Unemployment Rate

Date	Latest	Change from Year Ago	Latest Revision	Date Revised	Revision Percentile
2024-05-03	3.9	8.33%	-0.10	2023-10-01	25.62%

Unemployment Rate Path Analysis

Figure 1: Unemployment Rate Compared to Paths of Past Yield Curve Inversion Periods
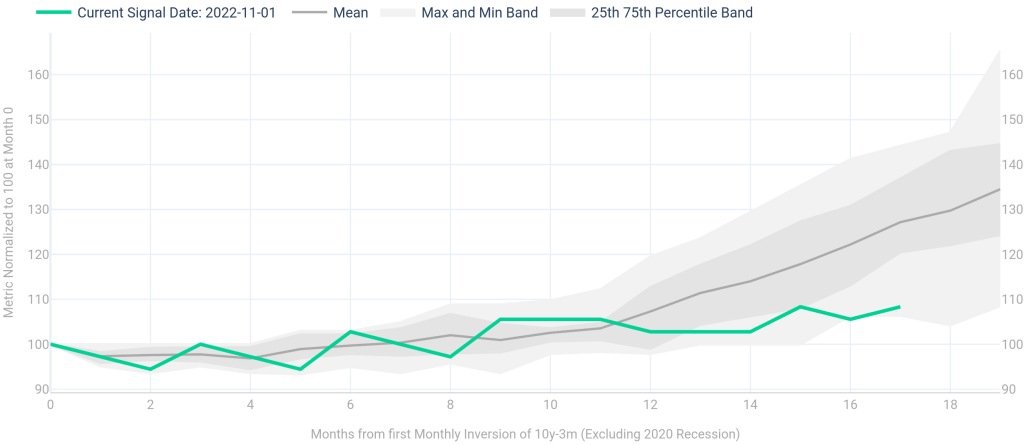
Unemployment Rate values are tracking below past values in 10Y-3M Inversion regimes.

Figure 2: Unemployment Rate by Inflation Regime
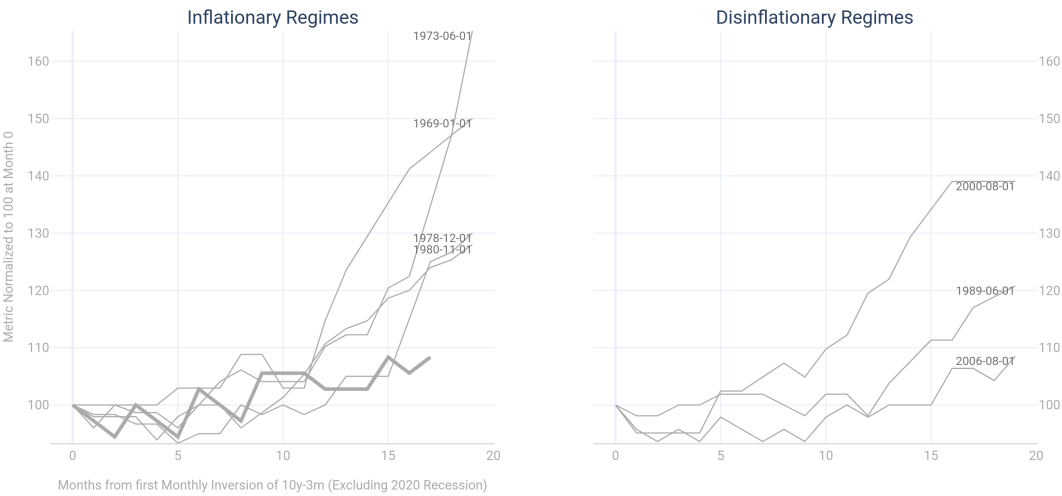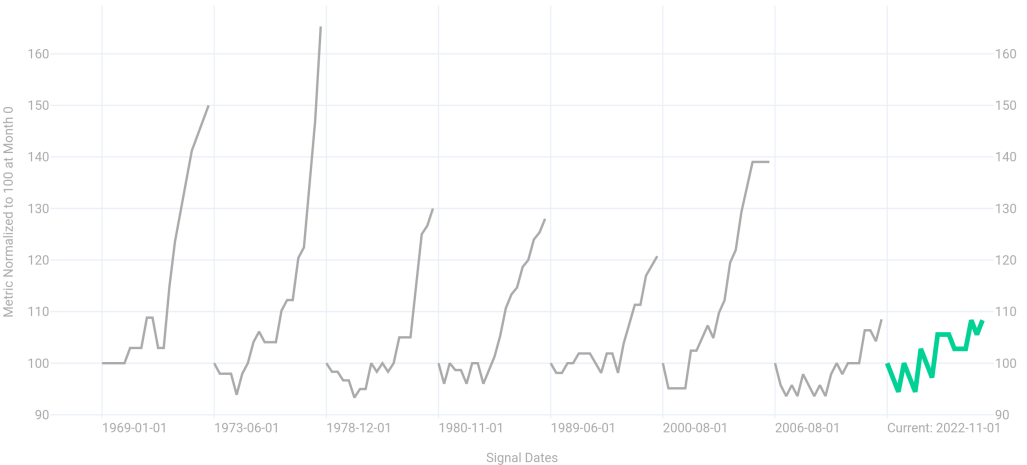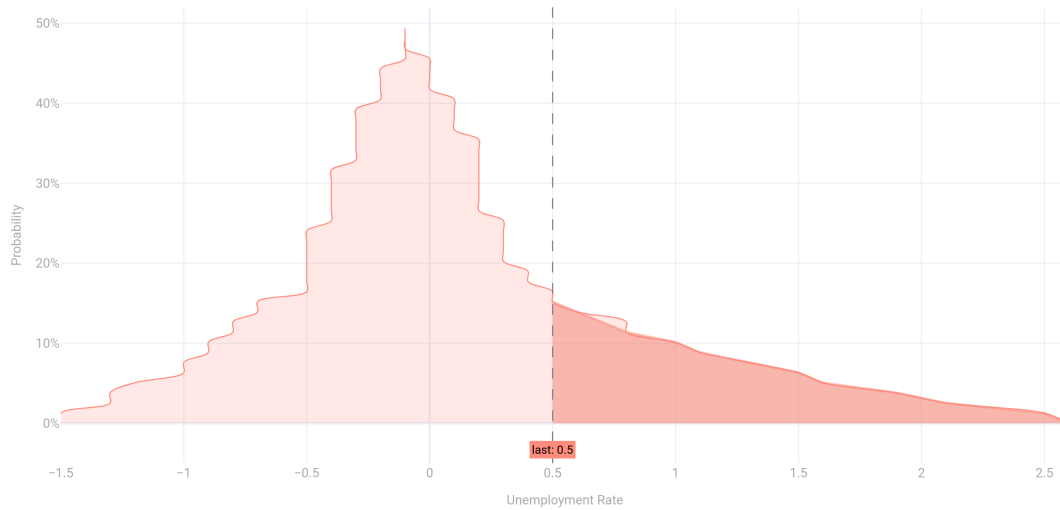

Figure 3: Unemployment Rate By Period Following Yield Curve Inversion

## Year-over-Year Analysis of Unemployment Rate

Figure 4: Latest Unemployment Rate Data vs. Prior Pre-Recessionary Regimes

The yearly Unemployment Rate change ranks 84.18% for the Pre-Recessionary regime. Values within + or - 0.6 from the mean of 0.0 are normal for the Pre-Recessionary regime.

An yearly Unemployment Rate change of 0.5 is unfavorably higher than the -0.1 median value of Unemployment Rate in this regime, suggesting economic weakness.

Figure 5: Comparison Across Other Business Cycle Regimes
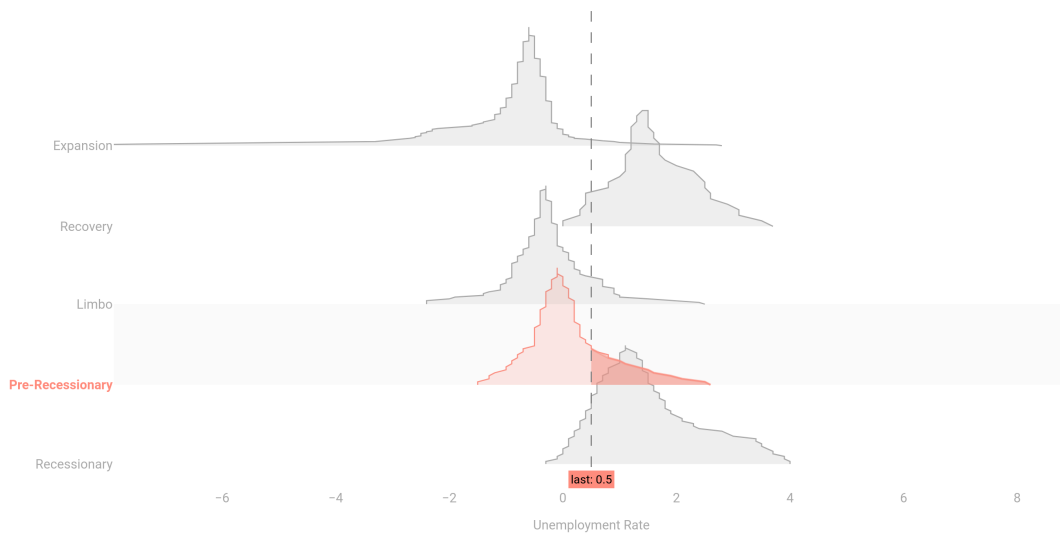
Yearly Unemployment Rate changes larger than 1.6 or smaller than -1.0 are improbable on any given month and could suggest the Pre-Recessionary regime is changing.

