

White Paper

The power of precision: Macro forecasting that surpasses consensus

An empirical analysis of LSEG's
Global Macro Forecasts

LSEG DATA &
ANALYTICS



EXPONENTIAL

Data & Feeds

Contents

Executive summary	2
Introduction.....	2
Realtime macroeconomic data.....	3
Forecast definition and evaluation framework.....	3
Forecast target.....	3
Forecast structure and update cycle	3
High-level forecast construction	4
Machine learning tools.....	4
Out-of-Sample evaluation	4
Accuracy metrics	4
Error magnitude metrics	4
Directional and sign-based metrics.....	5
Hit-based precision metrics	6
Headline and core CPI results.....	6
Summary accuracy metrics	6
Accuracy performance over time.....	8
Conclusion	10

Executive summary

This paper evaluates the performance of LSEG's Global Macroeconomic Forecasts, powered by Exponential Technology. These forecasts are benchmarked against the accuracy of professional consensus CPI forecasts and the world's leading individual economists. Using data from November 2017 through September 2025, we find that LSEG's bottom-up, component-level approach consistently outperforms consensus estimates across headline and Core CPI measures. LSEG's Global Macro Forecasts achieve higher directional accuracy and hit rates while maintaining lower forecast errors across multiple evaluation windows. The performance advantage persists over time and is not driven by isolated periods or specific inflation regimes. These results demonstrate that incorporating real-time economic data and modelling the underlying drivers of inflation materially improves forecast reliability ahead of official Bureau of Labor Statistics, "BLS" releases.

Introduction

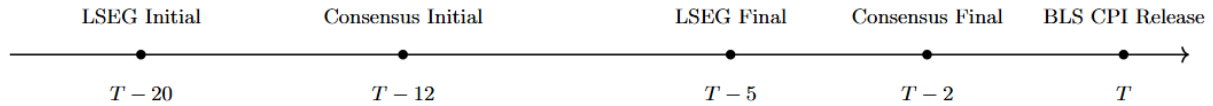
The ability to forecast inflation with precision ahead of official releases is a fundamental edge in institutional portfolio management. Consensus CPI forecasts—aggregated from dozens of expert economists and economic research teams—have become the de facto institutional benchmark against which all forecasting performance is measured. Less than 20% of professional economists have demonstrated the ability to predict CPI more accurately than the Consensus CPI forecast¹. Yet despite the intellectual capital devoted to consensus forecasting, these estimates suffer from structural limitations: they are inherently backward-looking, extrapolative, and systematically struggle to anticipate cyclical turning points when forecast errors are largest. For institutional investors managing portfolios sensitive to inflation expectations, whether through nominal return targets, real return objectives indexed to CPI inflation, or tactical positioning ahead of monetary policy shifts—the gap between consensus accuracy and true realized inflation can represent significant alpha. We analyse the US Consumer Price Index (CPI) forecasts produced by LSEG Global Macro Forecasts, with focus on headline CPI, Core CPI, and selected CPI subcomponents, to establish whether bottom-up, component-level forecasting can materially outperform the consensus benchmark.

LSEG Global Macro Forecasts deliver consistently stronger CPI forecast performance than survey-based consensus benchmarks across both headline and core inflation measures. Over the evaluation period from November 2017 to September 2025, LSEG headline CPI month-over-month, "MoM" forecasts achieve a directional accuracy of 81.9% and a hit rate of 48.4%, compared with 75.5% and 32.6% for the median consensus forecast, while also exhibiting lower mean absolute error (0.0009 versus 0.0010). Forecast precision is even more pronounced for the more challenging Core CPI MoM, where LSEG Global Macro Forecasts substantially outperform consensus in directional accuracy (55.3% versus 20.2%) and hit rate (41.1% versus 35.8%), alongside lower forecast errors.

Performance advantages extend beyond MoM forecasts. For both headline and Core CPI YoY changes, LSEG forecasts maintain low forecast errors, with a mean absolute error of 0.0009 for headline CPI compared with 0.0011 for the median consensus forecast, and 0.0009 versus 0.0011 for Core CPI, confirming that the gains observed in MoM forecasting reflect robust and persistent improvements rather than short-term noise. Taken together, the results demonstrate that LSEG Global Macro Forecasts real-time feed provides earlier, more accurate and reliable inflation estimates ahead of official BLS releases, outperforming traditional consensus forecasts across multiple dimensions of forecast accuracy.

Professional consensus forecasts aggregate the views of dozens of institutional research teams, central bank economists, and independent forecasters who collectively process macroeconomic data and anecdotal information to overlay their judgement to inform their forecasts. This crowdsourced approach generates a powerful benchmark: the median consensus forecast tends to be less biased than individual forecasters because outlier errors cancel out through aggregation. However, consensus forecasts exhibit a critical structural limitation—they are inherently backward-looking and extrapolative, mechanically projecting recent inflation trends into future periods. This approach systematically fails at economic inflection points, where forecast errors become largest precisely when they are most costly for investors. Since official CPI figures released by the BLS are reporting the prior month's business period and are not instantaneous, it is possible to use real-time macro data sources to predict the CPI in advance. This is the approach taken by LSEG, which combines millions of real-time datapoints to forecast the BLS CPI well in advance. A real-time, bottom-up component-level approach can overcome the limitation of traditional forecasts by modelling the underlying drivers of specific CPI categories (energy prices, labour costs, supply-chain dynamics) rather than relying on aggregate historical patterns, thereby capturing turning points that aggregate consensus forecasts persistently miss.

