WICHITA STATE UNIVERSITY
W. FRANK BARTON SCHOOL OF BUSINESS
Center for Economic Development and Business Research

Misery Index: 2018 Q1

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		
		2018 Q1	2017 Q4	Quarterly	Annual	HPI	CPI	UR
	U.S.	4.34	3.91	11.0%	-11.0%	0.003	0.001	0.433
	Kansas	3.50	3.08	13.5%	-12.4%	0.016	0.000	0.433
Kansas	Wichita, KS	3.94	3.55	11.2%	-13.1%	0.002	-0.001	0.400
Kansas	Kansas City, MO-KS	3.79	3.31	14.6%	-12.9%	0.017	-0.001	0.500
Kansas	Lawrence, KS	3.08	2.64	16.4%	-8.4%	0.034	-0.001	0.467
Kansas	Topeka, KS	3.65	3.09	18.1%	-11.1%	0.039	-0.001	0.600
Region	Oklahoma City, OK	3.67	3.56	3.0%	-11.6%	0.025	-0.001	0.133
Region	Omaha, NE	3.10	2.67	15.8%	-9.0%	0.009	-0.001	0.433
Region	St. Louis, MO-IL	3.81	3.21	18.5%	-11.0%	0.004	-0.002	0.600
Region	Tulsa, OK	4.16	4.13	0.9%	-14.1%	-0.038	-0.001	0.000
Peer	Akron, OH	4.89	4.61	6.0%	-18.2%	-0.012	-0.001	0.267
Peer	Grand Rapids, MI	3.83	3.38	13.1%	3.0%	0.021	-0.001	0.467
Peer	Greenville, SC	4.10	3.59	13.9%	2.1%	-0.002	0.000	0.500
Peer	Lancaster, PA	3.82	3.38	13.2%	-8.7%	0.025	0.005	0.467

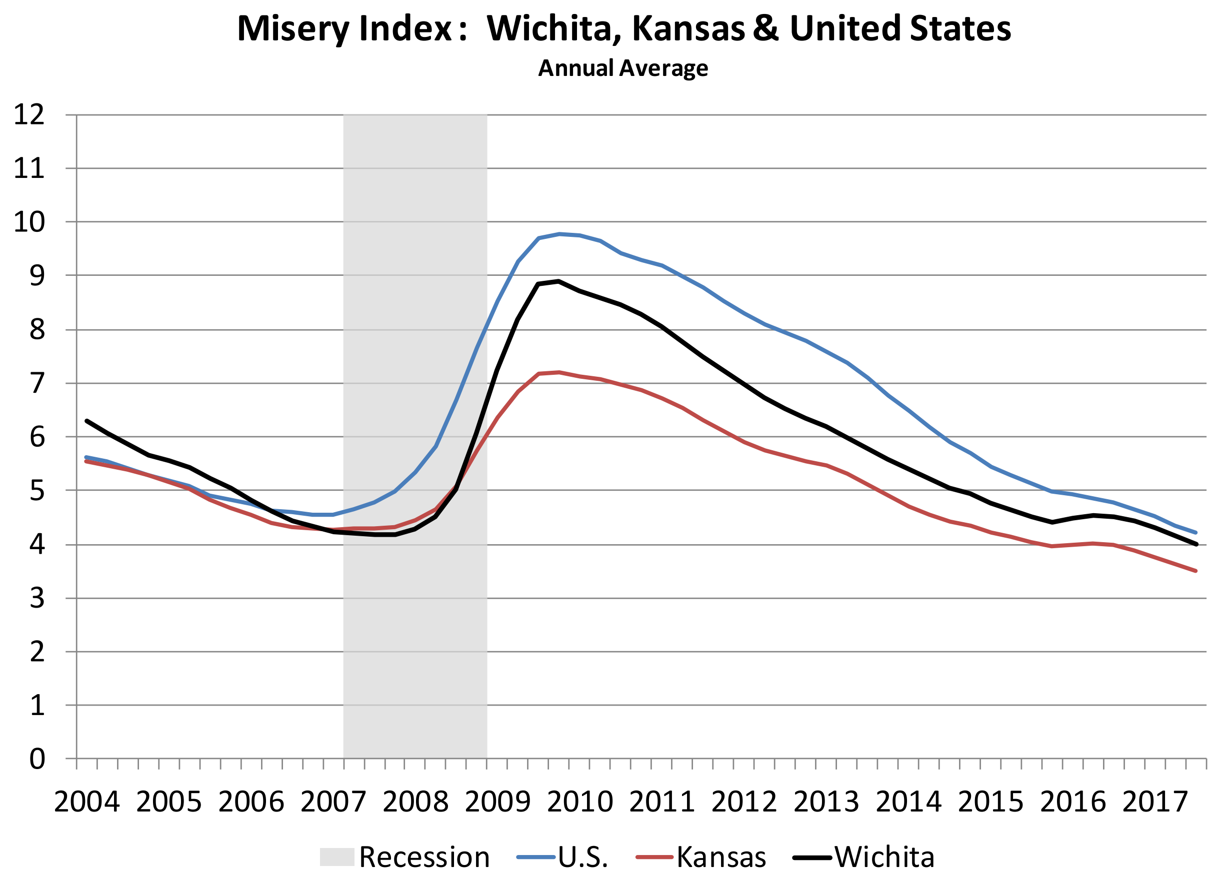
Values are impacted by rounding.

