CLEVELAND

EMPLOYMENT GROWTH RANK *Best=1, Worst=392*

2013-2015	2013-2018
28	64
1st quintile	1st quintile

LIFE CYCLE PHASE

Mature

RISK EXPOSURE

2013-2018: 140 — 2nd quintile

Highest=1, Lowest=384

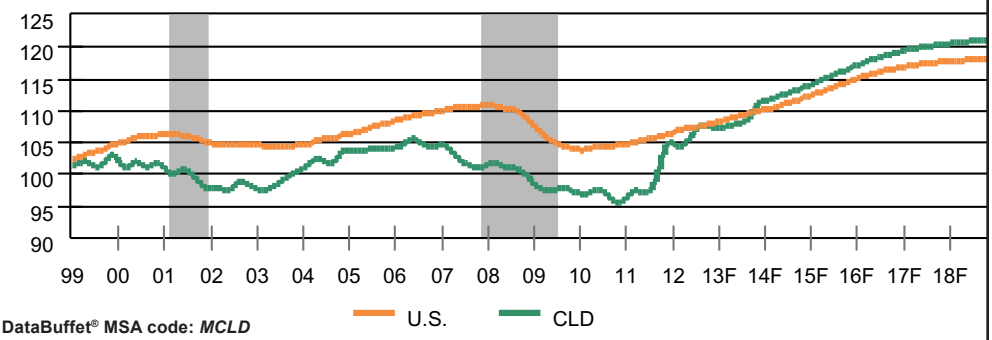
VITALITY

RELATIVE	RANK
109%	82
U.S.=100%	*Best=1, Worst=384*

RELATIVE COSTS *U.S.=100%*

LIVING	BUSINESS
93%	82%

RELATIVE EMPLOYMENT PERFORMANCE (1999=100)



DataBuffet® MSA code: *MCLD*

2007	2008	2009	2010	2011	2012	2013	INDICATORS	2014	2015	2016	2017	2018
3.1	3.0	2.9	3.0	3.1	3.4	3.6	**Gross metro product (C$B)**	3.7	3.9	4.1	4.2	4.3
-3.3	*-0.6*	*-3.5*	*4.0*	*2.5*	*8.6*	*5.0*	*% change*	*3.9*	*5.2*	*4.1*	*3.1*	*3.0*
41.3	40.7	39.4	39.0	40.1	42.9	43.9	**Total employment (ths)**	45.5	46.7	47.8	48.5	48.8
-2.4	*-1.4*	*-3.2*	*-1.0*	*2.9*	*6.9*	*2.3*	*% change*	*3.7*	*2.6*	*2.4*	*1.4*	*0.7*
4.6	6.7	9.9	9.6	9.3	7.7	7.7	**Unemployment rate**	7.1	6.8	6.4	6.2	6.1
5.0	4.1	-0.8	3.6	6.2	6.1	1.7	**Personal income growth**	6.6	7.1	6.0	4.4	3.5
112.9	114.3	115.1	116.0	116.7	117.8	118.6	**Population (ths)**	119.6	120.7	121.6	122.6	123.6
651	322	262	267	303	351	436	**Single-family permits**	667	973	980	854	737
168	124	89	283	73	59	26	**Multifamily permits**	10	7	9	11	9
119.4	114.8	109.8	109.6	109.7	114.9	122.5	**Existing-home price ($ ths)**	126.9	128.1	131.2	134.1	137.3
492	418	473	389	348	373	483	**Mortgage originations ($ mil)**	343	320	374	427	417
1.3	1.0	0.5	0.6	0.6	0.9	0.6	**Net migration (ths)**	0.8	0.8	0.8	0.8	0.9
793	1,033	1,167	1,045	979	864	865	**Personal bankruptcies**	830	785	805	883	1,002

STRENGTHS & WEAKNESSES

STRENGTHS

- Low business costs and infrastructure are attractive to potential manufacturers.
- Spillover growth from Chattanooga and Atlanta.

WEAKNESSES

- Low per capita income and educational attainment.
- High dependence on low-value manufacturing; few sustainable growth drivers.

CURRENT EMPLOYMENT TRENDS

% CHANGE YR AGO, 3-MO MA

	Jun 13	Oct 13	Feb 14
Total	2.0	2.4	3.2
Construction	-7.0	-6.9	0.2
Manufacturing	1.0	1.0	1.9
Trade	2.0	3.7	2.1
Trans/Utilities	9.4	5.7	6.4
Information	0.4	0.1	-0.1
Financial Activities	0.5	-0.0	-4.9
Prof & Business Svcs.	-0.5	1.7	11.6
Edu & Health Svcs.	1.0	2.3	-3.4
Leisure & Hospitality	9.4	9.4	10.3
Other Services	2.0	7.5	8.8
Government	1.6	-0.5	-0.1

FORECAST RISKS

SHORT TERM ▲ | LONG TERM ▲

UPSIDE

- Airport and Wacker Chemie investment attract other high-tech manufacturers.
- Recovering U.S. housing market spurs demand for local home furnishing manufacturers.