The materiality of these accuracy gains warrants clarification. For institutional asset managers, CPI surprises drive immediate portfolio repercussions: positive CPI surprises trigger rotation from growth into value equity, compress long-duration bond valuations, and influence monetary tightening priced into short-duration fixed income. Core CPI, which excludes volatile food and energy components, is especially critical because it provides signal of persistent inflationary pressures that guide Federal Reserve policy paths. Achieving 81.9% directional accuracy on headline CPI MoM changes—versus 75.5% for consensus—translates to superior positioning into official



releases, more reliable input for real-return portfolio construction, and earlier signal of inflation regime changes. The 48.4% hit-rate precision (exact match to nearest basis point) further reduces the uncertainty faced by quantitative and algorithmic trading strategies that depend on finely-calibrated inflation expectations.

Real-time macroeconomic data

Raw economic data does not translate directly into CPI forecasts. The data capture different aspects of pricing behaviour and together provide a richer and earlier view of inflation dynamics than official releases alone. A major driver of forecast accuracy is the quality, timeliness, and breadth of the real-time information feeding the models. Turning these inputs into CPI relevant signals requires substantial processing, econometric forecasting and machine learning expertise.

All data are managed on a point-in-time (PIT) basis. Each forecast uses only information that was available at the time it was produced, ensuring a clean historical record for evaluation and a true real time representation of performance. Finally, the data pipeline is continuously evolving. New sources are regularly evaluated and integrated when they improve coverage, reduce latency, or strengthen predictive power, reflecting an ongoing effort to expand and refine the real-time information set used in the forecasting system.

Forecast definition and evaluation framework

Forecast target

The primary forecast targets are the month-over-month (MoM) and year-over-year (YoY) percentage changes in the Consumer Price Index (CPI). Forecasts are produced at the CPI subcomponent level, with aggregate CPI measures constructed through weighted aggregation of individual subcomponent forecasts using published CPI weights.

For each CPI index or subcomponent, the MoM change at month t is defined as the percentage change in the index relative to the previous month:

$$MoM_{CPI_t} = \frac{CPI_t - CPI_{t-1}}{CPI_{t-1}}$$

The YoY change at month t is defined as the percentage change in the index relative to its level twelve months earlier:

$$YoY_{CPI_t} = \frac{CPI_t - CPI_{t-12}}{CPI_{t-12}}$$

This definition applies uniformly to all forecasted series, including headline CPI, Core CPI, and underlying CPI subindices.

The forecasting process begins at the subcomponent level, where MoM changes are forecast independently for each CPI category. These subcomponent forecasts are then aggregated using official CPI weights to construct forecasts for headline and Core CPI. While year-over-year inflation rates and index levels can be derived from these forecasts, all evaluation in this paper is conducted on the MoM forecast target to preserve comparability and focus on near-term predictive accuracy.

Forecast structure and update cycle

LSEG CPI forecasts are updated continuously as new information becomes available, with forecast revisions occurring in real-time in the run-up to the official BLS release. For the purpose of systematic evaluation and comparison, however, this paper focuses on two representative forecast snapshots produced each month: an Initial forecast and an Updated forecast.

The Initial forecast corresponds to the first published estimate for a given CPI release cycle, while the updated forecast reflects the final estimate produced prior to the official BLS publication, incorporating additional data and signals observed after the initial release. On average, these snapshots are published approximately 20 calendar days and 5 calendar days ahead of the official CPI release, respectively.

All forecasts are generated using a one-step-ahead, point-in-time (PIT) framework, in which the MoM change for the upcoming CPI release is predicted using only information available at the time each forecast is published. Forecast performance is evaluated strictly based on the original publication timestamp, ensuring that results reflect how the forecasts would have appeared to a real-time user.

High-level forecast construction

Forecasts are produced using a bottom-up approach, with MoM CPI changes forecast separately for each CPI subcomponent and then aggregated to headline and Core CPI using official weights. Modelling approaches and data inputs are tailored at the category level to reflect the underlying drivers of each CPI component.

Forecasts are generated in a one-step-ahead framework. At each point in time, machine learning models are trained using only historical realized CPI data and inputs that would have been available as of that date, and a single forecast is produced for the upcoming CPI release. When new data becomes available, models are retrained and the forecast is updated accordingly. This process ensures that forecasts reflect real-time information constraints and that no future outcomes or revisions are used in training or evaluation.

Data inputs include a combination of public macroeconomic releases, proprietary business surveys, business activity measures and real-time macro datasets relevant to the CPI categories being forecast.

Machine learning tools

Machine learning tools are used to enhance forecast accuracy through scientifically disciplined, interpretable modelling. Rather than relying on complex or opaque AI architectures, our approach emphasizes models that can be directly tied to economic mechanisms and evaluated consistently over time. A central focus is the use of data that reflects real economic activity and pricing behaviour, such as transaction-level and survey-based measures, rather than indirect proxies like web traffic or search trends. This emphasis on causally informative inputs, combined with careful feature selection and regularization, allows machine learning to improve forecast precision without sacrificing robustness or economic intuition.

Out-of-Sample evaluation

All forecasts are evaluated strictly out-of-sample and as they existed prior to the CPI release. Inputs and outputs are organized in a point-in-time framework, ensuring that forecasts reflect only information that would have been available at the time they were generated.

Forecast performance is assessed both in absolute terms and relative to benchmark forecasts, including survey consensus and individual economist projections. The evaluation framework is designed to measure real-time forecast accuracy under realistic information constraints.

Accuracy metrics

Forecast performance is evaluated using a combination of magnitude-based error metrics, directional and sign-based metrics, and measures of linear association. All metrics are computed using MoM CPI changes and are evaluated strictly on the out-of-sample period of 2017 November to 2025 September.

Error magnitude metrics

$y_t^{(OBS)}$, $\hat{y}_t^{(OBS)}$
 $t = 1, \dots, T^{(OBS)}$ using percentage-point units.