The Pre-Recessionary regime is ranked 3rd out of the 5 regimes, indicating a moderate levels of variability of values compared to other regimes.

Figure 6: Unemployment Rate Yearly Change Summary by Regime

Regime	Mean Abs Dev	Median	1st Percentile	5th Percentile	95th Percentile	99th Percentile
Economic Expansion	0.5	-0.6	-4.8	-2.5	0.0	1.3
Economic Recovery	0.7	1.5	0.1	0.3	3.1	3.6
Economic Limbo	0.5	-0.3	-2.3	-1.2	0.9	2.3
Pre-Recessionary	**0.6**	**-0.1**	**-1.3**	**-1.0**	**1.6**	**2.5**
Recessionary	0.9	1.1	-0.1	0.0	3.7	4.0

All Employees, Total Nonfarm

Date	Latest	Change from Year Ago	Latest Revision	Date Revised	Revision Percentile
2024-05-03	**158,286**	**4.28%**	**-22**	**2024-03-01**	**45.23%**

All Employees, Total Nonfarm Path Analysis

Figure 1: All Employees, Total Nonfarm Compared to Paths of Past Yield Curve Inversion Periods
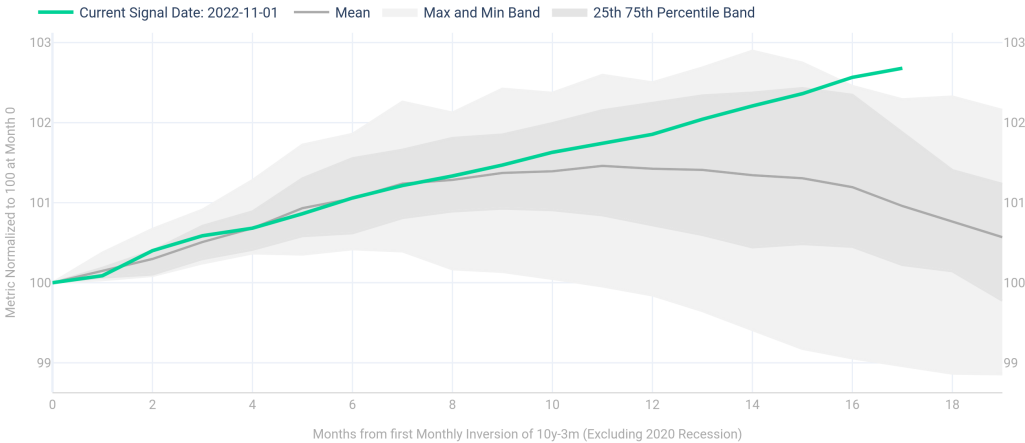
All Employees, Total Nonfarm values are tracking well above past values in 10Y-3M Inversion regimes.

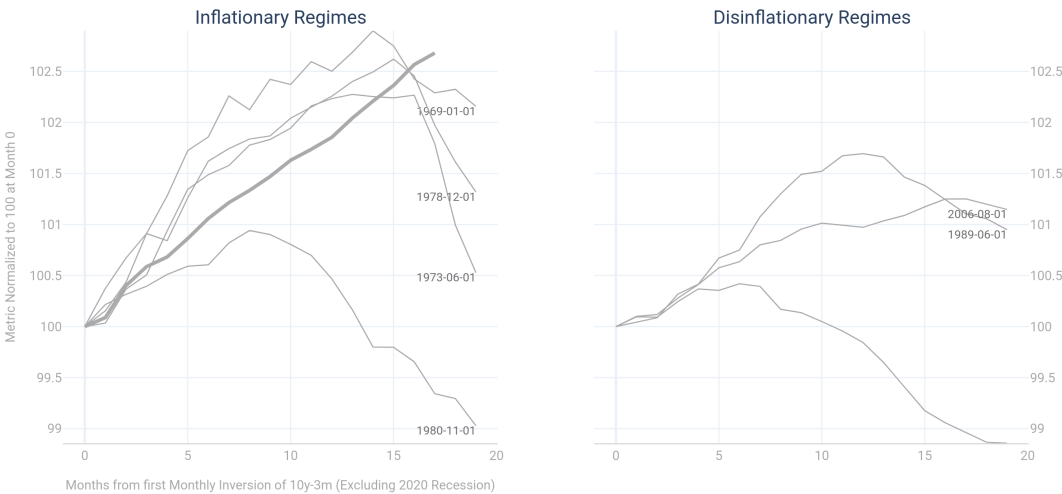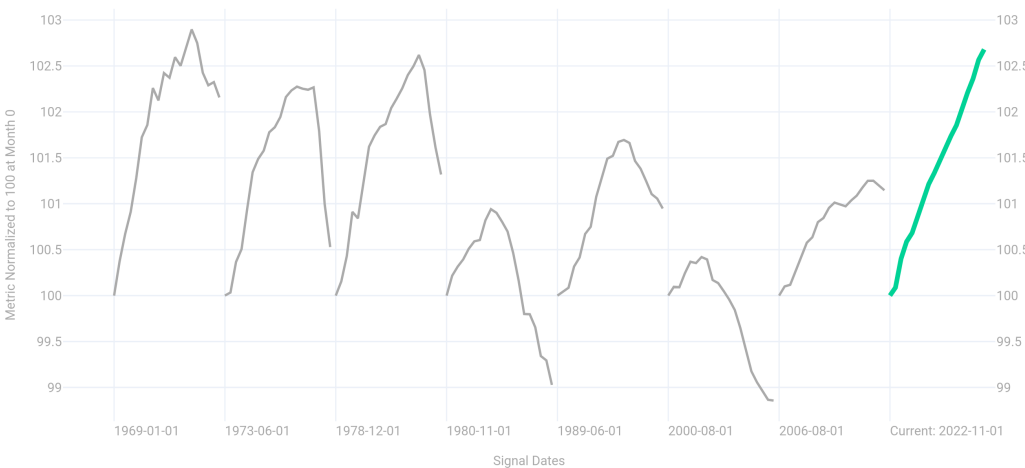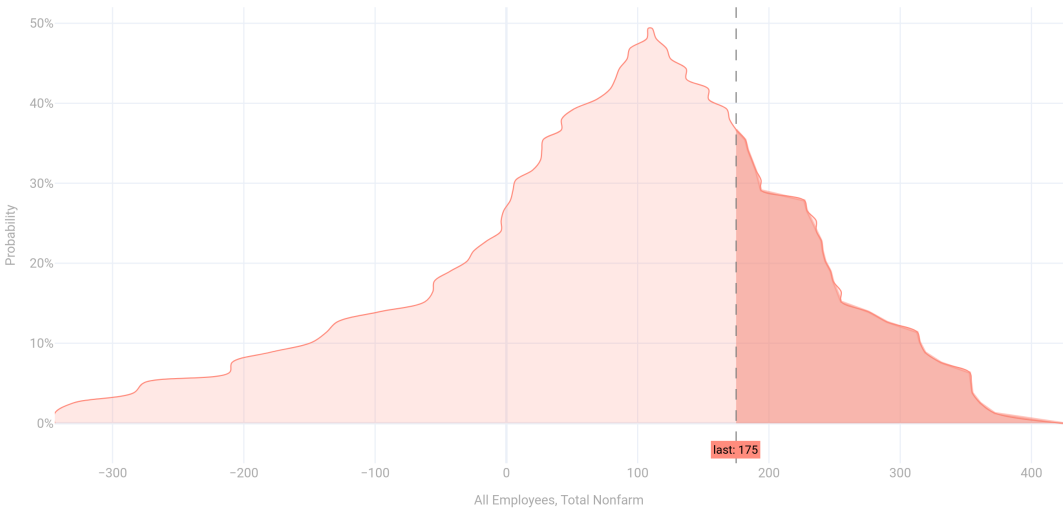**Figure 2: All Employees, Total Nonfarm by Inflation Regime**

Figure 3: All Employees, Total Nonfarm By Period Following Yield Curve Inversion

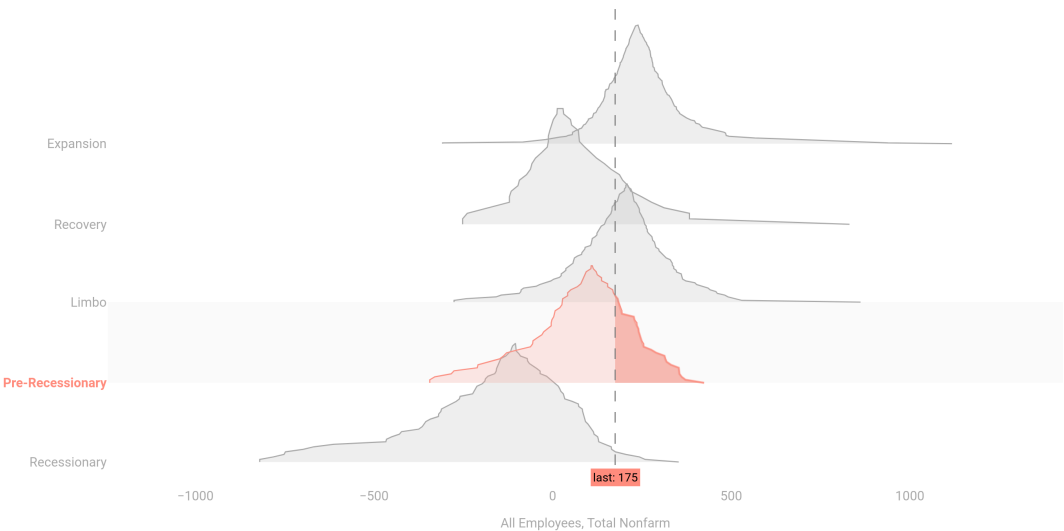# Month-over-Month Analysis of All Employees, Total Nonfarm

Figure 4: Latest All Employees, Total Nonfarm Data vs. Prior Pre-Recessionary Regimes

The monthly All Employees, Total Nonfarm change ranks 63.29% for the Pre-Recessionary regime. Values within + or - 140 from the mean of 98 are normal for the Pre-Recessionary regime.

