Wichita State University
W. Frank Barton School of Business
Center for Economic Development and Business Research

Misery Index: 2016 Q3

The Misery Index is an indicator measuring the impact of changing economic conditions on people. This index, as calculated by CEDBR, is a combination of the quarterly percent change in the Housing Price Index (HPI), the quarterly average change in the Consumer Price Index (CPI), and the quarterly average unemployment rate (UR). The combination of changes in these factors indicates the changing level of economic misery experienced by people in different geographic areas.

Misery Index

		Index Value		% Change in Index		Change in Index Components		
		2016 Q3	**2016 Q2**	**Quarterly**	**Annual**	**HPI**	**CPI**	**UR**
	U.S.	4.96	4.76	▲ 4.3%	▼ -4.9%	▼ -0.003	▲ 0.001	▲ 0.200
	Kansas	4.50	3.78	▲ 18.9%	▲ 6.6%	▼ -0.015	▼ -0.001	▲ 0.700
Kansas	Wichita, KS	5.06	4.18	▲ 20.9%	▲ 7.4%	▼ -0.010	▼ 0.000	▲ 0.867
Kansas	Kansas City, MO-KS	4.79	4.12	▲ 16.3%	▲ 2.2%	▼ -0.005	▼ -0.001	▲ 0.667
Kansas	Lawrence, KS	3.98	3.43	▲ 16.0%	▲ 4.2%	▲ 0.017	▼ 0.000	▲ 0.567
Kansas	Topeka, KS	4.31	3.72	▲ 16.0%	▲ 4.5%	▼ -0.029	▼ 0.000	▲ 0.567
Region	Oklahoma City, OK	4.52	4.20	▲ 7.6%	▲ 23.9%	▲ 0.015	▼ 0.000	▲ 0.333
Region	Omaha, NE	3.45	3.22	▲ 7.1%	▲ 6.5%	▲ 0.004	▼ 0.000	▲ 0.233
Region	St. Louis, MO-IL	4.95	4.53	▲ 9.3%	▲ 0.8%	▲ 0.008	▼ -0.001	▲ 0.433
Region	Tulsa, OK	5.42	4.86	▲ 11.6%	▲ 27.3%	▲ 0.003	▼ 0.000	▲ 0.567
Peer	Akron, OH	4.73	4.78	▼ -1.1%	▲ 4.1%	▼ -0.013	▼ 0.000	▼ -0.067
Peer	Grand Rapids, MI	3.35	3.14	▲ 6.6%	▼ -6.8%	▼ -0.007	▼ 0.000	▲ 0.200
Peer	Greenville, SC	4.76	4.71	▲ 1.1%	▼ -9.0%	▼ -0.019	▲ 0.002	▲ 0.033
Peer	Lancaster, PA	4.60	4.10	▲ 12.1%	▲ 12.9%	▼ -0.028	▲ 0.002	▲ 0.467

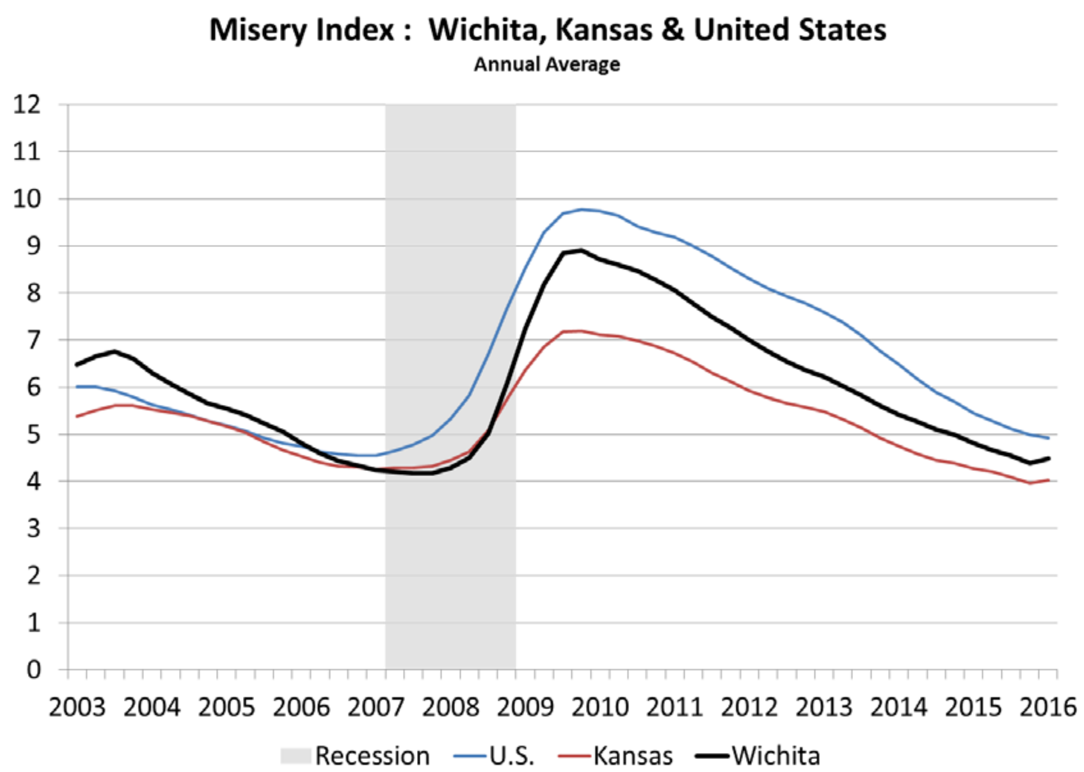
Values are impacted by rounding.