DOWNSIDE

- Lack of new, diverse manufacturers returns industry to long-term decline.
- High energy costs weigh on durable goods production.

ANALYSIS

Recent Performance. Cleveland is on the right track. Consumers and businesses alike are gaining confidence in the recovery, which gained momentum in the first quarter. Job gains are strongest in leisure/hospitality, retail and professional services. The unemployment rate is below 7% for the first time in five years, but the recent decline coincided with a renewed drop in the labor force. Job growth is above average, but since it is concentrated in low-wage industries, income growth is lower than that of Tennessee and the U.S.

Manufacturing. Manufacturing has done very little since mounting a mild recovery in 2011, but the industry will re-emerge as a positive once new investments come to fruition. Indeed, the labor market will get a substantial boost once German manufacturer Wacker Chemie's $2 billion production facility comes on line in 2015, adding hundreds of high-wage jobs. Other investments near CLD by Volkswagen and Amazon highlight southern Tennessee's appeal to large corporations seeking low costs. A successful run by Wacker Chemie would enhance CLD's reputation and help spur further investment. Other large manufacturers such as Cleveland Chair Co. and Whirlpool could join the mix as a strengthening U.S. housing market bolsters their business later this year and into 2015.

Housing. The positive impact of the local housing market on the economy will be limited due to weak demand. Migration dropped off sharply during the recession and has yet to recover, consistent with the forecast for population growth to lag that of the nation throughout the forecast horizon. The trickle of new residents not only crimps demand for housing and other consumer-driven industries such as leisure/hospitality and retail trade, it also deprives the labor market of construction jobs needed to raise new housing. Furthermore, there has been no substantial increase in home equity wealth, another obstacle to stronger services demand. Although house prices did not fall as sharply as elsewhere, they did drift lower and have been stagnant the past two years.

Challenges. Despite its recent success in attracting high-profile business investment, CLD's relatively low-skilled workforce will make it tough to sustain the trend and grow value-added industries that offer the best potential for stronger longer-term economic growth. Talent is a critical factor in deciding where to set up shop and the share of the workforce that has a bachelor's degree is about half of the U.S. average. CLD does have a large number of residents with specialized expertise, however. The share of the population with an associate's degree is relatively high, making it attractive to lower-value-added manufacturing industries. The presence of Lee University does little to expand the pool of educated labor as graduates of the small school typically leave the metro area due to the lack of high-wage career prospects. A joint venture between Wacker Chemie and Cleveland State Community College to educate potential employees is a step in the right direction but highlights the obstacles CLD faces in landing new employers.

Cleveland's recovery will strengthen thanks to gains in leisure/hospitality, healthcare and education. Manufacturing will also contribute positively as recent investments move forward. An increase in the labor force will slow the unemployment rate's descent this year, but job growth will exceed the statewide average. Longer term, CLD's role as a bedroom community to Chattanooga will enable it to thrive and lower costs will help it outperform its larger neighbor. High-profile investments from Whirlpool, Wacker Chemie and Volkswagen, in addition to new businesses brought in by a new regional airport, will ensure the metro area performs on par with the nation.

Daniel Culbertson
March 2014

EMPLOYMENT & INDUSTRY

TOP EMPLOYERS

Whirlpool Corp.	1,761
SkyRidge Medical Center	1,147
Peyton's Southeastern	950
Lee University	815
AT&T	780
Abitibibowater Inc.	643
Wal-Mart Stores Inc.	640
Amazon	600
Merck Consumer Care	537
Masterfoods USA	495
Life Care Centers of America	450
Olin Corp.	384
Procter & Gamble	350
Charleston Hosiery Inc.	350
Exel Inc.	340
Eaton Cutler-Hammer Inc.	325
Johnston Coca-Cola	320
Lonza	320
Cleveland Chair Co.	300
Rubbermaid Commercial Products	290

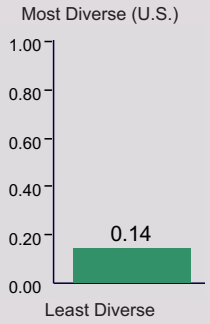
Sources: Cleveland / Bradley Chamber of Commerce, 2013, Tennessee Department of Economic and Community Development, 2010