Our composite model indicates that we are currently in a Pre-Recessionary regime. An monthly All Employees, Total Nonfarm change of 175 is in-line with historical Pre-Recessionary prints.

Figure 5: Comparison Across Other Business Cycle Regimes

Monthly All Employees, Total Nonfarm changes larger than 354 or smaller than -217 are improbable on any given month and could suggest the Pre-Recessionary regime is changing.

The Pre-Recessionary regime is ranked 4th out of the 5 regimes, indicating a higher levels of variability of values compared to other regimes.

Figure 6: All Employees, Total Nonfarm Monthly Change Summary by Regime

Regime	Mean Abs Dev	Median	1st Percentile	5th Percentile	95th Percentile	99th Percentile
Economic Expansion	99	240	-49	62	473	787
Economic Recovery	137	29	-247	-174	376	643
Economic Limbo	119	209	-214	-83	447	524
Pre-Recessionary	**140**	**111**	**-333**	**-217**	**354**	**383**
Recessionary	191	-104	-785	-679	169	266

Year-over-Year Analysis of All Employees, Total Nonfarm

Figure 7: Latest All Employees, Total Nonfarm Data vs. Prior Pre-Recessionary Regimes

The yearly All Employees, Total Nonfarm change ranks 63.29% for the Pre-Recessionary regime. Values within + or - 1,337 from the mean of 1,992 are normal for the Pre-Recessionary regime.

An yearly All Employees, Total Nonfarm change of 2,802 is in-line with historical prints.

Figure 8: Comparison Across Other Business Cycle Regimes

Yearly All Employees, Total Nonfarm changes larger than 4,107 or smaller than -812 are improbable on any given month and could suggest the Pre-Recessionary regime is changing.

The Pre-Recessionary regime is ranked 3rd out of the 5 regimes, indicating a moderate levels of variability of values compared to other regimes.
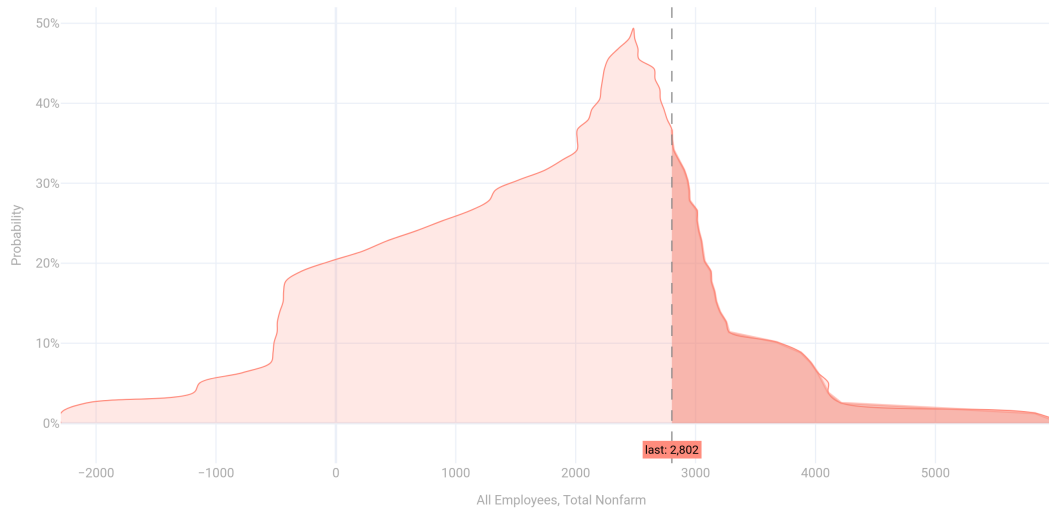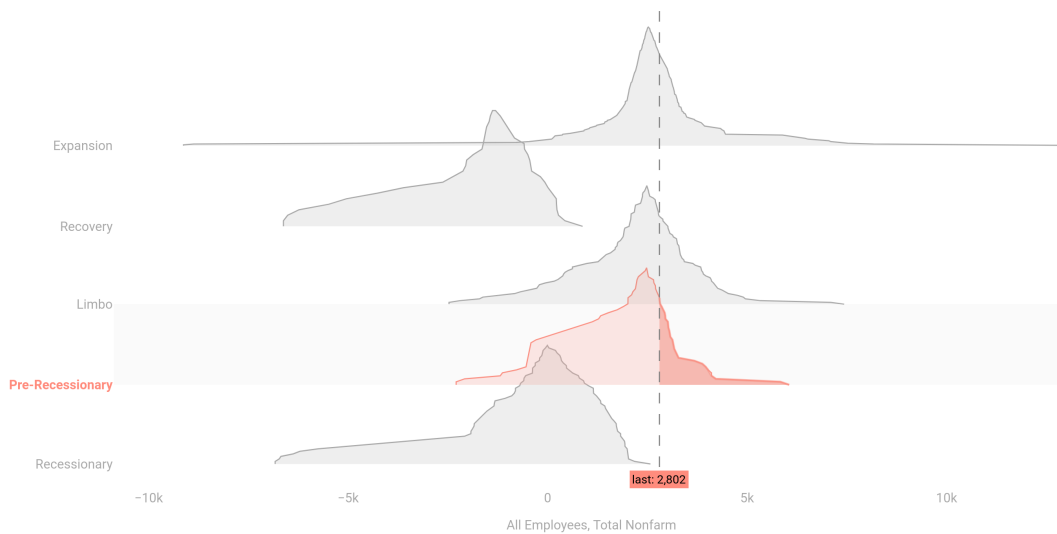
Figure 9: All Employees, Total Nonfarm Yearly Change Summary by Regime

Regime	Mean Abs Dev	Median	1st Percentile	5th Percentile	95th Percentile	99th Percentile
Economic Expansion	961	2,536	-847	620	4,456	7,592
Economic Recovery	1,378	-1,308	-6,579	-6,158	267	690
Economic Limbo	1,156	2,494	-2,040	-566	4,485	6,515
Pre-Recessionary	**1,337**	**2,483**	**-2,127**	**-812**	**4,107**	**5,880**
Recessionary	1,627	12	-6,736	-5,920	2,002	2,210

Revision Analysis of All Employees, Total Nonfarm

Figure 10: Latest Revision Data vs. Prior Pre-Recessionary Regimes

The last revision occured for the 2024-03-01 data release when the model was in the Pre-Recessionary regime. The All Employees, Total Nonfarm revision ranks 45.23% for the Pre-Recessionary regime. Values within + or - 550 are normal for the Pre-Recessionary regime.

An All Employees, Total Nonfarm revision of -22 is in-line with historical revisions.

Figure 11: All Employees, Total Nonfarm Revision Summary by Regime

All Employees, Total Nonfarm revisions larger than 1,432 or smaller than -737 are improbable in the Pre-Recessionary regime.

The All Employees, Total Nonfarm are least predictable in the Pre-Recessionary regime with the highest variability of revisions among all regimes.
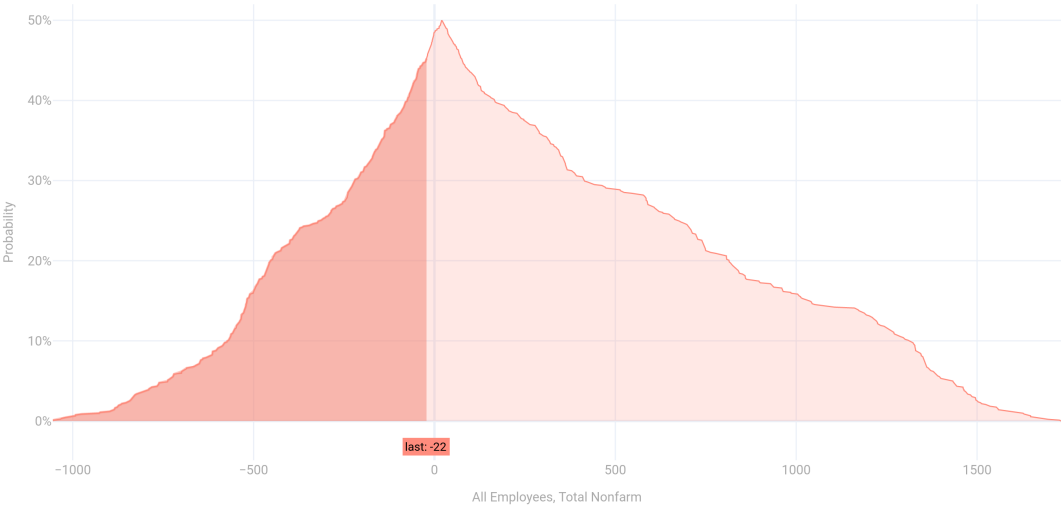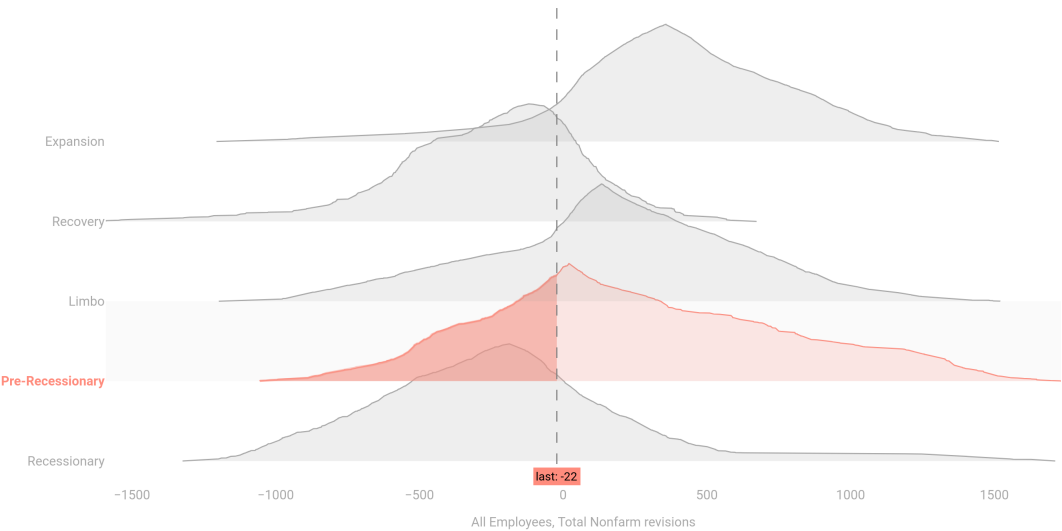
Figure 12: All Employees, Total Nonfarm Revision Summary by Regime

