Industry LMCI Data Appendix

Construction of Indexes

The Federal Reserve Bank of Kansas City publishes two Labor Market Conditions Indicators (LMCI) series each month: the level of activity and momentum. In Dilts Stedman and Pollard (2023), we create comparable series for major industries in the U.S. economy. Specifically, we create LMCI series for eight major industries: Construction, Manufacturing, Wholesale and retail trade, Transportation, warehousing, and utilities, Information, Financial activities, Professional services, and Non-professional services. The Industry Crosswalk table later in this document shows how these industry groups relate to those found in our input datasets.

To create the industry-level LMCI, we start by collecting industry-level data for the 24 data series used in the construction of the original LMCI series. Some of these series are not available at the industry-level or are only available in alternate forms. The Variable Definitions section below lists the variables used in the construction of the original LMCI and the variables we use for the industry LMCI. To ensure robustness and comparability, we pull this modified set of variables for the full U.S. economy in addition to at the industry level. These modified U.S. variables are listed in the Aggregate LMCI Industry Version column. We found that this modified set of variables results in extremely similar output to the original LMCI (level of activity and momentum correlations were both above 0.99).

In the original LMCI model presented in Hakkio and Willis (2014), they perform principal components analysis (PCA) on z-scored versions of the input variables. The first factor is the level of activity, and the second factor is momentum. These factors are rotated using the varimax method with raw loadings to produce the official LMCI series. To create the industry LMCI series, we use the same method to create level of activity and momentum series using the Aggregate LMCI Industry Version data series shown in the Variable Definitions table. We then regress the aggregate non-z-scored input data on each of the output series (level of activity and momentum).

$$LMCI\_Activity_{Agg} = \beta_{1\ Agg} U3_{Agg} + \beta_{2\ Agg} U6_{Agg} + \beta_{3\ Agg} BlueChip_{Agg} + \ldots$$

The coefficients from this regression are different from those produced by the PCA model, but result in almost exactly the same LMCI series, they are just calibrated to work with non-z-scored data. We use these coefficients with the non-z-scored industry-level data to produce the industry LMCI level of activity and momentum series.

$$LMCI\_Activity_{Construction} = \beta_{1\ Agg} U3_{Construction} + \beta_{2\ Agg} U6_{Construction} + \beta_{3\ Agg} BlueChip_{Construction} + \ldots$$

As a final step, we demean the output series by subtracting each series' mean from each of its data points. The final series have a mean of zero, and one is equivalent to one standard deviation of the aggregate series. By using the same aggregate coefficients across industries (specifically coefficients that work with non-z-scored data), we can compare LMCI series across industries. While each series is relative to its own mean (above zero means above its average, below zero means below its average), the size of dips in recessions or the rate of an increase or decrease (for example, this industry's momentum index is falling faster than another industry's) can be compared.

In addition to creating LMCI series for the eight major industries, we also create an interest-rate-sensitive LMCI and an interest-rate-insensitive LMCI. To do this, we run PCA on the industry-level LMCI series. While the first factor reflects their response to a common factor among all industries (specifically, the business cycle), the second factor appears to group industries into those historically categorized as interest rate sensitive versus those commonly thought of as interest rate insensitive. We use the coefficients of this second factor to pick the two industries most and least sensitive to interest rates. We then average the demeaned LMCI series for the two industries most sensitive to interest rates (Manufacturing and Information) to produce the interest-rate-sensitive LMCI series and average the demeaned LMCI series for the two industries least sensitive to interest rates (Non-professional services and Transportation, warehousing, and utilities) to produce the interest-rate-insensitive LMCI series.

Variable Definitions

Green shaded areas denote variable definitions in the same row that are identical.