PUBLIC

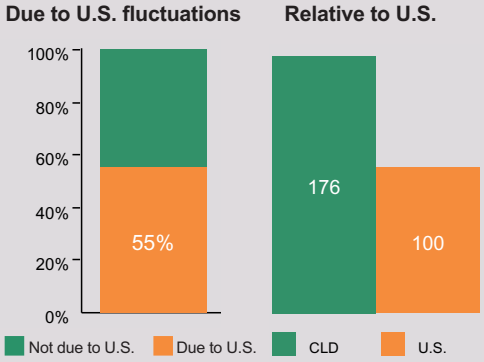
Federal	301
State	660
Local	4,610

2013

INDUSTRIAL DIVERSITY



EMPLOYMENT VOLATILITY

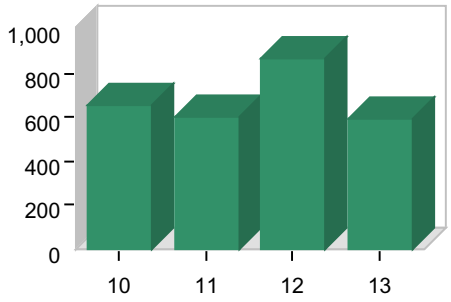


MIGRATION FLOWS

INTO CLEVELAND, TN	NUMBER OF MIGRANTS
Chattanooga, TN	814
Dalton, GA	154
Nashville, TN	76
Knoxville, TN	67
Orlando, FL	23
Memphis, TN	19
Detroit, MI	16
Jacksonville, FL	14
Total In-migration	*4,231*

FROM CLEVELAND, TN	
Chattanooga, TN	827
Dalton, GA	138
Knoxville, TN	86
Nashville, TN	56
Johnson City, TN	22
Clarksville, TN	18
Tampa, FL	16
Total Out-migration	*3,974*
Net Migration	**257**

NET MIGRATION, CLD



	2010	2011	2012	2013
Domestic	499	492	763	483
Foreign	151	112	104	109
Total	651	604	867	592

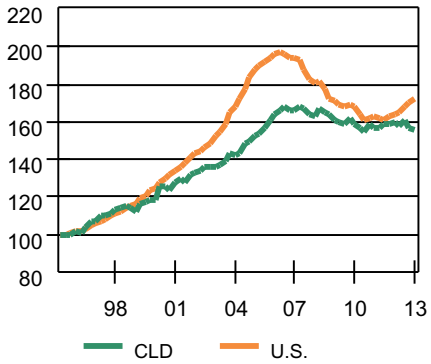
Sources: IRS (top), 2010; Census Bureau, 2013

COMPARATIVE EMPLOYMENT AND INCOME

Sector	% of Total Employment			Average Annual Earnings		
	CLD	TN	U.S.	CLD	TN	U.S.
Mining	0.1%	0.1%	0.6%	nd	$48,120	$121,241
Construction	3.4%	3.8%	4.3%	$43,321	$52,281	$55,288
Manufacturing	19.5%	11.6%	8.8%	$64,493	$65,829	$75,242
Durable	*56.9%*	*62.5%*	*62.8%*	*nd*	*$63,833*	*$76,882*
Nondurable	*43.1%*	*37.5%*	*37.2%*	*nd*	*$68,885*	*$72,564*
Transportation/Utilities	5.7%	5.3%	3.7%	nd	$56,399	$63,045
Wholesale Trade	2.1%	4.4%	4.2%	nd	$68,466	$77,359
Retail Trade	11.4%	11.5%	11.1%	$30,011	$31,715	$31,495
Information	0.7%	1.6%	2.0%	$36,545	$58,062	$93,099
Financial Activities	3.2%	5.0%	5.8%	$34,133	$40,789	$47,540
Prof. and Bus. Services	11.1%	12.8%	13.6%	$37,145	$48,837	$61,311
Educ. and Health Services	14.0%	14.4%	15.5%	nd	$63,577	$50,524
Leisure and Hosp. Services	10.6%	10.4%	10.4%	$18,068	$22,423	$23,812
Other Services	5.3%	3.8%	4.0%	$33,540	$31,346	$33,224
Government	12.7%	15.3%	16.0%	$48,612	$57,990	$70,342

Sources: Percent of total employment — Moody's Analytics & BLS, 2013; Average annual earnings — BEA, 2011