Regime	Mean Abs Dev	Median	1st Percentile	5th Percentile	95th Percentile	99th Percentile
Economic Expansion	395	354	-955	-365	1,170	1,436
Economic Recovery	359	-112	-1,361	-895	386	568
Economic Limbo	439	134	-977	-811	1,072	1,362
Pre-Recessionary	**550**	**21**	**-919**	**-737**	**1,432**	**1,622**
Recessionary	446	-194	-1,194	-1,062	530	1,538

Employed, Usually Work Full Time

Date	Latest	Change from Year Ago	Latest Revision	Date Revised	Revision Percentile
2024-05-03	**133,889.0**	**1.68%**	**-113**	**2023-11-01**	**14.12%**

Employed, Usually Work Full Time Path Analysis

Figure 1: Employed, Usually Work Full Time Compared to Paths of Past Yield Curve Inversion Periods
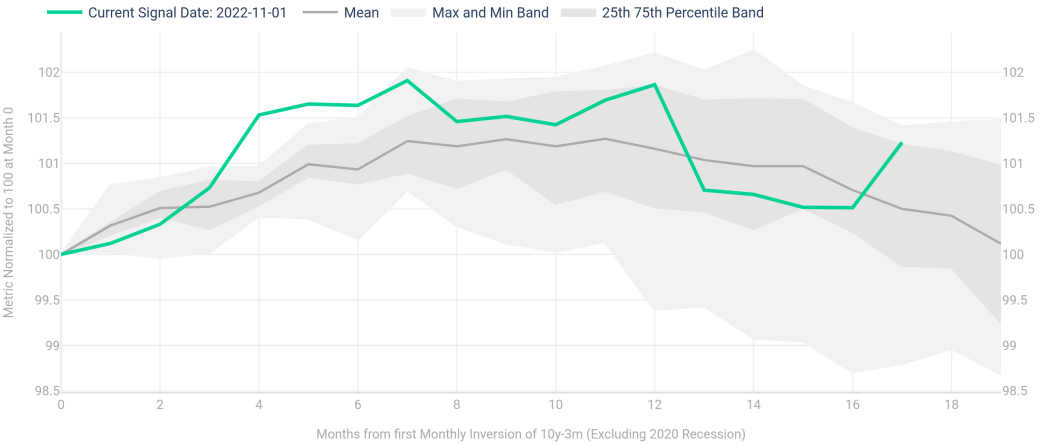
Employed, Usually Work Full Time values are tracking above past values in 10Y-3M Inversion regimes.

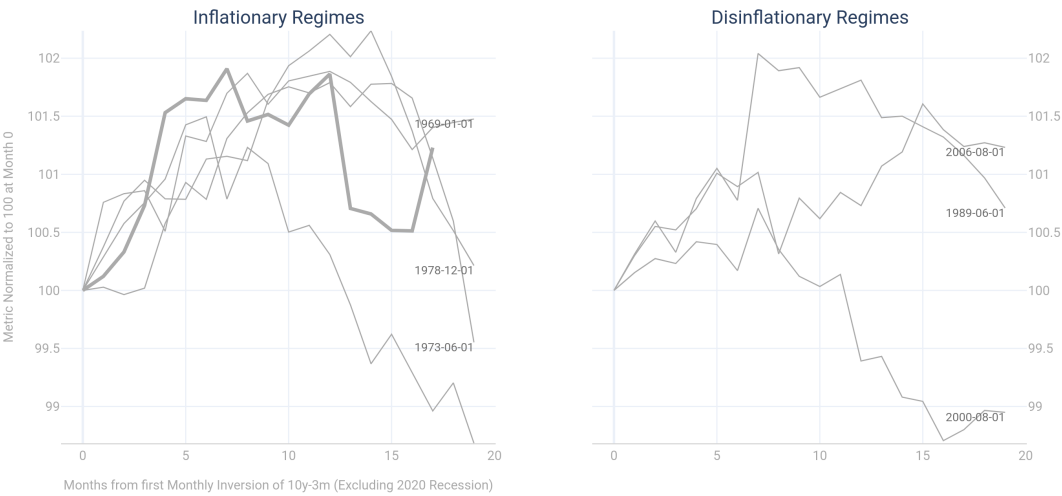**Figure 2: Employed, Usually Work Full Time by Inflation Regime**

Figure 3: Employed, Usually Work Full Time By Period Following Yield Curve Inversion
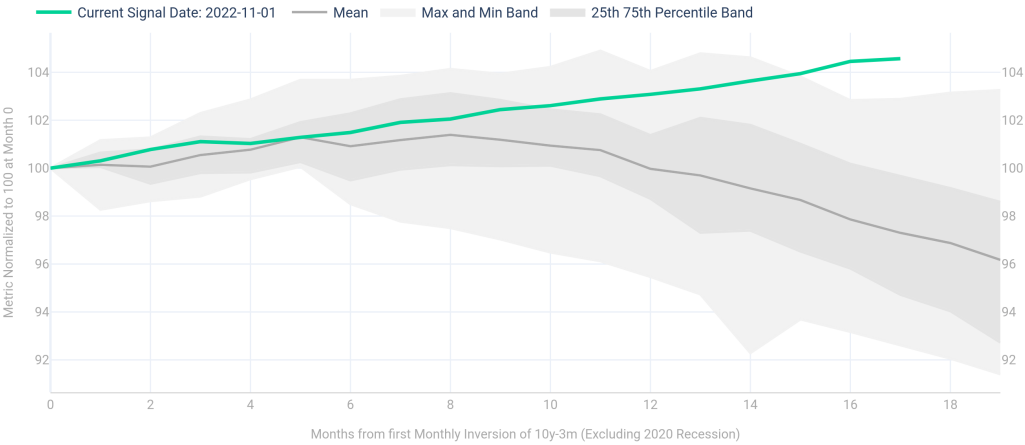
All Employees, Construction

Date	Latest	Change from Year Ago	Latest Revision	Date Revised	Revision Percentile
2024-05-03	**8,219.0**	**9.19%**	**-1.00**	**2024-03-01**	**52.41%**

All Employees, Construction Path Analysis

Figure 1: All Employees, Construction Compared to Paths of Past Yield Curve Inversion Periods

All Employees, Construction values are tracking well above past values in 10Y-3M Inversion regimes.

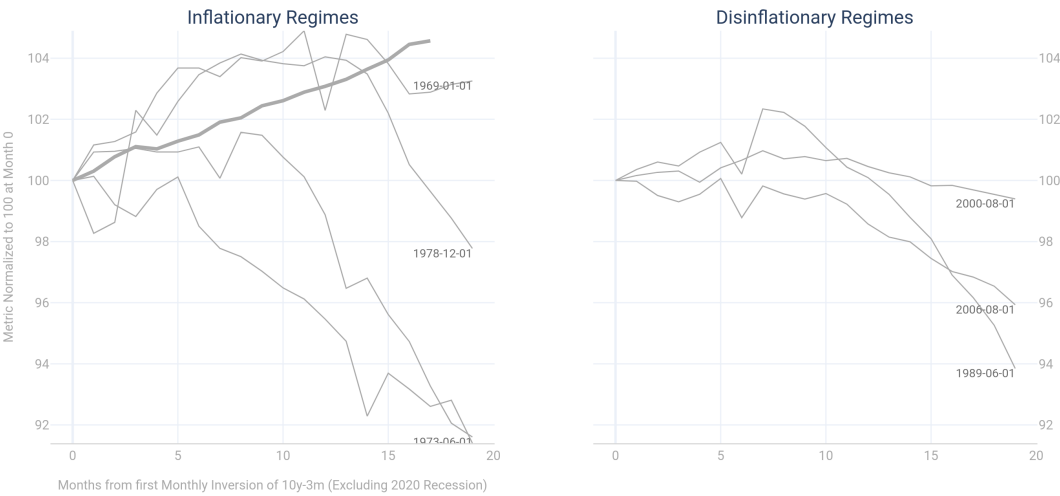**Figure 2: All Employees, Construction by Inflation Regime**