Variable	Original LMCI	Aggregate LMCI Industry Version	Industry LMCI
Unemployment rate (U3)	Unemployment Rate: 16 Years + (SA, %) pulled from Haver Source: BLS, Haver	U3 pulled from the CPS, used pwsswgt weight, seasonally adjusted using R Source: KC Fed CPS	U3 by industry pulled from the CPS, used pwsswgt weight, seasonally adjusted using R Not all unemployed workers have industry data. To keep the industry series comparable to the U.S., we distributed unemployed workers with no industry across industries based on each industry's proportion of workers. For example, in January 1992, 16% of unemployed workers with valid industry data reported Construction as their industry. Therefore, 16% of unemployed workers without valid industry data were assigned to the Construction industry in January 1992. Tüzemen (2017) uses a similar approach. Historical industry data were recoded to match the 2019 prmjind1 categories using the method described in Pollard (2019). Some of these categories were then combined to create the industry categories used in this model. Source: KC Fed CPS, Pollard (2019)
Broad unemployment rate (U6)	U-6: 16 Yrs + (SA, %) pulled from Haver U6 available starting in Jan. 1994. Backcast to 1992 using U3, working part time for economic reasons, and unemployed 27 or more weeks (measured as listed in this column). Source: BLS, Haver	U6 pulled from the CPS, used pwsswgt weight, seasonally adjusted using R U6 available starting in Jan. 1994. Backcast to 1992 using U3, working part time for economic reasons, and unemployed 27 or more weeks (measured as listed in this column). Source: KC FED CPS	U6 by industry pulled from the CPS, used pwsswgt weight, seasonally adjusted using R Not all U6 unemployed workers have industry data. To keep the industry series comparable to the U.S., we distributed U6 unemployed workers with no industry across industries based on each industry's proportion of workers. For example, in January 1994, 13% of U6 unemployed workers with valid industry data reported Construction as their industry. Therefore, 13% of U6 unemployed workers without valid industry data were assigned to the Construction industry in January 1994. Tüzemen (2017) uses a similar approach. Historical industry data were recoded to match the 2019 prmjind1 categories using the method described in Pollard (2019). Some of these categories were then combined to create the industry categories used in this model. U6 available starting in Jan. 1994. Backcast to 1992 using U3, working part time for economic reasons, and unemployed 27 or more weeks (measured as listed in this column). Source: KC FED CPS, Pollard (2019)

Variable	Original LMCI	Aggregate LMCI Industry Version	Industry LMCI
Unemployment forecast (Blue Chip)	US Four-Quarter-Ahead Unemployment forecast from Blue Chip pulled from Haver Source: Blue Chip, Haver	US Four-Quarter-Ahead Unemployment forecast from Blue Chip pulled from Haver Source: Blue Chip, Haver	US Four-Quarter-Ahead Unemployment forecast from Blue Chip pulled from Haver Source: Blue Chip, Haver
Job flows from U to E	Labor Force Flows: Unemployed to Employed (SA, Thous) divided by Unemployment: 16 years + (SA, Thous) in the previous month both pulled from Haver Source: BLS, Haver	Used 2-month match data from the CPS weighted with the longitudinal weight. Total job flows from U to E divided by the sum of U to E, U to U, and U to N. Seasonally adjusted in R No other adjustments made to make it comparable to the BLS official series Source: KC FED CPS	Used 2-month match data from the CPS weighted with the longitudinal weight. By industry in second month: job flows from U to E divided by the sum of U to E, U to U, and U to N (in other words, people who were unemployed last month). Not all people with U to U or U to N job flows have industry data for the second month. To keep the industry series comparable to the U.S., we distributed U to U and U to N workers with no industry across industries based on each industry's proportion of workers. For example, in February 1994, 14% of U to E, U to U, and U to N workers with valid industry data reported Construction as their industry. Therefore, 14% of U to U and U to N workers without valid industry data were assigned to the Construction industry in February 1994. Tüzemen (2017) uses a similar approach. Historical industry data were recoded to match the 2019 prmjind1 categories using the method described in Pollard (2019). Some of these categories were then combined to create the industry categories used in this model. Seasonally adjusted in R No other adjustments made to make it comparable to the BLS official series Source: KC FED CPS, Pollard (2019)
Quits rate	JOLTS: Quits Rate: Total Private (SA, %) pulled from Haver JOLTS data available starting in Dec. 2000 Use Davis, Faberman, and Haltiwanger (*Journal of Monetary Economics*, 2012) synthetic quarterly JOLTS data from 1990q2 to 2010q2. Convert from quarterly to monthly using a cubic spline interpolation and then splice to the actual JOLTS series in December 2000. Forecast final month of JOLTS data using a regression with 4 lags of JOLTS hires rate and quits rate, and current values of job leavers, job losers, and job flows (measured as listed in this column). Source: BLS, Haver, Davis, Faberman and Haltiwanger (2012)	JOLTS: Quits Rate: Total Private (SA, %) pulled from Haver JOLTS data available starting in Dec. 2000 Use Davis, Faberman, and Haltiwanger (*Journal of Monetary Economics*, 2012) synthetic quarterly JOLTS data from 1990q2 to 2010q2. Convert from quarterly to monthly using a cubic spline interpolation and then splice to the actual JOLTS series in December 2000. Forecast final month of JOLTS data using a regression with 4 lags of JOLTS hires rate and quits rate, and current values of job leavers, job losers, and job flows (measured as listed in this column). Source: BLS, Haver, Davis, Faberman and Haltiwanger (2012)	JOLTS: Quits Rate by industry (SA, %) pulled from Haver JOLTS data available starting in Dec. 2000. Backcast to 1992 using the one-month lead of industry JOLTS quits rate and the current month aggregate JOLTS quits rate (measured as listed in the Original LMCI and Aggregate LMCI Industry Version columns). Forecast final month of JOLTS data using a regression with 4 lags of JOLTS hires rate and quits rate, and current values of job leavers, job losers, and job flows (measured as listed in this column). Source: BLS, Haver, Davis, Faberman and Haltiwanger (2012)

