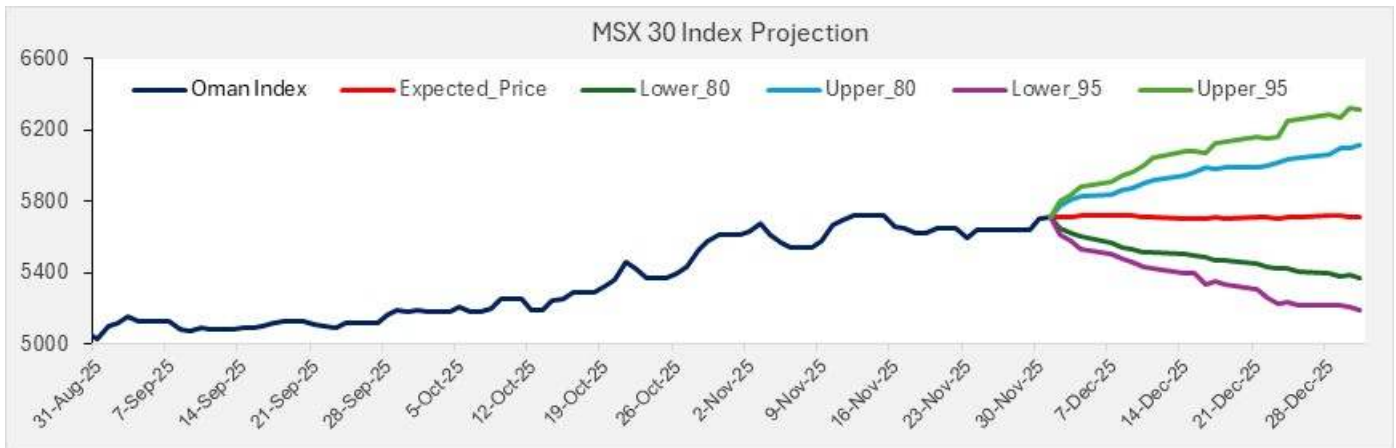
The Bahrain Bourse All Share Index is the main stock market index of the Bahrain Bourse. The index tracks the performance of all listed companies on the Bourse. The index is a market capitalization-weighted index. Bahrain Bourse has the lowest number of constituent companies in the GCC with numbers fluctuating between 42 and 44 listed companies. The index is heavily influenced by key sectors including the Material and Financial sectors. Financials (Banking & Insurance): Dominant sector (~60-70% of index weight). Key players include Ahli United Bank (AUB), Bank of Bahrain and Kuwait (BBK), National Bank of Bahrain (NBB). The standard GARCH model with student's t distribution captured the volatility of the Bahrain Bourse All Share Index the best. Using the model we have created a daily index projection for the next 22 days. The model projects that the Bahrain All Share Index remain moderately subdued for next month penciling a 0.5% increase for the December-2025 projection expecting to close the month at 2,057.69 points. However, in its upper_95 confidence level projection the model forecasts that the index might growth to as high as 2,289.17 points at the end of December-2025 or in its lower_95 confidence level as low as 1,914.91 points during similar period.



Sources : Bloomberg, Kamco Invest Research

MSX

The MSX 30 Index is the premier stock market benchmark for the Muscat Stock Exchange (MSX). The index covers a concentrated view of the exchange’s biggest companies. The MSX 30 Index is also an important indicator of the Sultanate’s economy. The index tracks the 30 most liquid and largest companies by market capitalization listed on the MSX. It is a free-float adjusted market-cap weighted index. The index is mainly influenced by the oil economy dependent on Financial and Industrial Sectors. The standard GARCH model with student’s t distribution captures the volatility of the MSX 30 Index the best. Using the model we have created a daily index projection for the next 22 days. The model projects that the MSX 30 Index remain moderately subdued for next month penciling a 0.0% increase for the December-2025 projection expecting to close the month at 5,714.04 points. However, in its upper_95 confidence level projection the model forecasts that the index might growth to as high as 6,313.95 points at the end of December-2025 or in its lower_95 confidence level as low as 5,372.59 points during the similar period.



Sources : Bloomberg, Kamco Invest Research

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