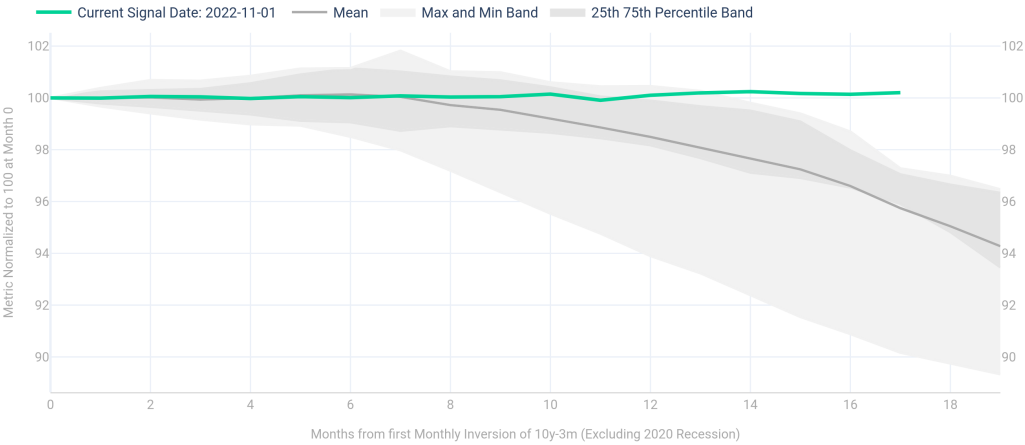**Figure 3: All Employees, Construction By Period Following Yield Curve Inversion**

All Employees, Manufacturing

Date	Latest	Change from Year Ago	Latest Revision	Date Revised	Revision Percentile
2024-05-03	**12,961.0**	**1.27%**	**-3**	**2024-03-01**	**65.96%**

All Employees, Manufacturing Path Analysis

Figure 1: All Employees, Manufacturing Compared to Paths of Past Yield Curve Inversion Periods

All Employees, Manufacturing values are tracking well above past values in 10Y-3M Inversion regimes.

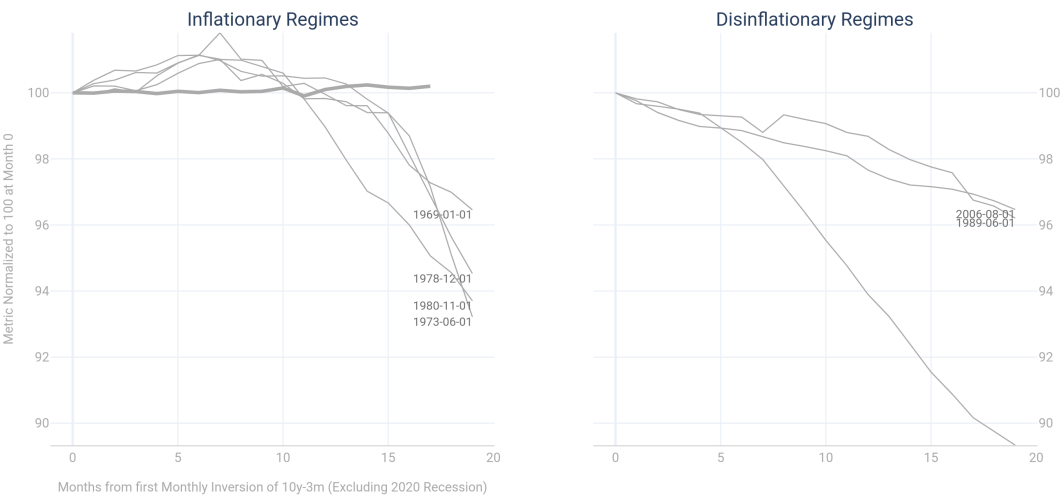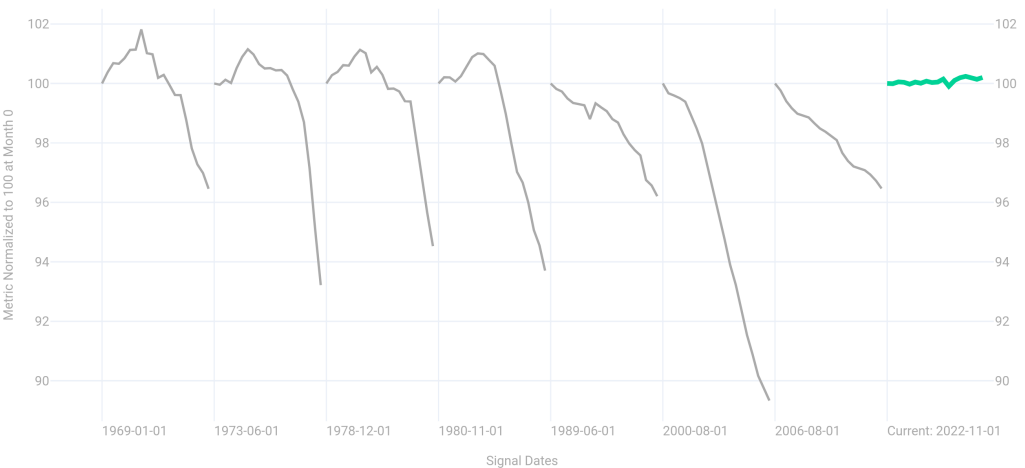**Figure 2: All Employees, Manufacturing by Inflation Regime**

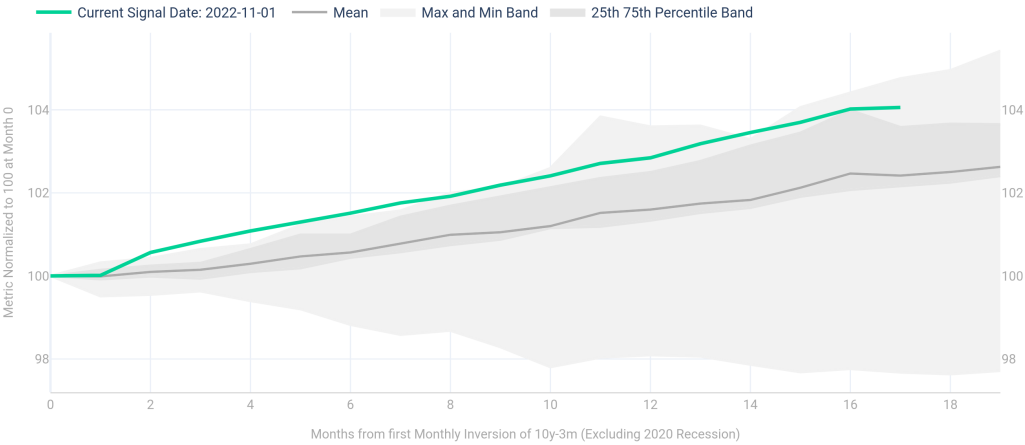**Figure 3: All Employees, Manufacturing By Period Following Yield Curve Inversion**

All Employees, Government

Date	Latest	Change from Year Ago	Latest Revision	Date Revised	Revision Percentile
2024-05-03	23,271.0	2.40%	-7	2024-03-01	29.11%

All Employees, Government Path Analysis

Figure 1: All Employees, Government Compared to Paths of Past Yield Curve Inversion Periods

All Employees, Government values are tracking above past values in 10Y-3M Inversion regimes.

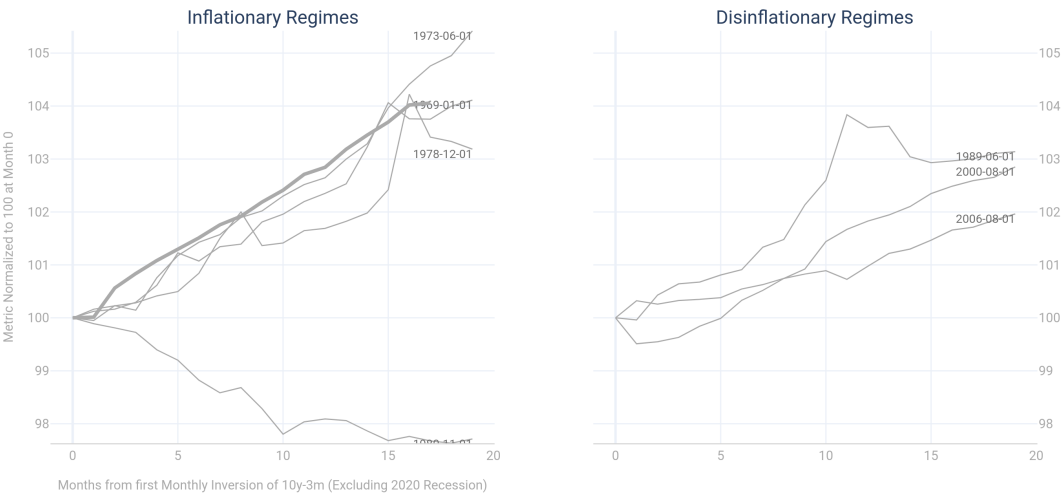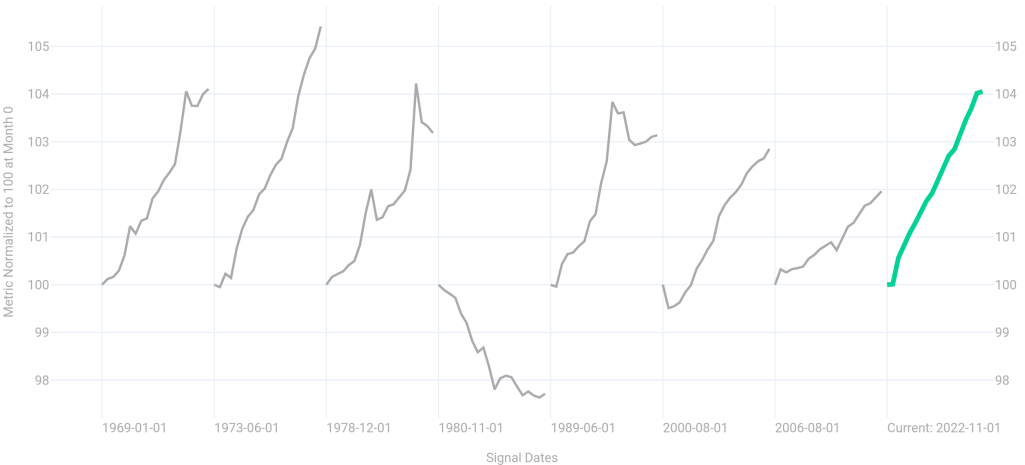### Figure 2: All Employees, Government by Inflation Regime