HOUSE PRICES



Source: FHFA, 1996Q1=100, NSA

MOODY'S RATING

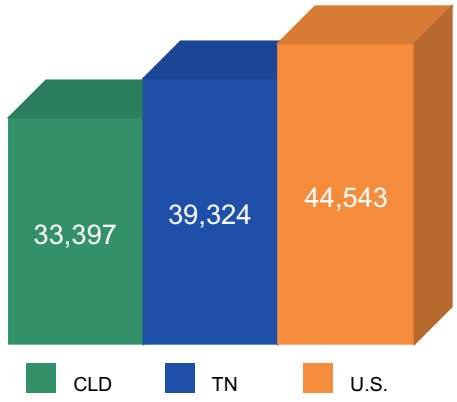
Aa3	CITY AS OF NOV 19, 2010

LEADING INDUSTRIES

NAICS	INDUSTRY	EMPLOYEES (000)
GVSL	State & Local Government	5.3
7225	Restaurants and other eating places	3.7
5613	Employment services	2.7
3352	Household appliance manufacturing	2.1
FR	Farms	1.3
4931	Warehousing and storage	1.2
6221	General medical and surgical hospitals	0.9
6211	Offices of physicians	0.8
6231	Nursing care facilities (skilled nursing facilities)	0.8
3371	Hsehld & instit. furniture & kitchen cab. manuf.	0.8
4521	Department stores	0.8
8129	Other personal services	0.8
4411	Automobile dealers	0.7
4841	General freight trucking	0.7
3251	Basic chemical manufacturing	0.7
	High-tech employment	0.9
	As % of total employment	2.0