Variable	Original LMCI	Aggregate LMCI Industry Version	Industry LMCI
Employment-population ratio	Employment-Population Ratio: 16 Years + (SA, %) pulled from Haver Source: BLS, Haver	Employment to population ratio pulled from the CPS, used pwsswgt weight, seasonally adjusted using R Source: KC FED CPS	Employment to population ratio by industry pulled from the CPS, used pwsswgt weight, seasonally adjusted using R Not all people in the CPS population have industry data (specifically, some unemployed workers and almost all workers not in the labor force are missing industry data). To keep the industry series comparable to the U.S., we distributed people with no industry across industries based on each industry's proportion of workers. For example, in January 1992, 6% of people with valid industry data reported Construction as their industry. Therefore, 6% of people without valid industry data were assigned to the Construction industry in January 1992. Tüzemen (2017) uses a similar approach. Historical industry data were recoded to match the 2019 prmjind1 categories using the method described in Pollard (2019). Some of these categories were then combined to create the industry categories used in this model. Source: KC FED CPS, Pollard (2019)
Working part time for economic reasons	Employed: Part-Time/Economic Reasons: All Industries (SA, Thous.) as a percent of Civilian Employment: 16 Years + (SA, Thous.) pulled from Haver Source: BLS, Haver	Working part time for economic reasons as a percent of employed pulled from the CPS, used pwsswgt weight, seasonally adjusted using R Source: KC FED CPS	Working part time for economic reasons as a percent of employed, by industry, pulled from the CPS, used pwsswgt weight, seasonally adjusted using R Historical industry data were recoded to match the 2019 prmjind1 categories using the method described in Pollard (2019). Some of these categories were then combined to create the industry categories used in this model. Source: KC FED CPS, Pollard (2019)
Job leavers	Unemployed: Job Leavers [Quit Job] (SA, %) pulled from Haver Source: BLS, Haver	Job leavers as a percent of unemployed pulled from the CPS, used pwsswgt weight, seasonally adjusted using R Source: KC FED CPS	Job leavers as a percent of unemployed by industry pulled from the CPS, used pwsswgt weight, seasonally adjusted using R Not all unemployed workers have industry data. To keep the industry series comparable to the U.S., we distributed unemployed workers with no industry across industries based on each industry's proportion of workers. For example, in January 1992, 16% of unemployed workers with valid industry data reported Construction as their industry. Therefore, 16% of unemployed workers without valid industry data were assigned to the Construction industry in January 1992. Tüzemen (2017) uses a similar approach. Historical industry data were recoded to match the 2019 prmjind1 categories using the method described in Pollard (2019). Some of these categories were then combined to create the industry categories used in this model. Source: KC FED CPS, Pollard (2019)