Figure 3: All Employees, Government By Period Following Yield Curve Inversion

All Employees, Leisure and Hospitality

Date	Latest	Change from Year Ago	Latest Revision	Date Revised	Revision Percentile
2024-05-03	**16,897.0**	**0.55%**	**-13**	**2024-03-01**	**27.17%**

All Employees, Leisure and Hospitality Path Analysis

Figure 1: All Employees, Leisure and Hospitality Compared to Paths of Past Yield Curve Inversion Periods
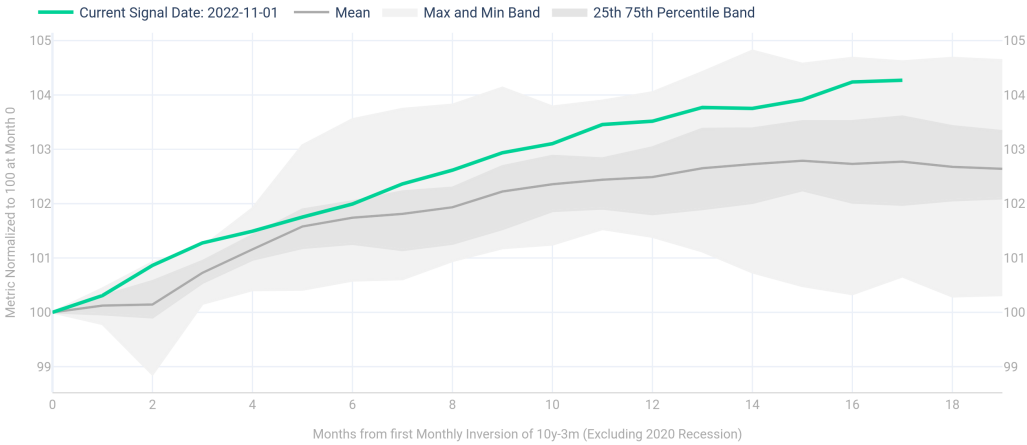
All Employees, Leisure and Hospitality values are tracking above past values in 10Y-3M Inversion regimes.

Figure 2: All Employees, Leisure and Hospitality by Inflation Regime
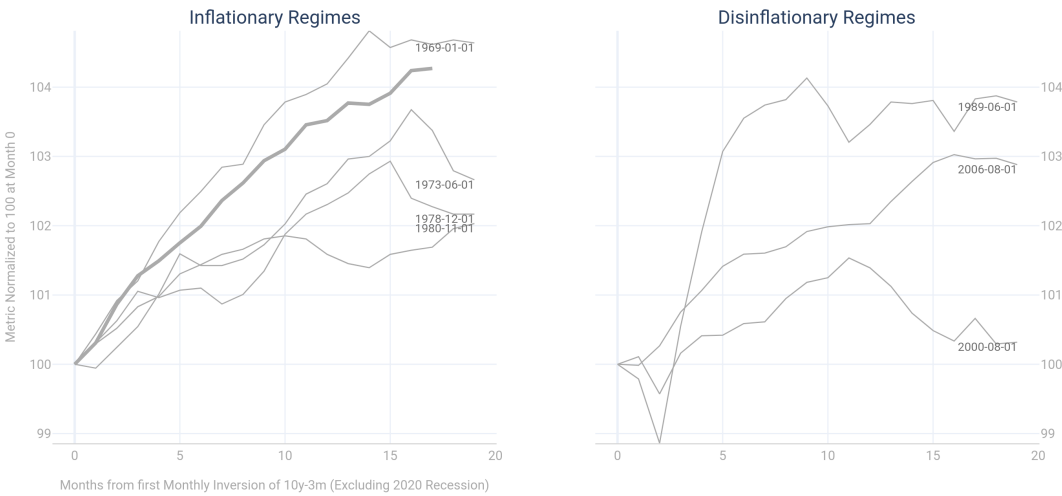
Figure 3: All Employees, Leisure and Hospitality By Period Following Yield Curve Inversion
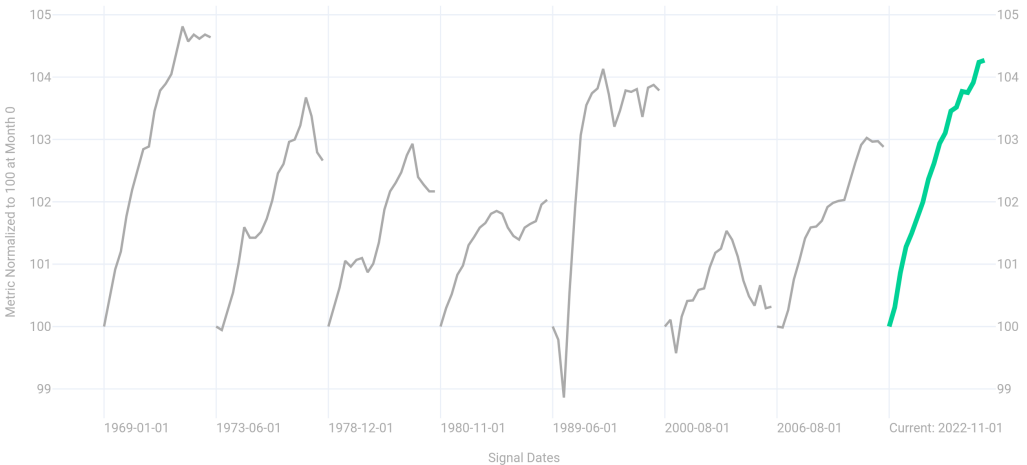
All Employees, Retail Trade

Date	Latest	Change from Year Ago	Latest Revision	Date Revised	Revision Percentile
2024-05-03	15,677.9	0.85%	-2	2024-03-01	54.08%

All Employees, Retail Trade Path Analysis

Figure 1: All Employees, Retail Trade Compared to Paths of Past Yield Curve Inversion Periods
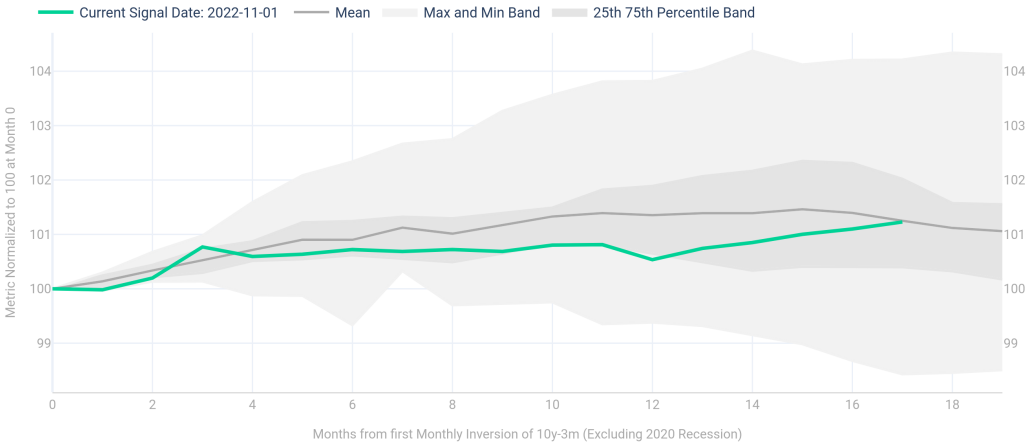
All Employees, Retail Trade values are in line with past values in 10Y-3M Inversion regimes.

Figure 2: All Employees, Retail Trade by Inflation Regime
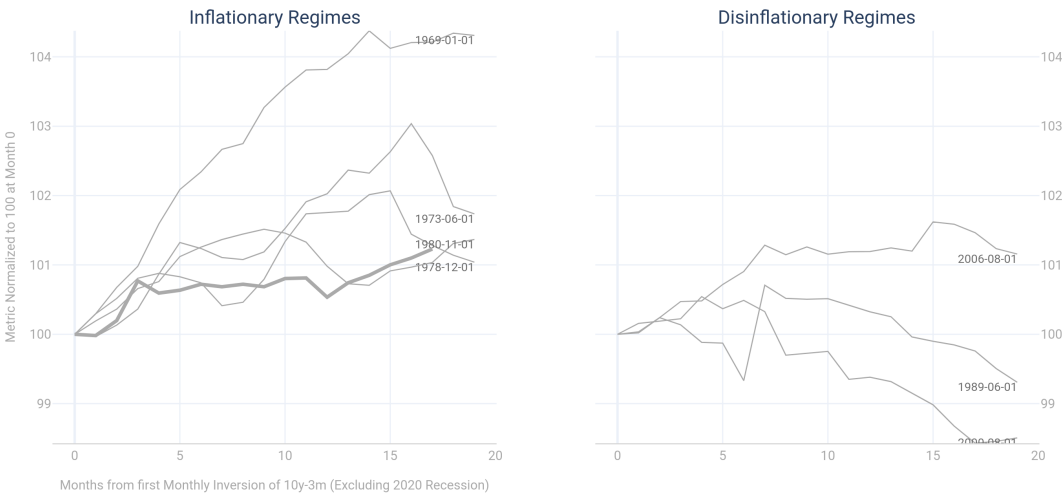
Figure 3: All Employees, Retail Trade By Period Following Yield Curve Inversion