Sources: BLS, Moody's Analytics, 2013

PER CAPITA INCOME

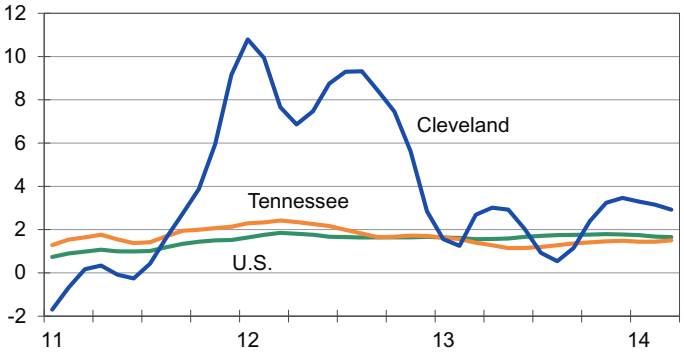


Sources: BEA, Moody's Analytics, 2013

CLEVELAND

Volatile Job Market Headed in Right Direction…

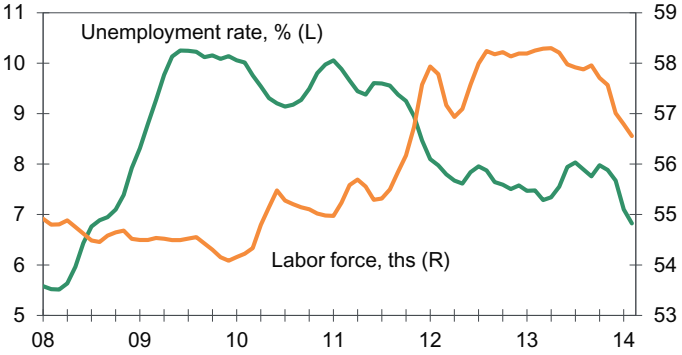
Employment, % change yr ago, 3-mo MA



Sources: BLS, Moody's Analytics

…Although Labor Force Decline a Concern

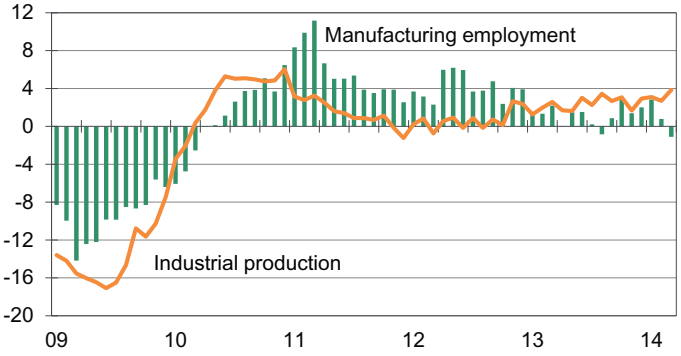
3-mo MA



Sources: BLS, Moody's Analytics

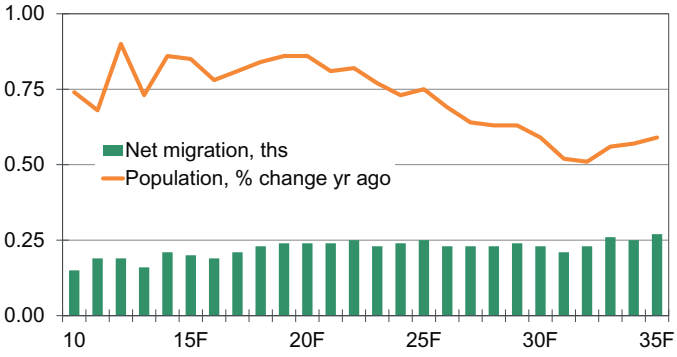
Factory Growth Settles at Slower Pace

% change yr ago



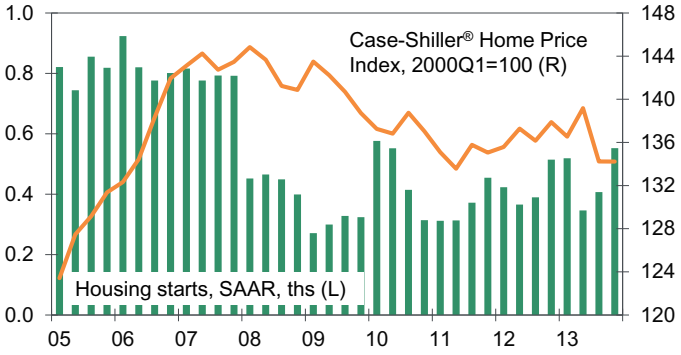
Sources: BLS, Moody's Analytics

Weak Demographics Will Hamper Economy



Sources: Census Bureau, Moody's Analytics

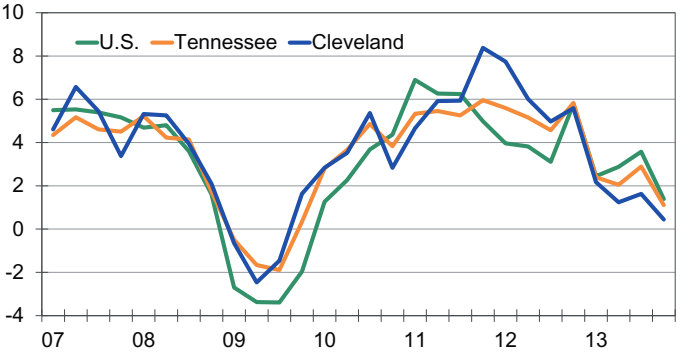
Housing Market Treading Water



Sources: CoreLogic, Census Bureau, Moody's Analytics

Low-Wage Positions Hurt Income Growth

Personal income, % change yr ago



Sources: BEA, Moody's Analytics

A Employment Growth Rank

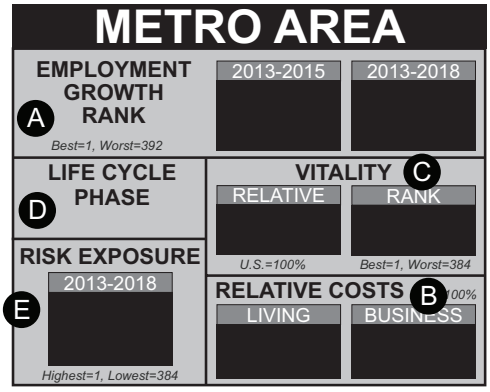
These numbers represent the MSA's rank among all 392 MSAs in the U.S., which include 29 metropolitan divisions and eight metro areas in Puerto Rico, in its short-term employment growth (over the next two years, top) and its long-term growth (over the next five years, bottom). For easier interpretation, the quintiles of the ranks appear. The actual expected short-term and long-term employment growth rates can be found on Page 9.

FYI: Depending on the distribution of the forecast growth rates, large differences in MSA forecast rankings may or may not indicate large differences in MSA forecast growth rates. For the current distribution of MSA employment growth rates, see Page 25.

B Relative Costs

Cost of Living
The cost of living index measures the relative cost to the average household in the nation to maintain its standard of living in each metropolitan area. The index is created by summing expenditures on various components of consumption in each metro area relative to average U.S. expenditures on the components. The components that vary across metro areas include housing, food and apparel, utilities, transportation and auto insurance.