Mean Absolute Error (MAE) measures the average absolute difference between forecasted and realized CPI month-over-month changes, providing an intuitive measure of typical forecast error in percentage points.

$$MAE = \frac{1}{T} \sum_{t=1}^T |\hat{y}_t - y_t| \quad (1)$$

Root Mean Squared Error (RMSE) measures the square root of the average squared forecast error and places greater weight on larger forecast misses.

$$RMSE = \sqrt{\frac{1}{T} \sum_{t=1}^T (\hat{y}_t - y_t)^2} \quad (2)$$

The coefficient of determination (R²) measures the proportion of variation in realized CPI changes explained by the forecasted series.

$$R^2 = 1 - \frac{\sum_{t=1}^T (y_t - \hat{y}_t)^2}{\sum_{t=1}^T (y_t - \bar{y})^2} \quad (3)$$

Theil's U₁ provides a scale-free measure of forecast accuracy based on the ratio of root mean squared error to the combined magnitude of forecasted and realized values.

$$\text{Theil's } U_1 = \frac{\sqrt{\frac{1}{T} \sum_{t=1}^T (\hat{y}_t - y_t)^2}}{\sqrt{\frac{1}{T} \sum_{t=1}^T \hat{y}_t^2 + \sqrt{\frac{1}{T} \sum_{t=1}^T y_t^2}}} \quad (4)$$

Theil's U Bias measures the extent to which forecast errors arise from systematic differences in the average level of the forecast relative to the realized series. A large bias component indicates persistent over- or under-prediction.

$$\text{Theil's } U_{\text{Bias}} = \frac{(\bar{\hat{y}} - \bar{y})^2}{\frac{1}{T} \sum_{t=1}^T (\hat{y}_t - y_t)^2} \quad (5)$$

Theil's U Variance captures differences in variability between the forecasted and realized series. A large variance component reflects scale mismatches, where the forecast fluctuates too much or too little relative to the realized data.

$$\text{Theil's } U_{\text{Variance}} = \frac{(\sigma_{\hat{y}} - \sigma_y)^2}{\frac{1}{T} \sum_{t=1}^T (\hat{y}_t - y_t)^2} \quad (6)$$

Theil's U Covariance reflects the portion of forecast error attributable to imperfect co-movement between forecasted and realized values. This component captures timing misalignment and turning-point errors rather than level or scale differences.

$$\text{Theil's } U_{\text{Covariance}} = \frac{2(1 - \rho) \sigma_{\hat{y}} \sigma_y}{\frac{1}{T} \sum_{t=1}^T (\hat{y}_t - y_t)^2} \quad (7)$$

Theil's U₂ compares the root mean squared error of the forecast model to that of a naïve benchmark that uses the previous month's realized CPI change as the forecast, providing a scale-free measure of relative forecast accuracy.

$$\text{Theil's } U_2 = \frac{\sqrt{\frac{1}{T} \sum_{t=2}^T (\hat{y}_t - y_t)^2}}{\sqrt{\frac{1}{T} \sum_{t=2}^T (y_{t-1} - y_t)^2}} \quad (8)$$

Directional and sign-based metrics

Pearson correlation measures the linear association between forecasted and realized CPI MoM changes and captures co-movement and turning-point alignment rather than exact magnitude matching.

$$\text{Pearson Correlation} = \frac{\text{Cov}(\hat{y}_t, y_t)}{\sigma_{\hat{y}} \sigma_y} \quad (9)$$

Directional accuracy (DA) measures the percentage of months in which the forecast correctly predicts the direction of the CPI MoM change, defined by agreement in the sign of forecasted and realized changes.

$$\text{Directional Accuracy} = \frac{1}{T-1} \sum_{t=2}^T \mathbb{I}[\text{sign}(\hat{y}_t - \hat{y}_{t-1}) = \text{sign}(y_t - y_{t-1})] \quad (10)$$

Signed correlation measures the correlation between the signs of forecasted and realized CPI MoM changes, capturing directional alignment independent of magnitude.

$$\text{Signed Correlation} = \text{Corr}(\text{sign}(\hat{y}_t - \hat{y}_{t-1}), \text{sign}(y_t - y_{t-1})) \quad (11)$$

Hit-based precision metrics

Hit rate measures the percentage of months in which the forecasted CPI change exactly matches the realized value after rounding both series to three decimal places, reflecting alignment at the precision level used in CPI reporting.

$$\text{Hit Rate (Exact Match)} = \frac{1}{T} \sum_{t=1}^T \mathbb{I}[\text{round}(\hat{y}_t, 3) = \text{round}(y_t, 3)] \quad (12)$$

Hit rate within one tick measures the percentage of months in which the forecasted CPI change, after rounding to three decimal places, falls within ± 0.001 of the similarly rounded realized value. This metric extends the exact-match hit rate by allowing a one-tick tolerance while preserving alignment with the precision level used in CPI reporting.

$$\text{Hit Rate (Within One Tick)} = \frac{1}{T} \sum_{t=1}^T \mathbb{I}[|\text{round}(\hat{y}_t, 3) - \text{round}(y_t, 3)| \leq 0.001] \quad (13)$$

Headline and core CPI results

The LSEG forecasts performed favourably compared to every other economist and consensus forecast estimates. This section presents the out-of-sample performance of CPI forecasts for headline and core inflation over the period from November 2017 to September 2025. Forecast accuracy is evaluated using the metrics defined in Section 3 and benchmarked against survey consensus forecasts, individual economist projections, and simple reference alternatives, all constructed on a comparable pre-release basis. Consensus and economist forecasts are one-month-ahead predictions released prior to the official BLS release.