All Employees, Professional and Business Services

Date	Latest	Change from Year Ago	Latest Revision	Date Revised	Revision Percentile
2024-05-03	22,942.0	7.10%	-8	2024-03-01	41.80%

All Employees, Professional and Business Services Path Analysis

Figure 1: All Employees, Professional and Business Services Compared to Paths of Past Yield Curve Inversion Periods
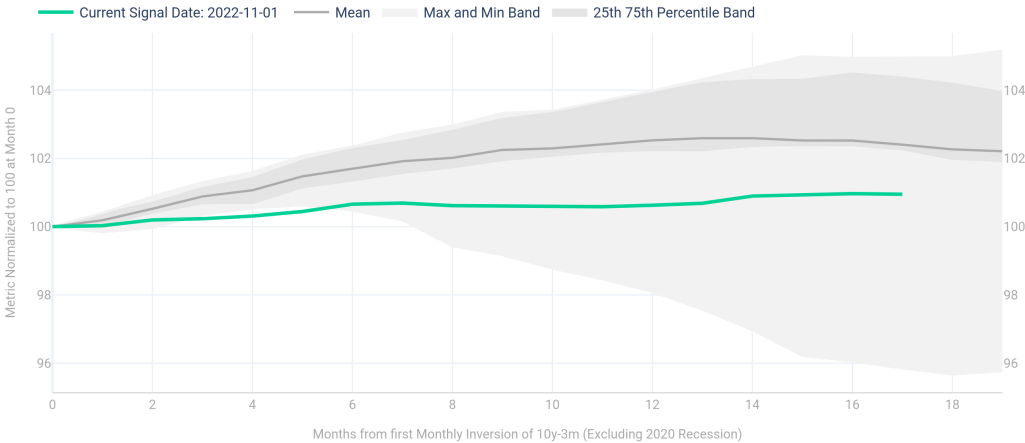
All Employees, Professional and Business Services values are tracking below past values in 10Y-3M Inversion regimes.

Figure 2: All Employees, Professional and Business Services by Inflation Regime
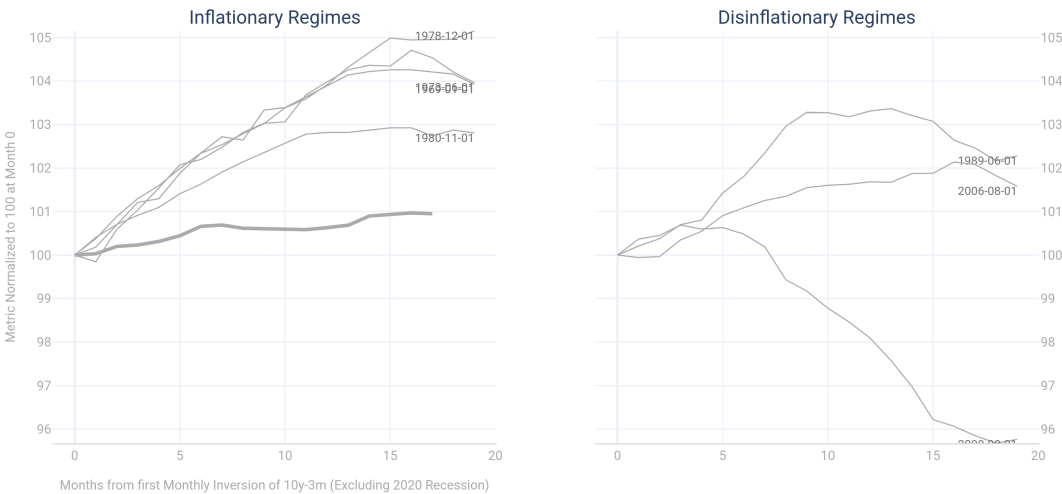
Figure 3: All Employees, Professional and Business Services By Period Following Yield Curve Inversion
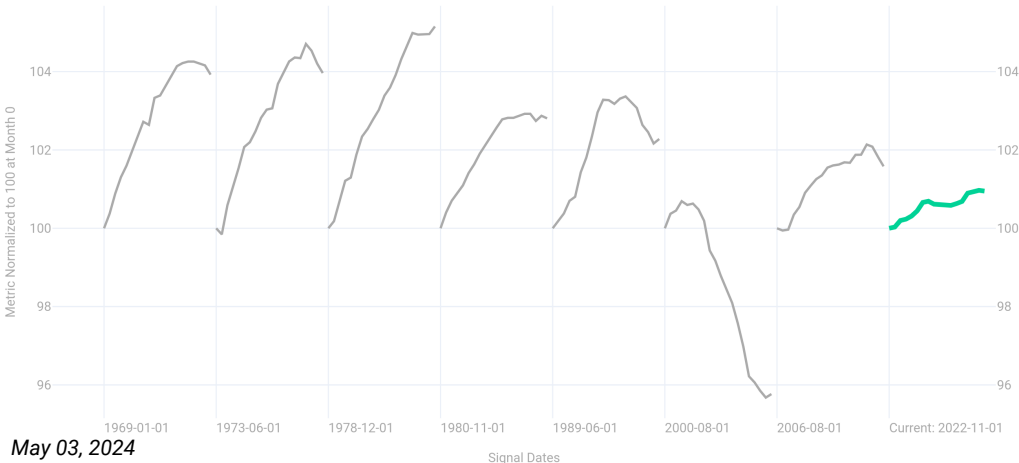
All Employees, Total Private

Date	Latest	Change from Year Ago	Latest Revision	Date Revised	Revision Percentile
2024-05-03	135,015.0	4.61%	-15	2024-03-01	50.65%

All Employees, Total Private Path Analysis

Figure 1: All Employees, Total Private Compared to Paths of Past Yield Curve Inversion Periods
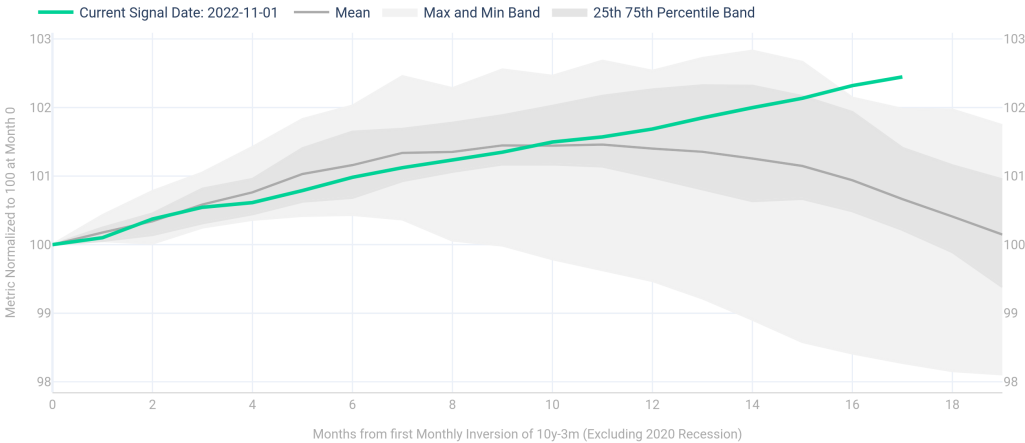
All Employees, Total Private values are tracking well above past values in 10Y-3M Inversion regimes.