Variable	Original LMCI	Aggregate LMCI Industry Version	Industry LMCI
Job availability index (Conference Board)	"Present Situation: Employment Conditions: Jobs plentiful" minus "Present Situation: Employment Conditions: Jobs hard to get" plus 100 Pulled from the Conference Board website Source: Conference Board	"Present Situation: Employment Conditions: Jobs plentiful" minus "Present Situation: Employment Conditions: Jobs hard to get" plus 100 Pulled from the Conference Board website Source: Conference Board	"Present Situation: Employment Conditions: Jobs plentiful" minus "Present Situation: Employment Conditions: Jobs hard to get" plus 100 Pulled from the Conference Board website Source: Conference Board
Unemployed 27 or more weeks	Unemployed: 27 Weeks & Over (SA, %) pulled from Haver Source: BLS, Haver	Unemployed 27 or more weeks as a percent of total unemployed pulled from the CPS, used pwsswgt weight, seasonally adjusted using R Source: KC FED CPS	Unemployed 27 or more weeks as a percent of total unemployed by industry pulled from the CPS, used pwsswgt weight, seasonally adjusted using R Not all unemployed workers have industry data. To keep the industry series comparable to the U.S., we distributed unemployed workers with no industry across industries based on each industry's proportion of workers. For example, in January 1992, 16% of unemployed workers with valid industry data reported Construction as their industry. Therefore, 16% of unemployed workers without valid industry data were assigned to the Construction industry in January 1992. Tüzemen (2017) uses a similar approach. We used this approach separately to calculate an adjusted number for workers unemployed 27 or more weeks and to calculate the denominator of unemployed workers more generally. Historical industry data were recoded to match the 2019 prmjind1 categories using the method described in Pollard (2019). Some of these categories were then combined to create the industry categories used in this model. Source: KC FED CPS, Pollard (2019)
Percent of firms with positions not able to fill right now (NFIB)	NFIB: Percent of Firms With Positions Not Able to Fill Right Now (SA, %) pulled from Haver Source: NFIB, Haver	Current Job Openings Indicator for the US, Seasonally Adjusted, pulled from the NFIB website (http://www.nfib-sbet.org/indicators/) Source: NFIB	Current Job Openings Indicator by industry, Seasonally Adjusted, pulled from the NFIB website (http://www.nfib-sbet.org/indicators/) Source: NFIB