Cost of Doing Business
To better gauge regional economic prospects, Moody's Analytics has developed a cost of doing business index for each MSA. The relative business cost index is composed of **labor costs**, tax burdens, energy costs, and office costs. Labor costs are measured by unit labor costs, or earnings per dollar of output. Unit labor costs are determined for each three-digit NAICS industry for each MSA and compared with unit labor costs for the same industries nationally. **Energy costs** are measured by average cents per kilowatt-hour (Kwh) charged to commercial and industrial users. **Tax burdens** are measured by total taxes and fees as a percent of total personal income in each metro area. Business contributions to unemployment and workers' compensation programs are also included in the tax measure because they represent costs for labor hired. **Office costs** are measured as the average price paid per square foot for class A office space. In the overall business cost index, a state-specific component weight system has been adopted to more accurately account for an area's business cost structure. State-specific weights were generated by analyzing inter-industry capital flows via IMPLAN modeling software. All metro areas within a state use the state's weight structure. On average across all metro areas, tax burdens have a 7% weight, energy a 15% weight, office rents a 27% weight, and unit labor costs a 51% weight. The index is configured so that the cost of doing business nationally equals 100. Thus, an MSA with a cost index of 110 has business costs 10% above the national average; an index of 90 means an MSA has business costs 10% below the national average.



C Vitality Index

The Moody's Analytics vitality index can be used to assess a metropolitan area's long-term economic potential. The index abstracts from business cycle fluctuations and near-term economic events. Only persistent forces of economic strength or weakness are considered. To maintain a long-term focus, the vitality index was created with the purpose of predicting the average annual growth rate in an area's gross domestic product over the next 10 years. The following four factors make up the vitality index: (1) industrial structure, (2) excess labor supply, (3) labor force quality, and (4) labor force growth. An index was generated for each of these components. A value of 100 indicates that the component in the metro area's economy matches the component's value nationally; values above 100 indicate that the component in the metro area's economy is above average, and those below 100 indicate the component is below average.

The index for industrial structure is called the industrial vitality index. The three labor inputs are reconciled into a single labor force vitality index in which values of 100 also correspond to the national average. The labor force vitality index is then combined with the industrial vitality index to produce the metro area's vitality index. Industrial vitality was assigned a 55% weight, and labor force vitality is assigned a 45% weight. These were assigned to achieve maximum correlation between predicted DP growth and actual GDP growth as determined by regression analysis. A vitality index value of 100 is consistent with the nation. Values above 100 suggest there is potential for faster growth, and those below 100 suggest the possibility for slower growth. The rank of the 384 U.S.metropolitan areas and metro divisions is also provided.

See *Regional Financial Review,* "U.S. Regional Diversity, Volatility and Vitality," August 2009 for a detailed explanation.

D Life Cycle Phase Indicator

Moody's Analytics has developed a weighted index based on the factors that determine long-term economic performance. High-tech share of GDP (5% weight) is measured as the share of GDP contributed by high-technology industries. Educational attainment (21% weight) is the share of the population 25 and older that has earned a bachelor's degree or higher. Climate (3% weight) measures the absolute average temperature deviation from 65 degrees. Geographic factors (6% weight) measures location-specific factors such as mountains and coasts that are conducive to development. Export share of employment (8% weight) is the percentage of employment in export-oriented industries relative to the national average. Relative business costs (30% weight) are measured by the Moody's Analytics cost of doing business index. Migration contribution (15% weight) measures the annual ratio of net migration to population. Construction activity (12% weight) is the 10-year average share of employment in construction industries relative to total employment.

E Risk Exposure

Risk exposure represents the extent to which a metro area economy's employment growth forecast will be vulnerable to upside or downside fluctuations in the upcoming five-year period. The ranking reflects the expected employment volatility associated with a specific metro area, with a higher ranking – and higher quintile – denoting greater risk. It is important to keep in mind that the ranking represents the relative potential for variation from the forecast; this can be to the upside or downside. A metro area in the first quintile, for example, faces a much wider range of potential outcomes than one in the fifth quintile, which is unlikely to deviate significantly from the forecast.

There are seven determinants of metro area risk exposure: (1) Investment income dependence, (2) metro area size, (3) the prior year's change in population, (4) education and healthcare share of output, (5) government share of output, (6) finance share of output, and (7) home price volatility, based on the change in the ratio of median home price to per capita income.

Risk exposure should be considered in combination with a metro area's expected growth rate in order to ascertain the level of certainty associated with an employment growth forecast. Metro areas with high growth rates and low volatility rankings represent those that are the safest in terms of expected growth, while those with low growth rates and high volatility are most exposed to highly negative results.

See Regional Financial Review, "Measuring Regional Uncertainty: An Update of Risk-Adjusted Return," March 2013, for a detailed explanation.