CPI publication, with initial consensus forecasts typically released approximately 12 days before the CPI release and final consensus forecasts approximately 2 days before; individual economist forecasts are generally issued within a similar 10–2 day window. LSEG Global Macro Forecasts are likewise produced ahead of the CPI release, with initial and updated forecasts released approximately 20 days and 5 days prior to publication, respectively, ensuring a fair and consistent comparison across forecasting approaches.

Summary accuracy metrics

Table 1 summarizes the out-of-sample performance of headline CPI month-over-month forecasts across a range of accuracy metrics. The updated LSEG forecast exhibits materially stronger performance than survey-based consensus benchmarks, achieving a directional accuracy of 81.9%, compared with 75.5% for both the consensus mean and median forecasts. Forecast precision is also higher, with an exact-match hit rate of 48.4% and a ± 1 bp hit rate of 72.6%, exceeding the corresponding consensus hit rates of approximately 32–33% and 68%, respectively. In addition, LSEG forecasts maintain lower forecast errors, with a mean absolute error of 0.0009, compared with 0.0010 for consensus forecasts. Improvements from the initial to updated LSEG forecasts are evident across most metrics, indicating that incorporating additional information closer to the release date meaningfully enhances forecast quality. Overall, the results demonstrate that LSEG headline CPI forecasts deliver superior and robust performance relative to traditional consensus-based approaches.

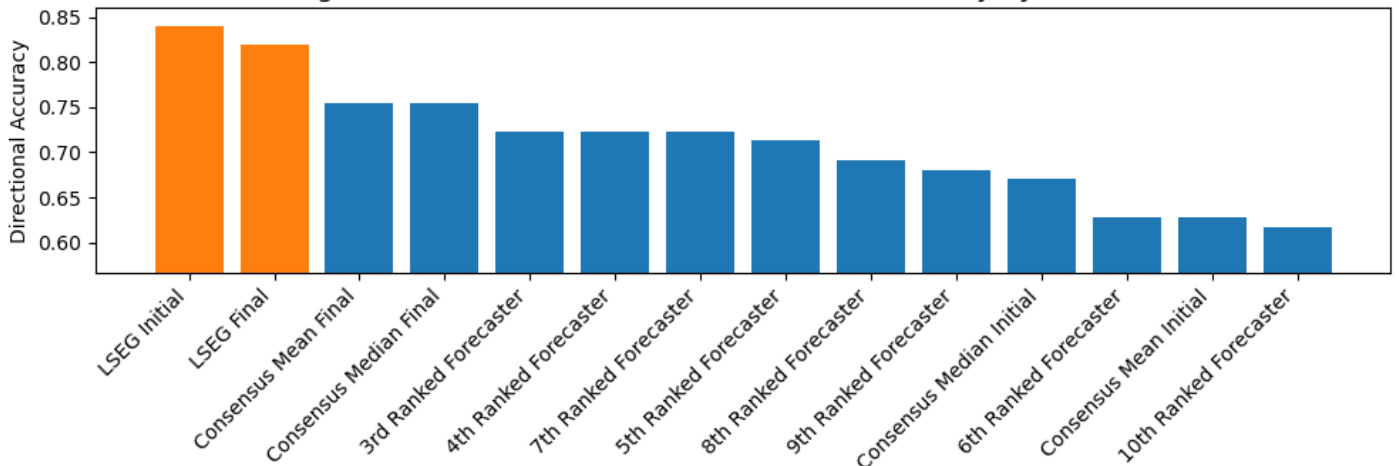
Table 1: Headline MoM forecast performance

Display Name	MAE	RMSE	R2	Corr	DA	DA Rank	Signed Corr	Hit Rate	Hit Rate ± 1 bp	Theil U1	U1 Bias	U1 Variance	U1 Cov	U2
LSEG Final	0.0009	0.0014	0.764	0.891	0.819	2	0.640	0.484	0.726	0.187	0.078	0.203	0.729	0.510
LSEG Initial	0.0010	0.0014	0.746	0.880	0.840	1	0.681	0.421	0.726	0.194	0.078	0.183	0.749	0.529
Consensus Mean Final	0.0010	0.0013	0.805	0.905	0.755	3	0.684	0.316	0.684	0.171	0.016	0.207	0.788	0.441
Consensus Median Final	0.0010	0.0013	0.811	0.907	0.755	3	0.684	0.326	0.684	0.168	0.021	0.183	0.807	0.434
3rd Ranked Forecaster	0.0010	0.0014	0.794	0.895	0.723	4	0.630	0.400	0.684	0.174	0.024	0.104	0.882	0.453
4th Ranked Forecaster	0.0010	0.0013	0.816	0.904	0.723	4	0.630	0.326	0.632	0.160	0.000	0.083	0.927	0.428
5th Ranked Forecaster	0.0010	0.0014	0.775	0.887	0.713	5	0.592	0.400	0.653	0.184	0.042	0.116	0.852	0.473
6th Ranked Forecaster	0.0010	0.0014	0.796	0.902	0.628	9	0.528	0.337	0.642	0.175	0.073	0.105	0.832	0.449
7th Ranked Forecaster	0.0011	0.0016	0.731	0.858	0.723	4	0.630	0.316	0.621	0.199	0.022	0.085	0.903	0.518
8th Ranked Forecaster	0.0011	0.0014	0.784	0.890	0.691	6	0.547	0.316	0.558	0.179	0.030	0.102	0.878	0.464
Consensus Median Initial	0.0011	0.0016	0.731	0.877	0.670	8	0.690	0.326	0.600	0.207	0.015	0.362	0.634	0.517
9th Ranked Forecaster	0.0012	0.0017	0.695	0.856	0.681	7	0.615	0.305	0.558	0.224	0.084	0.213	0.712	0.551
Consensus Mean Initial	0.0012	0.0016	0.710	0.861	0.628	9	0.592	0.305	0.579	0.215	0.028	0.298	0.684	0.536
10th Ranked Forecaster	0.0013	0.0017	0.676	0.841	0.617	10	0.618	0.295	0.537	0.229	0.038	0.271	0.701	0.568

This table reports headline CPI month-over-month forecast accuracy metrics by forecaster over the period of Nov 2017 – Sept 2025.