Variable	Original LMCI	Aggregate LMCI Industry Version	Industry LMCI
Job losers	Unemployed: Job Losers (SA, %) pulled from Haver Source: BLS, Haver	Job losers as a percent of unemployed pulled from the CPS, used pwsswgt weight, seasonally adjusted using R Source: KC FED CPS	Job losers as a percent of unemployed by industry pulled from the CPS, used pwsswgt weight, seasonally adjusted using R Not all unemployed workers have industry data. To keep the industry series comparable to the U.S., we distributed unemployed workers with no industry across industries based on each industry's proportion of workers. For example, in January 1992, 16% of unemployed workers with valid industry data reported Construction as their industry. Therefore, 16% of unemployed workers without valid industry data were assigned to the Construction industry in January 1992. Tüzemen (2017) uses a similar approach. Historical industry data were recoded to match the 2019 prmjind1 categories using the method described in Pollard (2019). Some of these categories were then combined to create the industry categories used in this model. Source: KC FED CPS, Pollard (2019)
Hires rate	JOLTS: Hires Rate: Total Private (SA, %) pulled from Haver JOLTS data available starting in Dec. 2000 Use Davis, Faberman, and Haltiwanger (*Journal of Monetary Economics*, 2012) synthetic quarterly JOLTS data from 1990q2 to 2010q2. Convert from quarterly to monthly using a cubic spline interpolation and then splice to the actual JOLTS series in December 2000. Forecast final month of JOLTS data using a regression with 4 lags of JOLTS hires rate and quits rate, and current values of job leavers, job losers, and job flows (measured as listed in this column). Source: BLS, Haver, Davis, Faberman and Haltiwanger (2012)	JOLTS: Hires Rate: Total Private (SA, %) pulled from Haver JOLTS data available starting in Dec. 2000 Use Davis, Faberman, and Haltiwanger (Journal of Monetary Economics, 2012) synthetic quarterly JOLTS data from 1990q2 to 2010q2. Convert from quarterly to monthly using a cubic spline interpolation and then splice to the actual JOLTS series in December 2000. Forecast final month of JOLTS data using a regression with 4 lags of JOLTS hires rate and quits rate, and current values of job leavers, job losers, and job flows (measured as listed in this column). Source: BLS, Haver, Davis, Faberman and Haltiwanger (2012)	JOLTS: Hires Rate by industry (SA, %) pulled from Haver JOLTS data available starting in Dec. 2000. Backcast to 1992 using the one-month lead of industry JOLTS hires and the current month aggregate JOLTS hires rate (measured as listed in the Original LMCI and Aggregate LMCI Industry Version columns). Forecast final month of JOLTS data using a regression with 4 lags of JOLTS hires rate and quits rate, and current values of job leavers, job losers, and job flows (measured as listed in this column). Source: BLS, Haver, Davis, Faberman and Haltiwanger (2012)
Percent of firms planning to increase employment (NFIB)	NFIB: Percent Planning to Increase Employment, Net (SA, %) pulled from Haver Source: NFIB, Haver	Plans to Increase Employment Indicator for the US, Seasonally Adjusted, pulled from the NFIB website (http://www.nfib-sbet.org/indicators/) Source: NFIB	Plans to Increase Employment Indicator by industry, Seasonally Adjusted, pulled from the NFIB website (http://www.nfib-sbet.org/indicators/) Source: NFIB
Average hourly earnings	Avg Hrly Earnings of Prod & Nonsupervisory Employees: Total Private (SA, $/Hour) 3-month %Change pulled from Haver Source: BLS, Haver	Avg Hrly Earnings of Prod & Nonsupervisory Employees: Total Private (SA, $/Hour) 3-month %Change pulled from Haver Source: BLS, Haver	Avg Hrly Earnings of Prod & Nonsupervisory Employees (SA, $/Hour) 3-month %Change by industry pulled from Haver Several industries we use are combinations of industries on Haver. To aggregate, we took the average of the hourly earnings series weighted by industry employment and then calculated the three-month percent change. Source: BLS, Haver