Indicator	Units	Source	Note
Gross Metro Product	Chain-weighted dollars	Moody's Analytics	Sum of all income produced in a county, including corporate profits. Thus, it does not necessarily track employment growth.
Total Employment	Ths	BLS Current Employment Statistics; for NECMAs series estimated by Moody's Analytics	Sum of mining, construction, manufacturing, education/ health, transportation/utilities, trade, information, financial activities, professional/ business, leisure/hospitality, and other services, and government.
Unemployment Rate	%	BLS Current Population Survey	
Personal Income Growth	% change previous yr	Bureau of Economic Analysis, Moody's Analytics	Measures income received by households from employment (including self-employment), investments and transfer payments.
Population	Ths	Census Bureau	
Single-Family Permits	Number of units	Census Bureau	
Multifamily Permits	Number of units	Census Bureau	
Existing-Home Price	$ ths	National Assoc. Realtors	Index is affected by mix of homes sold.
Mortgage Originations	$ mil	HMDA, FRB, Moody's Analytics	
Net Migration	Ths	Census Bureau	Number of U.S. residents and foreigners moving into a state minus those leaving.
Personal Bankruptcies	Number of household filings	Admin. Office U.S. Courts	

USER'S GUIDE

EMPLOYMENT AND INDUSTRY STRUCTURE

INDUSTRIAL DIVERSITY

Industrial diversity is defined as the extent to which an MSA's industrial structure approximates the U.S. industrial structure.

Diversity is derived using the following formula: Diversity = $1/\sum((EMP_{ij}/EMPUS_j)*EMP_{ij})$

Where EMP = share of employment in four-digit NAICS industry j during period 2010-2012; i = MSA; US = U.S. The diversity measure is bounded between 0 and 1. A 1 means the metro area has the same industrial structure as the U.S.; a value close to 0 means it has a totally different industrial structure than the U.S. does.

Formula derived from Hachman index, Bureau of Business and Economic Research, Univ. of Utah, December 1994.

EMPLOYMENT VOLATILITY

Employment volatility is defined as the standard deviation in an MSA's monthly year-over-year percentage nonagricultural employment growth relative to the standard deviation in U.S. year-over-year percentage nonagricultural employment growth over the 2002 to 2012 period. Volatility of 100 means that employment volatility in an MSA is equal to employment volatility in the nation. MSAs tend to be more volatile than states.

EMPLOYMENT VOLATILITY DUE TO U.S. FLUCTUATIONS

Volatility due to U.S. fluctuations (also known as "systematic volatility") is defined as:

$SYSVOL = (R_i^2)^{1/2}$

where SYSVOL = systematic volatility; R^2 = is the proportion of total variance in MSA i's growth rate that is associated with contemporaneous fluctuations in national growth.

Volatility not due to U.S. fluctuations (also known as "nonsystematic volatility") is defined as: $NONSYS = 1 - (R_i^2)^{1/2}$

where NONSYS = nonsystematic volatility in MSA i; R^2 is the proportion of total variance in MSA i's growth rate that is associated with contemporaneous fluctuations in national growth.

Formulas modified from "Assessing Regional Economic Stability: A Portfolio Approach," Economic Review (Federal Reserve Bank of San Francisco), Winter 1990.

REGION DEFINITION

The Moody's Analytics definition of the Northeast differs from the Census Bureau's definition of the Northeast Census Region in that it includes Maryland, Delaware, and the District of Columbia in addition to Middle Atlantic and New England states. The Moody's Analytics definition of the South excludes Maryland, Delaware and the District of Columbia. The Moody's Analytics definitions of the Midwest and West match the Census Bureau's definitions of the Midwest and West Census Regions, respectively.

MIGRATION FLOWS

IRS data. When a taxpayer notifies the IRS of a change in address, the IRS records the household's current county of residence, the county to which the household is moving, and the number of household members. Moody's Analytics aggregates this data by metro area into gross migration. The data are then sorted to show the 10 MSAs providing the largest number of new residents and the 10 MSAs to where the largest number of current residents move.

The IRS migration data cover only households that file returns and thus do not provide a complete tally of domestic migration flows. Furthermore, although the state data are updated to include late filings and extensions, that for the counties includes only data from tax returns filed by the deadline. Moody's Analytics adjusts the county-level data by sharing out late filings and extensions at the state level to counties.

Census data. The Census Bureau measure of net migration attempts to capture all migration to and from counties. Unlike the IRS data, Census data cover all migrants, including international immigrants. Moody's Analytics aggregates county net migration data to metro areas and states. Domestic and international net migration were re-estimated for 2001-2010, because the Census had no plans to do so. Pre-existing net migration estimates (derived from 2000 census population estimates combined with constant birth and death rates) were used. The weights for domestic and international migration are the same as those that existed before.

LEADING INDUSTRIES

Leading industries are defined as the largest industries with location quotients greater than 1.1. A location quotient greater than 1 indicates an industry that serves more than the local market.