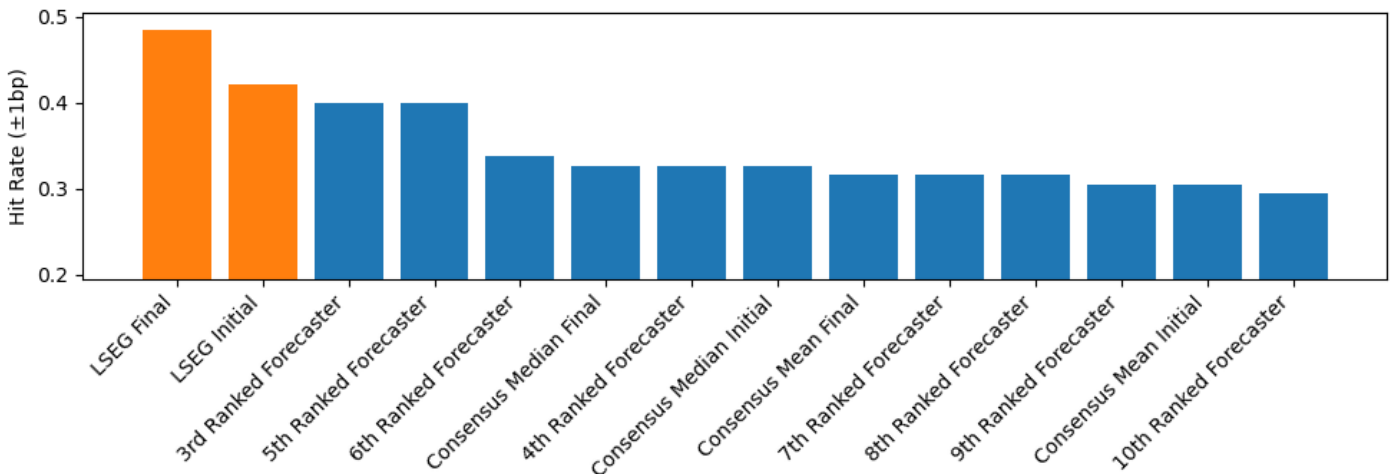
Figures 1 through 3 provide a visual representation of selected summary metrics reported in Table 5.1, including directional accuracy, hit rate, and mean absolute error across individual forecasters, consensus benchmarks, and LSEG forecasts. These figures reinforce the tabular results by illustrating the relative ranking of forecasters across key performance dimensions and highlight the consistent outperformance of LSEG forecasts relative to consensus and individual forecasters.

Figure 1: Headline CPI MoM direction accuracy by forecaster



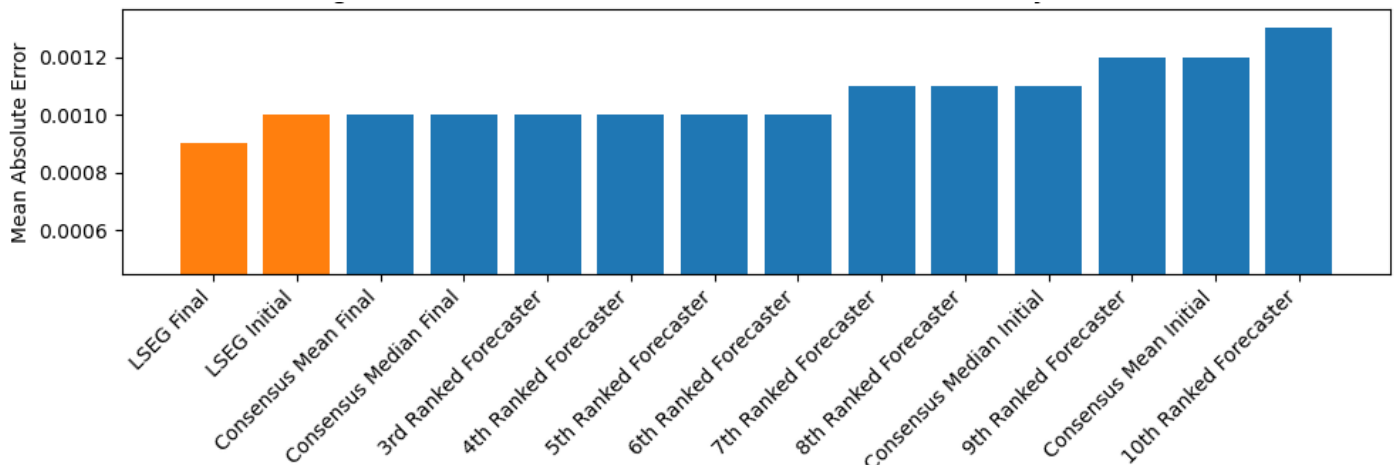
This bar chart compares directional accuracy across forecasters, ordered by performance.

Figure 2: Headline CPI MoM forecast hit rate by forecaster



This bar chart compares forecast hit rate across forecasters, ordered by performance.

Figure 3: Headline CPI MoM forecast error (MAE) by forecaster



This bar chart compares mean absolute forecast error across forecasters, ordered by performance.

Tables 2 through 4 report corresponding accuracy metrics for headline CPI year-over-year forecasts, as well as Core CPI month-over-month and year-over-year forecasts and show performance patterns that are broadly consistent with the headline MoM results.