Variable	Original LMCI	Aggregate LMCI Industry Version	Industry LMCI
Initial claims	Initial Claims for Unemployment Insurance, State Programs, Wkly Avg (SA, Thous) as a percent of Civilian Labor Force: 16 Years + (SA, Thous.) pulled from Haver Source: BLS, Department of Labor, Haver	Average Weekly Total Weeks Continued Claims (NSA, Thous.) pulled from Haver and seasonally adjusted in R as a percent of the civilian labor force pulled from the CPS using pwsswgt weight, seasonally adjusted using R Continuing claims data only start in January 2001. Backcast to 1992 using the current month reading for initial claims as a percent of the labor force (measured as listed in the Original LMCI column). Source: BLS, Department of Labor, KC Fed CPS, Haver	Share of Continued Claims (%) by industry multiplied by Average Weekly Total Weeks Continued Claims (NSA, Thous.) pulled from Haver and seasonally adjusted in R to get continuing claims by industry Then calculated as a percent of the civilian labor force using civilian labor force pulled from the CPS using pwsswgt weight, seasonally adjusted using R Historical labor force data by industry from the CPS were recoded to match the 2019 prmjind1 categories using the method described in Pollard (2019). Some of these categories were then combined to create the industry categories used in this model. Continuing claims data only start in January 2001. Backcast to 1992 using the current month reading for initial claims as a percent of the labor force (measured as listed in the Original LMCI column). Source: BLS, Department of Labor, KC Fed CPS, Pollard (2019) Haver
Private nonfarm payroll employment	All Employees: Total Private (SA,) 3-month %Change pulled from Haver Source: BLS, Haver	All Employees: Total Private (SA,) 3-month %Change pulled from Haver Source: BLS, Haver	All Employees (SA,) 3-month %Change by industry pulled from Haver. Source: BLS, Haver
Aggregate weekly hours	Indexes of Agg Wkly Hours of Prod & Nonsup Employ: Total Private (SA, 2002=100) 3-month %Change pulled from Haver Source: BLS, Haver	Indexes of Agg Wkly Hours of Prod & Nonsup Employ: Total Private (SA, 2002=100) 3-month %Change pulled from Haver Source: BLS, Haver	Aggregate Weekly Hours Index: Prod & Nonsupervisory (SA, 2002=100) 3-month %Change by industry pulled from Haver Several industries we use are combinations of industries on Haver. To aggregate, we took the average of the component indexes weighted by industry employment and then calculated the three-month percent change. Source: BLS, Haver
Temporary help employment	All Employees: Temporary Help Services (SA,) 3-month %Change pulled from Haver Source: BLS, Haver	All Employees: Temporary Help Services (SA,) 3-month %Change pulled from Haver Source: BLS, Haver	All Employees: Temporary Help Services (SA,) 3-month %Change pulled from Haver Source: BLS, Haver
Expected job availability (U of Michigan)	University of Michigan 12 Month Economic Expectations: Less Unemployment (%) minus University of Michigan 12 Month Economic Expectations: More Unemployment (%) pulled from Haver Source: University of Michigan, Haver	University of Michigan 12 Month Economic Expectations: Less Unemployment (%) minus University of Michigan 12 Month Economic Expectations: More Unemployment (%) pulled from Haver Source: University of Michigan, Haver	University of Michigan 12 Month Economic Expectations: Less Unemployment (%) minus University of Michigan 12 Month Economic Expectations: More Unemployment (%) pulled from Haver Source: University of Michigan, Haver