Location quotients are calculated according to the formula: $LC^i_m = (E^i_m/E^t_m)/(E^i_{us}/E^t_{us})$

where LC = location quotient in MSA m for industry i; E = employment in industry i for MSA m or the U.S.; and t = total employment for MSA m or the U.S.

Moody's Analytics defines high-tech employment as the sum of employment in the following industries:

NAICS	Industry
3254	Pharm. & Medicine Manuf.
3341	Computer & Peripheral Equip. Manuf.
3342	Communications Equipment Manuf.
3344	Semi. & Other Elec. Comp. Manuf.
3345	Nav., Meas., Elec., & Control Instr. Manuf.
3391	Medical Equip. & Supplies Manuf.
5112	Software Publishers
5171	Wired Telecommunications Carriers
5172	Wireless Telecom. Carriers (except Sat.)
5174	Satellite Telecommunications
5179	Other Telecommunications
5182	Data Proc., Hosting, & Related Services
5191	Other Information services
5415	Computer Sys. Design & Related Services
5417	Scientific Research & Dev. Services
5419	Other Prof., Scientific, & Tech. Services
6215	Medical & Diagnostic Laboratories

HOUSE PRICES

FHFA Conventional and Conforming Home Price Index. The Federal Housing Finance Agency estimates and publishes quarterly house price indices for single-family detached properties using data on conventional conforming mortgage transactions obtained from the Federal Home Loan Mortgage Corporation and the Federal National Mortgage Association. These indices use a repeat-purchase method. The chief advantage of the repeat-purchase method over other house price measures is that it is not affected by the mix of homes sold. For example, using traditional house-price measures, a rise in the number of low-priced homes sold relative to higher-priced homes will bias house prices downward, even though relative prices may not have changed. Because repeat-purchase house price indices keep track of successive selling prices for the same property, they avoid this bias.

FYI: The house price index is based on transactions involving conforming, conventional mortgages purchased or securitized by Fannie Mae or Freddie Mac. Only mortgage transactions on single-family properties are included. A conforming mortgage is one that both meets the underwriting guidelines of Fannie Mae or Freddie Mac and does not exceed the conforming loan limit. The conforming limit for single-family homes is $417,000 as of January 2013. Conventional means that the mortgages are neither insured nor guaranteed by the FHA, VA, or other federal entity. Because of the conforming limit, the FHFA repeat-purchase index is less reliable in such states as California, Connecticut and New Jersey, where many homes are priced above the purchase limits.

BOND RATINGS

Bond ratings for general obligation bonds issued by cities and counties are available from Moody's. Not all governments issue GO bonds, and thus some areas will show "NA" here. The Moody's interpretation of its bond ratings is as follows:

Aaa	Best quality; smallest degree of investment risk.
Aa	High quality; margins of protection not as large as in Aaa.
A	Upper medium grade obligations, adequately secured.
Baa	Medium grade obligations, neither highly protected nor poorly secured.
Ba	Speculative; future cannot be considered as well assured.
B	Lacking characteristics of desired investment.

Modifiers 1, 2 and 3 correspond to the higher to lower ends of a generic category.

The bond rating reported in Précis applies to the core county or city that best represents the metropolitan area; the selection is noted next to the rating. As local governments are organized at the city and county level, not as metropolitan governments, Moody's bond ratings apply to cities and counties only. No summary metropolitan bond rating exists.

About Moody's Analytics
Economic & Consumer Credit Analytics

Moody's Analytics helps capital markets and credit risk management professionals worldwide respond to an evolving marketplace with confidence. Through its team of economists, Moody's Analytics is a leading independent provider of data, analysis, modeling and forecasts on national and regional economies, financial markets, and credit risk.

Moody's Analytics tracks and analyzes trends in consumer credit and spending, output and income, mortgage activity, population, central bank behavior, and prices. Our customized models, concise and timely reports, and one of the largest assembled financial, economic and demographic databases support firms and policymakers in strategic planning, product and sales forecasting, credit risk and sensitivity management, and investment research. Our customers include multinational corporations, governments at all levels, central banks and financial regulators, retailers, mutual funds, financial institutions, utilities, residential and commercial real estate firms, insurance companies, and professional investors.

Our web periodicals and special publications cover every U.S. state and metropolitan area; countries throughout Europe, Asia and the Americas; the world's major cities; and the U.S. housing market and other industries. From our offices in the U.S., the United Kingdom, the Czech Republic and Australia, we provide up-to-the-minute reporting and analysis on the world's major economies.

Moody's Analytics added Economy.com to its portfolio in 2005. Now called Economic & Consumer Credit Analytics, this arm is based in West Chester PA, a suburb of Philadelphia, with offices in London, Prague and Sydney. More information is available at www.economy.com.