Table 2: Headline YoY forecast performance metrics

Display Name	MAE	RMSE	R2	Corr	DA	DA Rank	Signed Corr	Hit Rate	Hit Rate ±1bp	Theil U1	U1 Bias	U1 Variance	U1 Cov	U2
LSEG Final	0.0009	0.0014	0.996	0.998	0.851	3	0.703	0.389	0.737	0.018	0.074	0.041	0.894	0.347
LSEG Initial	0.0010	0.0015	0.995	0.998	0.894	1	0.787	0.389	0.726	0.018	0.074	0.062	0.874	0.361
3rd Ranked Forecaster	0.0011	0.0015	0.995	0.998	0.787	6	0.787	0.274	0.568	0.018	0.033	0.064	0.913	0.355
Consensus Mean Final	0.0011	0.0014	0.996	0.998	0.862	2	0.864	0.253	0.589	0.018	0.041	0.058	0.912	0.347
Consensus Median Final	0.0011	0.0014	0.996	0.998	0.862	2	0.864	0.274	0.579	0.017	0.026	0.049	0.936	0.340
4th Ranked Forecaster	0.0012	0.0016	0.995	0.998	0.840	4	0.800	0.337	0.516	0.020	0.024	0.146	0.841	0.387
5th Ranked Forecaster	0.0012	0.0017	0.994	0.997	0.840	4	0.817	0.358	0.579	0.021	0.013	0.048	0.950	0.410
Consensus Median Initial	0.0013	0.0017	0.994	0.997	0.830	5	0.846	0.232	0.537	0.021	0.010	0.056	0.944	0.418
Consensus Mean Initial	0.0014	0.0018	0.993	0.997	0.830	5	0.844	0.232	0.495	0.022	0.022	0.071	0.917	0.433

This table reports headline CPI year-on-year forecast accuracy metrics by forecaster over the period of Nov 2017 – Sept 2025.

Table 3: Core MoM forecast performance metrics

Display Name	MAE	RMSE	R2	Corr	DA	DA Rank	Signed Corr	Hit Rate	Hit Rate ±1bp	Theil U1	U1 Bias	U1 Variance	U1 Cov	U2
LSEG Final	0.0009	0.0014	0.501	0.716	0.553	1	0.105	0.411	0.768	0.214	0.024	0.154	0.833	0.86
LSEG Initial	0.0009	0.0014	0.501	0.716	0.553	1	0.105	0.411	0.768	0.214	0.024	0.154	0.833	0.86
3rd Ranked Forecaster	0.0012	0.0017	0.275	0.541	0.245	2	0.131	0.284	0.579	0.272	0.020	0.228	0.763	0.992
4th Ranked Forecaster	0.001	0.0015	0.465	0.695	0.234	3	0.160	0.337	0.642	0.232	0.016	0.305	0.689	0.851
5th Ranked Forecaster	0.0011	0.0015	0.415	0.646	0.234	3	0.043	0.284	0.579	0.239	0.004	0.245	0.761	0.891
6th Ranked Forecaster	0.0012	0.0015	0.415	0.650	0.234	3	-0.063	0.263	0.537	0.240	0.012	0.200	0.799	0.890
7th Ranked Forecaster	0.0011	0.0015	0.453	0.677	0.213	4	-0.014	0.326	0.632	0.231	0.005	0.268	0.738	0.861
Consensus Mean Final	0.001	0.0014	0.506	0.721	0.202	5	0.167	0.347	0.653	0.220	0.006	0.303	0.701	0.818
Consensus Median Final	0.001	0.0014	0.501	0.719	0.202	5	0.192	0.358	0.663	0.221	0.004	0.316	0.690	0.822
Consensus Median Initial	0.001	0.0014	0.478	0.699	0.202	5	0.088	0.358	0.642	0.227	0.007	0.285	0.718	0.841
Consensus Mean Initial	0.0011	0.0015	0.434	0.665	0.181	6	0.072	0.347	0.632	0.237	0.007	0.294	0.710	0.876
8th Ranked Forecaster	0.0012	0.0016	0.326	0.571	0.138	7	-0.039	0.326	0.611	0.254	0.000	0.288	0.723	0.956
9th Ranked Forecaster	0.0012	0.0018	0.237	0.497	0.128	8	-0.083	0.284	0.621	0.277	0.008	0.262	0.741	1.017

This table reports core CPI month-over-month forecast accuracy metrics by forecaster over the period of Nov 2017 – Sept 2025.

Table 4: Core YoY forecast performance metrics

Display Name	MAE	RMSE	R2	Corr	DA	DA Rank	Signed Corr	Hit Rate	Hit Rate ±1bp	Theil U1	U1 Bias	U1 Variance	U1 Cov	U2
LSEG Final	0.0009	0.0014	0.992	0.996	0.755	1	0.509	0.411	0.695	0.019	0.023	0.000	0.988	0.512
LSEG Initial	0.0009	0.0014	0.992	0.996	0.755	1	0.509	0.411	0.695	0.019	0.023	0.000	0.988	0.512
Consensus Mean Final	0.001	0.0015	0.991	0.996	0.606	2	0.521	0.358	0.621	0.020	0.010	0.003	0.998	0.543
Consensus Median Final	0.0011	0.0015	0.990	0.995	0.585	3	0.505	0.326	0.589	0.020	0.011	0.005	0.994	0.559
3rd Ranked Forecaster	0.0012	0.0017	0.988	0.994	0.585	3	0.432	0.232	0.526	0.023	0.001	0.001	1.008	0.619
4th Ranked Forecaster	0.0012	0.0016	0.989	0.995	0.585	3	0.412	0.263	0.537	0.022	0.005	0.028	0.978	0.593
Consensus Mean Initial	0.0011	0.0015	0.990	0.995	0.564	4	0.520	0.347	0.589	0.021	0.012	0.007	0.992	0.567
Consensus Median Initial	0.001	0.0015	0.991	0.995	0.553	5	0.496	0.347	0.600	0.020	0.010	0.005	0.996	0.553
5th Ranked Forecaster	0.0013	0.0019	0.985	0.993	0.553	5	0.369	0.274	0.505	0.025	0.036	0.000	0.974	0.696

This table reports core CPI year-over-year forecast accuracy metrics by forecaster over the period of Nov 2017 – Sept 2025.