Variable	Original LMCI	Aggregate LMCI Industry Version	Industry LMCI
Labor force participation rate	Labor Force Participation Rate: 16 Years + (SA, %) pulled from Haver Source: BLS, Haver	Labor force participation rate pulled from the CPS, used pwsswgt weight, seasonally adjusted using R Source: KC FED CPS	Labor force participation rate by industry pulled from the CPS, used pwsswgt weight, seasonally adjusted using R Not all people in the CPS population have industry data (specifically, some unemployed workers and almost all workers not in the labor force are missing industry data). To keep the industry series comparable to the U.S., we distributed people with no industry across industries based on each industry's proportion of workers. For example, in January 1992, 6% of people with valid industry data reported Construction as their industry. Therefore, 6% of people without valid industry data were assigned to the Construction industry in January 1992. Tüzemen (2017) uses a similar approach. Historical industry data were recoded to match the 2019 prmjind1 categories using the method described in Pollard (2019). Some of these categories were then combined to create the industry categories used in this model. Source: KC FED CPS, Pollard (2019)
Manufacturing employment index (ISM)	ISM Mfg: Employment Index (SA, 50+ = Econ Expand) pulled from Haver Source: ISM, Haver	ISM Mfg: Employment Index (SA, 50+ = Econ Expand) pulled from Haver Source: ISM, Haver	ISM Mfg: Employment Index (SA, 50+ = Econ Expand) pulled from Haver Source: ISM, Haver
Announced job cuts (Challenger-Gray-Christmas)	Challenger, Gray & Christmas: Announced Job Cuts, Total (Number) pulled from Haver and converted to thousands. Then calculated as a percent of Civilian Labor Force: 16 Years + (SA, Thous.) CGC data are available monthly starting in January 1993. They are available for December 1991 and March and June 1992. We interpolate to monthly using a cubic spline. Source: BLS, Challenger, Gray & Christmas, Haver	The sum of all industry series of Challenger, Gray & Christmas: Announced Job Cuts (Number) pulled from Haver. This is extremely similar to the series in the Original LMCI category. Then calculated as a percent of the civilian labor force pulled from the CPS using pwsswgt weight, seasonally adjusted using R CGC data by industry only start in January 1993. Backcast to 1992 using the one-month lead of this series and the current month reading for CGC Job Cuts (measured as listed in the Original LMCI column). Source: Challenger, Gray & Christmas, KC Fed CPS, Haver	Challenger, Gray & Christmas: Announced Job Cuts (Number) by industry pulled from Haver and summed up to our industries (see Industry Crosswalk Table at the end of the document). Then calculated as a percent of the civilian labor force using civilian labor force pulled from the CPS using pwsswgt weight, seasonally adjusted using R Historical labor force data by industry from the CPS were recoded to match the 2019 prmjind1 categories using the method described in Pollard (2019). Some of these categories were then combined to create the industry categories used in this model. CGC data by industry only start in January 1993. Backcast to 1992 using the one-month lead of this series and the current month reading for CGC Job Cuts (measured as listed in the Original LMCI column). Source: Challenger, Gray & Christmas, KC Fed CPS, Pollard (2019), Haver

Variable	Original LMCI	Aggregate LMCI Industry Version	Industry LMCI
Expected job availability (Conference Board)	"Expectations: Employment 6 months hence: More jobs" minus "Expectations: Employment 6 months hence: Fewer jobs" plus 100 Pulled from the Conference Board website Source: Conference Board	"Expectations: Employment 6 months hence: More jobs" minus "Expectations: Employment 6 months hence: Fewer jobs" plus 100 Pulled from the Conference Board website Source: Conference Board	"Expectations: Employment 6 months hence: More jobs" minus "Expectations: Employment 6 months hence: Fewer jobs" plus 100 Pulled from the Conference Board website Source: Conference Board

Industry Crosswalk Table

LMCI Categories	CPS	Establishment Survey	JOLTS	UI Claims	NFIB SBET	Challenger-Gray-Christmas Job Cuts
Construction	Construction	Construction	Construction	Construction	Construction	Construction
Manufacturing	Manufacturing	Manufacturing	Manufacturing	Manufacturing	Manufacturing	Aerospace/Defense, Apparel, Automotive, Chemical, Consumer Products, Electronics, Energy, Food, Industrial Goods, Pharmaceutical
Wholesale and retail trade	Wholesale and retail trade	Wholesale trade Retail trade	Wholesale trade Retail trade	Wholesale trade Retail trade	Wholesale Retail	 Retail, E-Commerce
Transportation, warehousing, and utilities	Transportation and utilities	Transportation and warehousing Utilities	Transportation, warehousing, and utilities	Transportation and warehouse Utilities	Transportation	Transportation, Warehousing Utility
Information	Information	Information	Information	Information	Professional services	Media, Technology, Telecommunication
Financial activities	Financial activities	Financial activities	Financial activities	Finance and insurance Real estate, rental and leasing	Financial services	Financial, Fintech, Insurance, Real Estate
Professional services	Professional and business services Educational and health services	Professional and business services Education and health services	Professional and business services Education and health services	Professional, scientific and technical services Management of companies and enterprises Administration and support, waste management and remediation services Educational services Health care and social assistance	Professional services	Legal, Environmental Education, Health Care
Non-professional services	Leisure and hospitality Other services	Leisure and hospitality Other services	Leisure and hospitality Other services	Arts, entertainment and recreation Accommodation and food services Other services (expect public administration)	(Non-professional) Services	Entertainment/Leisure Diversified services

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