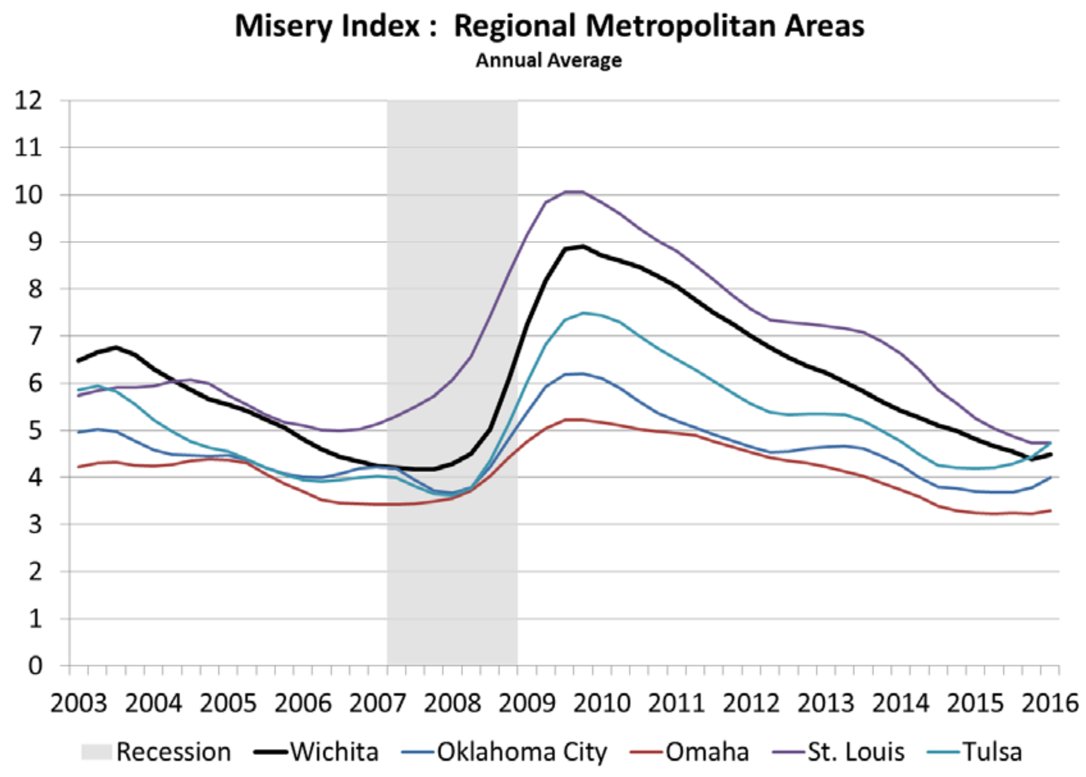
Between the second and third quarters of 2016, the general level of misery experienced by people in the United States increased, but remains below the 2015 level. This can be attributed to an increase in the unemployment rate, low levels of inflation and a decrease in housing prices. The level of misery in Kansas also increased between the second and third quarters and is somewhat above the 2015 level.