Accuracy Performance Over Time

Forecast accuracy is consistent across evaluation horizons. As shown in Tables 5 through 7, LSEG’s CPI forecasts rank at the top in terms of hit rate when evaluated over life-to-date, trailing twelve-month, and trailing twenty-four-month windows. Both the Initial and Final LSEG forecasts demonstrate strong performance relative to consensus measures and individual economists across all three evaluation periods, with LSEG forecasts consistently occupying the highest-ranked positions. Importantly, the results show that forecast accuracy is not driven by a single period or regime but remains robust over time as new information is incorporated.

Table 5: Life-to-date headline CPI hit rate comparison

Forecaster	Hit Rate	Rank
LSEG Final	0.484	1
LSEG Initial	0.474	2
3rd ranked forecaster	0.432	3
4th ranked forecaster (tie)	0.400	4
Consensus Median	0.326	6
Consensus Mean	0.316	7

This table displays the hit rate by forecasters for the life-to-date period from Nov 2017 – Sept 2025.

Table 6: Trailing 12-month headline CPI hit rate comparison

Forecaster	Hit Rate	Rank
LSEG Final	0.667	1
LSEG Initial	0.667	1
1st ranked forecaster (tie)	0.667	1
4th ranked forecaster (tie)	0.583	4
Consensus Mean	0.333	6
Consensus Median	0.333	6

This table displays the hit rate by forecaster for the trailing 12-month period from Oct 2024 – Sept 2025.

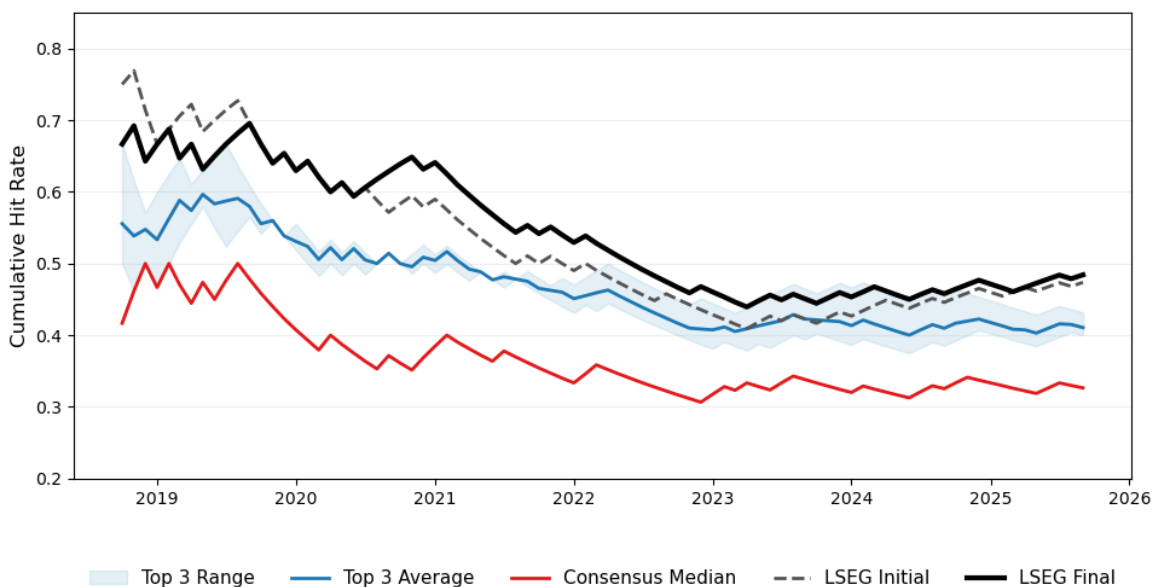
Table 7: Trailing 24-month headline CPI hit rate comparison

Forecaster	Hit Rate	Rank
LSEG Initial	0.625	1
LSEG Final	0.583	2
3rd ranked forecaster	0.500	3
4th ranked forecaster (tie)	0.458	4
Consensus Mean	0.292	6
Consensus Median	0.292	6

This table displays the hit rate by forecaster for the trailing 24-month period from Oct 2023 – Sept 2025.

Figure 4 plots the cumulative hit rate of LSEG forecasts, survey-based consensus forecasts, and the average performance of the top three economists over time, beginning in the second year of the evaluation sample. The top three economist benchmark is constructed based on overall performance across the full sample period. The cumulative hit-rate trajectories show that both LSEG Initial and LSEG Final forecasts maintain consistently higher cumulative accuracy than consensus forecasts, while also outperforming the average of the top three economists for the majority of the sample. This pattern indicates that LSEG forecasts accumulate correct predictions at a faster and more stable rate over time, reinforcing that performance advantages persist across multiple inflation regimes rather than being driven by short-lived episodes.