Figure 2: All Employees, Total Private by Inflation Regime

**Figure 3: All Employees, Total Private By Period Following Yield Curve Inversion**

Summary Page 1: Macrodial Composite Model
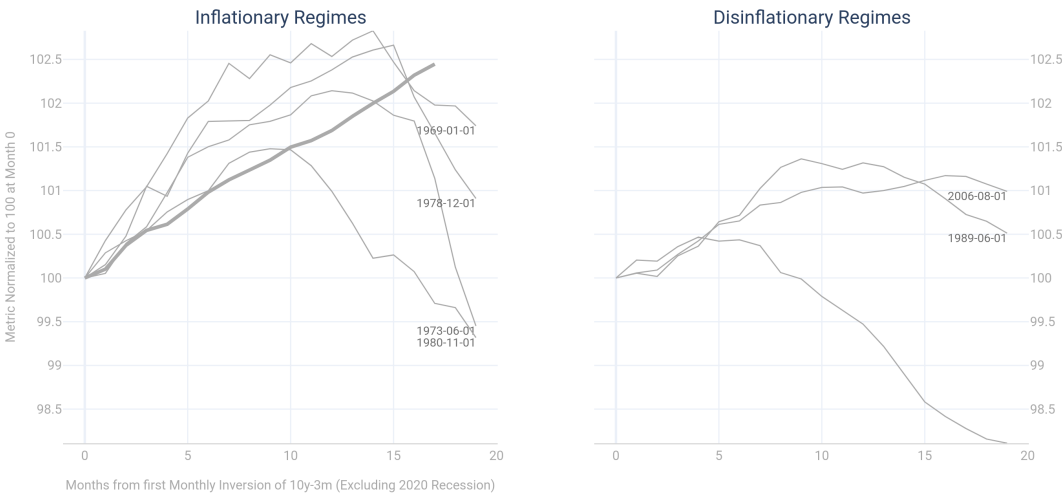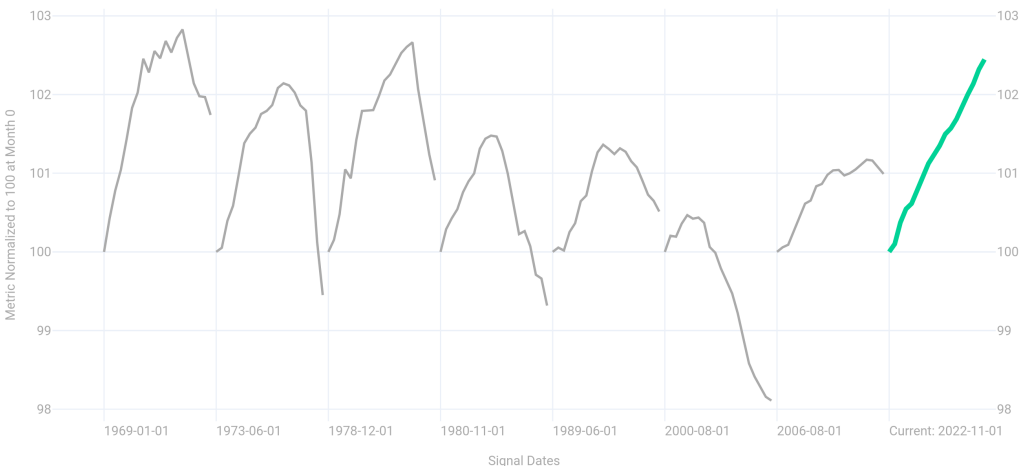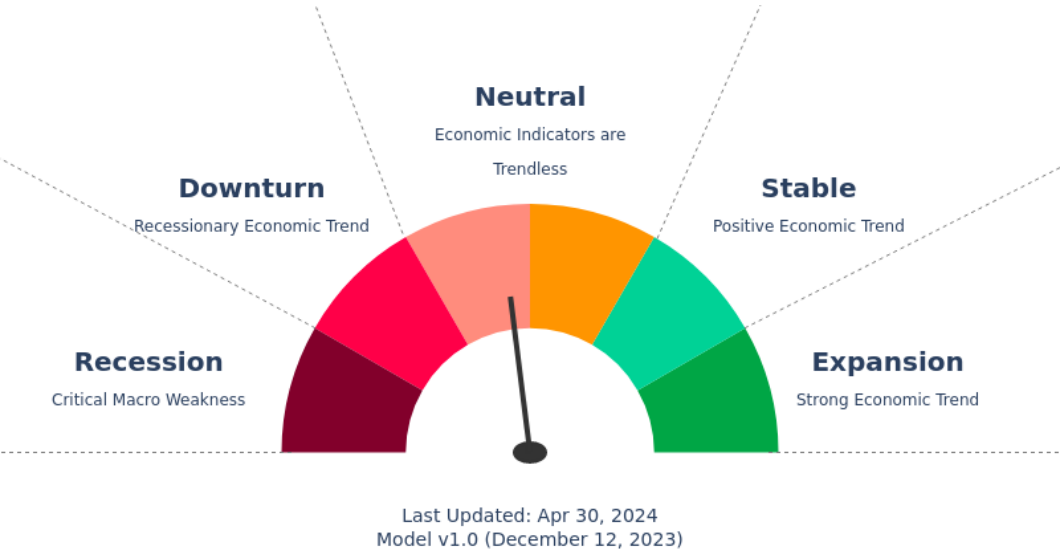

Last Updated: Apr 30, 2024
Model v1.0 (December 12, 2023)

The Macro Composite model is currently in the Pre-Recessionary regime. The model score is -5.0 and has changed 5.0 points since last month.

Historical View of Macro Dial Composite Components

	May 23	Jun 23	Jul 23	Aug 23	Sep 23	Oct 23	Nov 23	Dec 23	Jan 24	Feb 24	Mar 24	Apr 24
VIX Vs. Yield Curve	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
Unemployment Rate	1	1	-1	1	-1	-1	-1	-1	-1	-1	-1	-1
U Michigan Sentiment	0	-1	1	1	1	1	-1	-1	1	1	1	1
Truck Transport Employees	1	1	1	1	-1	-1	-1	-1	0	-1	-1	-1
Personal Savings Rate	1	1	1	1	1	1	1	1	1	1	1	1
New Housing Starts	-1	1	-1	0	-1	-1	-1	1	1	-1	1	-1
Margin Debt	-1	-1	-1	-1	1	1	1	1	1	1	1	1
Initial Claims	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1
Continued Claims	-1	-1	1	1	1	1	-1	-1	-1	-1	-1	1
Consumer Price Index	1	1	1	1	1	1	1	1	1	1	1	1
Advance Retail Sales	1	1	1	1	1	1	1	1	1	-1	1	1
10Y-3M Reversion	0	0	0	1	0	0	0	0	0	0	0	0
10Y-3M Inversion	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
Net Indicative Contribution	0	0	0	6	2	2	-2	0	3	-4	0	0

Indicative Contribution to Model Score

Positive

None

Negative

6 of 13 economic indicators are contributing positively to the Macro Dial score.

Summary Page 2: Indicator Paths Analysis

Economic

Real GDP	↗
Industrial Production	→
Real Personal Income	→
C & I Loans	↘
Leading Indicators OECD	↗

Employment

Total Nonfarm Payroll	↗
Unemployment Rate	↘
Initial Claims	↘
Continued Claims	↘
All Emp. Truck Transport	↗

Economic indicators are demonstrating mixed trends relative to prior 10Y-3M Inversion regimes.

All Employment indicators are demonstrating favorable trends.

Housing

Units Started	↗
Units Authorized	↗
Units Under Construction	↗
Units Under Construct...	↗
Median Sales Price	↘

Financial

Federal Funds Rate	↗
10Y-3M Spread	↗
10Y-2Y Spread	↗
Real 10Y Yield	↗
High Yield OAS	↘

The majority of Housing indicators are demonstrating favorable trends relative to prior 10Y-3M Inversion regimes.

The majority of Financial indicators are demonstrating unfavorable trends relative to prior 10Y-3M Inversion regimes.

Inflation

Consumer Price Index	↘
Personal Consumption Ex.	→
PPI: All Commodities	↘
5Y Breakeven Infl.	↗
10Y Breakeven Infl.	↗

Transportation

Truck Tonnage Index	↘
U.S. Waterways Tonnage	↗
Pipe Petrol Movement	↗
Rail Freight Carloads	↘
Air Passenger Miles	↗

The majority of Inflation indicators are demonstrating favorable trends relative to prior 10Y-3M Inversion regimes.

The majority of Transportation indicators are demonstrating favorable trends relative to prior 10Y-3M Inversion regimes.

The economic indicators tracked above are largely exhibiting mixed trends relative to prior 10Y-3M Inversion regimes.

Appendix

Period-over-Period Analysis Charts (For Unemployment Rate and Nonfarm Payrolls)

These distribution charts help investors evaluate the likelihood of observing various levels of changes in the employment data released monthly.

We utilize our Macro Composite Model to identify the current regime and then compare the latest employment data with previous observations that occurred during similar business cycle regimes. This context is crucial because employment data have historically exhibited distinctive biases depending on the business cycle regime in which they originated.

The distribution charts utilize a Y-axis that plots the historical probability (ranging from 0% to 50%) of the data the timeframe or level specified on the chart.

The peak of chart chart represents the median value of the data, i.e. the 50% point, where 50% of the data falls to the left of the peak, and 50% of the data falls to the right of the peak.By comparing the latest data point to historical observations within similar business cycle regimes, investors can evaluate whether the reported figure is typical or atypical for the current economic phase. Unusual deviations from historical trends, such as exceptionally strong or weak values unrelated to isolated events like force majeurs, may suggest a potential transition to a new business cycle regime, or a mis-classication of the regime by the Macro Composite Model.

Charts Comparing Distributions Across Business Regimes

By segmenting the regimes in Expansion, Recovery, Limbo, Pre-Recessionary, Recessionary, and then lining up the segments on a single chart, we can more easily discern

how the employment data tends to behave across different business cycle phases.

Fatter tails in a regime's distribution suggest a greater variability in period over period or level of employment data prints during that period. Conversely, when a regime's

distribution is more tightly clustered around the median, it indicates historically lower variability in the employment data.

Employment Data Path Compared to Yield Curve and Economic Regimes

These visualizations illustrate the current trajectory of the employment data since the trigger signal for the Yield Curve or Economic Regime compared to the historical distribution of past Yield Curve or Economic Regimes. For example, one signal is the 10-year minus 3-month yield curve inversion in the current cycle compared with the historical distribution of the indicator during the previous equivalent inversion periods from 1968 to present, all of which preceded recessions. The charts include bands delineated by the 25th and 75th percentiles, as well as the maxmimum and minimum values, to illustrate where the current signal falls within the broader distribution. To ensure consistency, each path is indexed to 100 in the month when the yield curve first inverts, denoted as month 0. The other signals that this will generate include indicator progression from the first 10-year minutes 3-month yield curve reversion, since the start of a recession and since the end of a recession.

Inflationary Regime Charts

These graphs compare the trajectory of employment data since the signal date e.g. first 10-year minus 3-month yield curve inversion in the current cycle with its path during previous pre-recession inversion periods. These periods are categorized into inflationary and disinflationary regimes. Each path is indexed to 100 in the month when the curve first inverts, marked as month 0, to ensure consistency across scales.

Employment Data By Period Following Yield Curve or Economic Regime Charts

This set of graphs display the individual trajectories of employment data for each period following a e.g. 10-year minus 3-month yield curve inversion, encompassing the present period as well. To ensure consistency across charts, each trajectory is indexed to 100 in the month when the curve first inverts, identified as month 0.