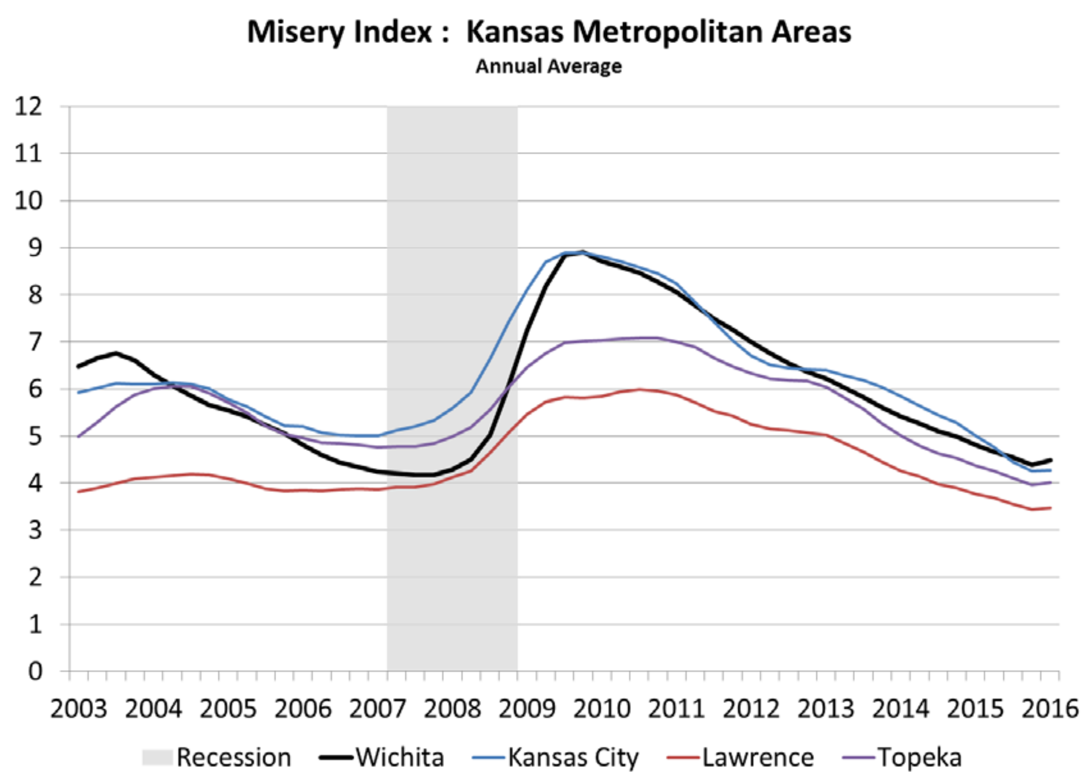
Within the metropolitan areas in Kansas, the level of misery is mixed. Wichita and Kansas City have levels of misery higher than the United States and Kansas. Lawrence and Topeka have levels of misery lower than the United States and Kansas. Wichita had the largest increase in misery in the state between the second and third quarters.