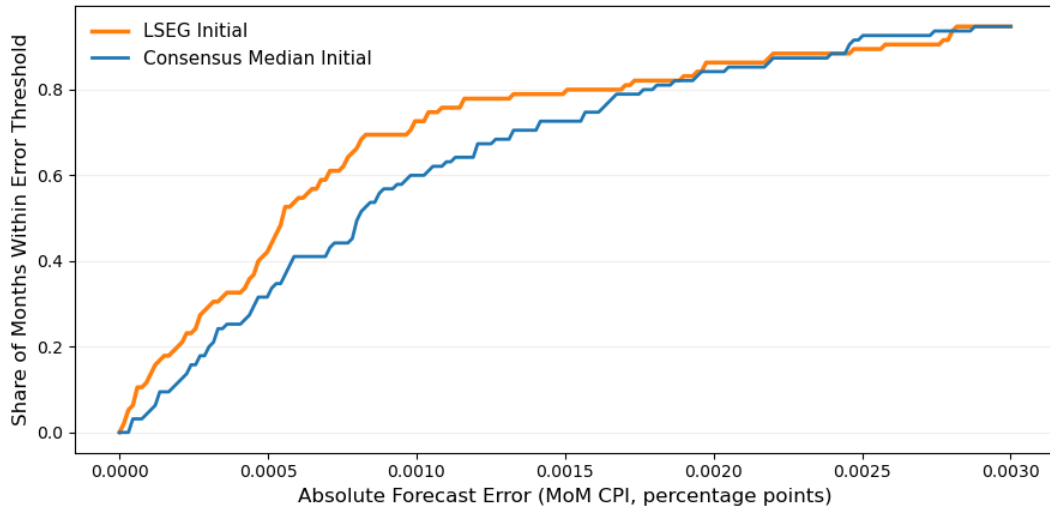
Figure 4: Cumulative CPI forecast hit rate over time



Cumulative hit rate comparison for LSEG’s Global Macro Forecasts consensus median and the average of the top three economists.

Figure 5 presents the cumulative distribution of absolute forecast errors for LSEG and survey-based consensus CPI forecasts. For each error threshold on the horizontal axis, the vertical axis reports the share of months in which the absolute forecast error falls within that threshold. Higher curves therefore indicate greater forecast precision, as a larger fraction of forecasts lie close to the realized CPI outcome.

Figure 5: Distribution of absolute forecast errors – Initial forecasts



Cumulative distribution of absolute forecast errors comparing LSEG’s Global Macro Forecasts with consensus forecasts.

LSEG’s Global Macro Forecast error curve lies above the corresponding consensus curve across nearly all error thresholds, indicating that LSEG forecasts are closer to realized CPI outcomes more frequently than consensus forecasts for any reasonable definition of forecast accuracy. This dominance across the entire error distribution demonstrates that LSEG’s performance advantage is systematic and not driven by isolated months or a particular choice of error magnitude.

Across headline and core CPI forecasts, and for both month-over-month and year-over-year horizons, LSEG Global Macro Forecasts consistently rank at the top across all evaluated accuracy metrics. LSEG forecasts exhibit lower forecast errors, higher hit rates, and stronger directional accuracy than survey-based consensus measures and individual economist projections. Performance improvements are evident for both initial and updated forecasts, with updates systematically enhancing precision and directional correctness as new information becomes available. Taken together, these results indicate that LSEG forecasts deliver robust and consistently superior inflation estimates ahead of official CPI releases, reflecting a durable forecasting process rather than period-specific or metric-specific advantages.

Conclusion

This paper provides a rigorous out-of-sample evaluation of the US CPI forecasts produced by LSEG, focusing on headline CPI, Core CPI, and selected CPI subcomponents. We assess forecast accuracy using multiple diagnostic measures and benchmark results against survey consensus forecasts, and the world's leading individual economist projections, and simple reference alternatives. Across the evaluation period, LSEG's CPI forecasts demonstrate consistently strong performance. For both headline and Core CPI, forecast accuracy materially exceeds that of consensus benchmarks and every other economist, with lower average errors, higher directional accuracy, and stronger alignment with realized CPI movements. Relative to individual economist forecasts, LSEG's CPI predictions rank favourably within the cross-sectional distribution, achieving higher win rates and robust percentile rankings across releases.

The degree of outperformance becomes particularly pronounced in the most recent period from January 2025 through September 2025. Over this interval, LSEG's forecasts outperform consensus benchmarks across every evaluated metric, achieving a hit rate of 56%, perfect directional accuracy (100%), and a mean absolute error of 0.0005. By comparison, consensus forecasts over the same period record a substantially lower hit rate of 33%, directional accuracy of 78%, and a materially higher mean absolute error of 0.0009, underscoring the magnitude and consistency of LSEG's relative forecasting advantage in the current inflation environment. Results at the subcomponent level further reinforce these findings. Forecasts for Gasoline and Used Cars and Trucks exhibit strong out-of-sample accuracy despite elevated volatility, and their performance contributes meaningfully to aggregate CPI results.

This consistency across components indicates that headline and Core CPI accuracy is supported by underlying forecasting skill, high quality real-time data and a disciplined machine learning process rather than aggregation effects alone. Taken together, the empirical evidence confirms that LSEG's Global Macroeconomic Forecasts delivers the most accurate and reliable CPI estimates ahead of official releases. By combining a bottom-up forecasting structure with strict real-time evaluation, the framework provides a transparent and reproducible basis for measuring inflation dynamics and establishes a high standard for CPI forecast performance relative to existing market benchmarks.

While this paper focuses on forecast accuracy, the ultimate objective for institutional investors is the translation of macroeconomic insight into actionable investment decisions.

Forecast today what's coming tomorrow – for more information [please contact sales](#).

© 2026 LSEG. Reproduction or redistribution of LSEG content, including by framing or similar means, is prohibited without the prior written consent of LSEG. LSEG is not liable for any errors or delays in LSEG content, or for any actions taken in reliance on such content. LSEG Data & Analytics logo is a trademark of LSEG and its affiliated companies.

lseg.com