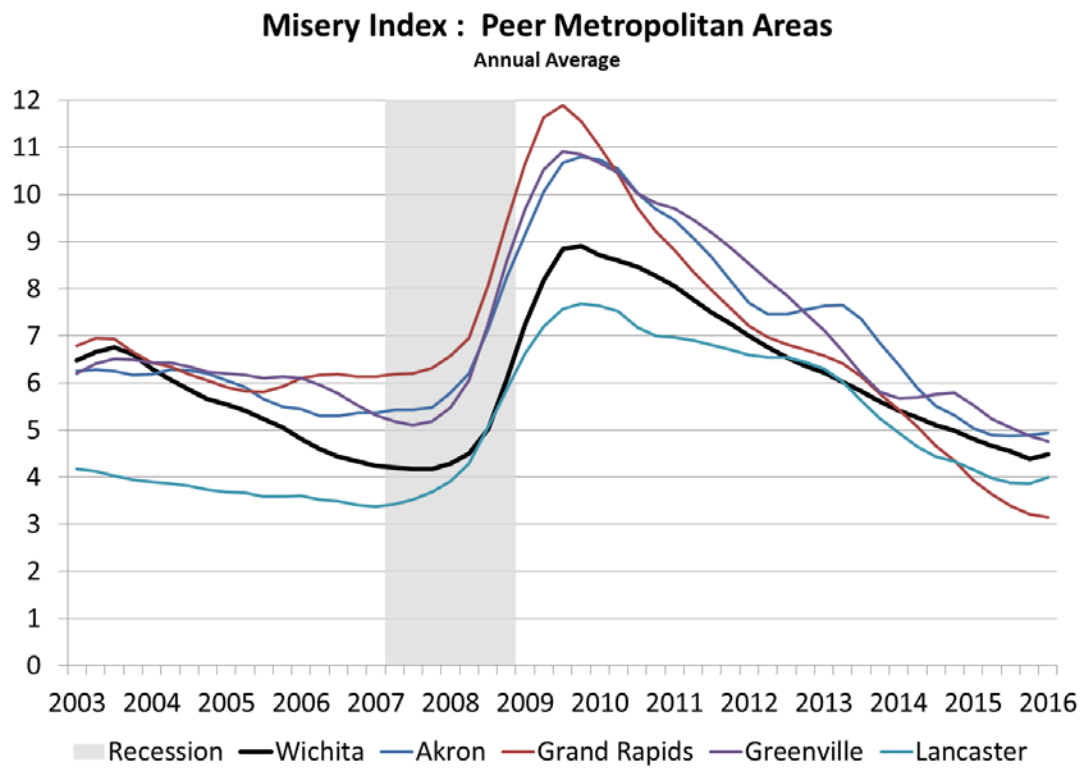
Within the region, Tulsa continues to have the highest level of misery, followed by Wichita and St. Louis. The lowest level of misery in the region continues to be in Omaha, followed by Lawrence. Between the second and third quarters, metropolitan areas in Kansas experienced a larger percentage increase in misery then other metropolitan areas in the region. In general, this is due to larger increases in the unemployment rate and small decreases in housing prices.

For comparison, the misery index for four metropolitan areas similar to Wichita in population, demographics, and industrial mix are also provided. Within these peer communities, Wichita has the highest level of misery. The level of misery in Wichita increased more than the peer communities between the second and third quarters. The level of misery in Grand Rapids and Greenville is below 2015 levels.




Misery Index : Regional Metropolitan Areas
Annual Average
12
11
10
9
8
7
6
5
4
3
2
1
0
2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016
Recession
Wichita
Oklahoma City
Omaha
St. Louis
Tulsa


Misery Index : Kansas Metropolitan Areas
Annual Average
12
11
10
9
8
7
6
5
4
3
2
1
0
2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016
Recession
Wichita
Kansas City
Lawrence
Topeka



Methodology

The Misery Index calculated by the Center for Economic Development and Business Research (CEDBR) includes the following information:

- The Consumer Price Index (CPI) from the Bureau of Labor Statistics[1]
- House Price Index (HPI) from the Federal Housing Finance Agency[2]
- Unemployment Rates (UR) from the Bureau of Labor Statistics[3]

Not seasonally adjusted, monthly data values for the Consumer Price Index – All Urban Consumers were used to calculate the quarterly inflation rates. The specific indices used are as follows. U.S. city average, with a base period of 1982-84, was used for the United States inflation rate. Midwest urban, with a base period of 1982-84, was used for the Kansas inflation rate. Midwest – Size Class A, with a base year of 1982-84, was used for the Kansas City and St. Louis metropolitan area's inflation rates. Midwest – Size Class B/C, with a base year of December 1996, was used for the Wichita, Topeka, Lawrence, Grand Rapids, Omaha, Akron, Oklahoma City and Tulsa metropolitan area's inflation rates. Northeast urban – Size Class B/C, with a base period of December 1996, was used for the Lancaster metropolitan area

[1] http://www.bls.gov/cpi/ Data accessed November 23, 2016.
[2] http://www.fhfa.gov/Default.aspx?Page=87 Data accessed November 23, 2016.
[3] http://www.bls.gov/bls/unemployment.htm Data accessed November 23, 2016.

inflation rate. South – Size Class B/C, with a base period of December 1996, was used for the Greenville metropolitan area inflation rate.

The HPI is a measure of single family home prices within specific areas. This series is used because the index is produced for a wide range of geographic areas. The CEDBR used the "All-Transactions Index" values for each respective area. The percentage change from the previous quarter was used in the Misery Index. The HPI is a positive indicator for consumers. Therefore, if the HPI is increasing, the Misery Index will decline.

The CEDBR used not seasonally adjusted, area specific, unemployment data (the official unemployment rate) to calculate the Misery Index. The unemployment rate is a negative indicator for consumers. Therefore, if the unemployment rate is increasing, the Misery Index will also increase.

For additional information and methodology details please click HERE.