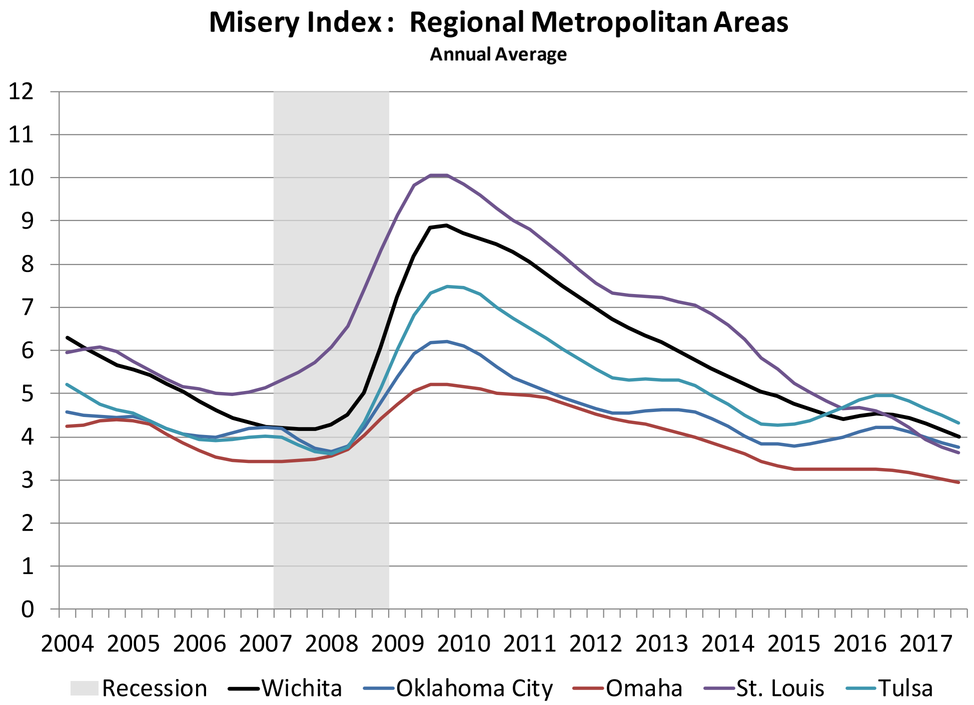
Between the fourth quarter of 2017 and first quarter of 2018, the general level of misery experienced by people in the United States and Kansas increased. This can be attributed to an increase in the unemployment rate and inflation, partially offset by an increase in housing prices. However, the level of misery is less than the first quarter of 2017.

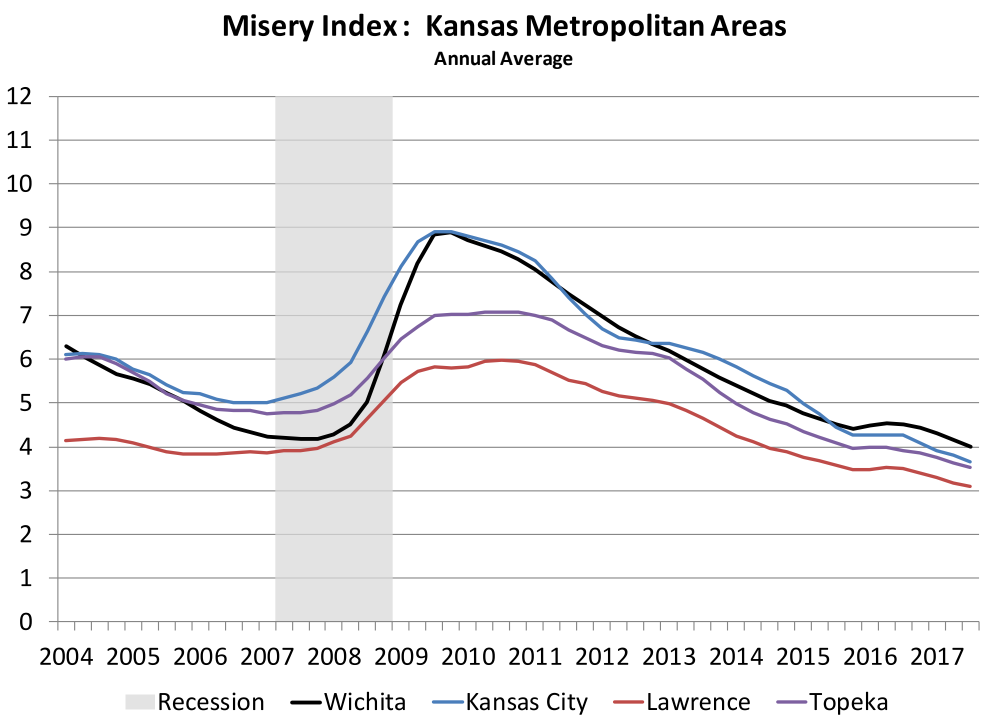
Each of the metropolitan areas in Kansas also experienced an increase in the level of misery. Among the metropolitan areas in the state, Wichita, Kansas City, and Topeka all have levels of misery above the state level. However, all areas in Kansas are below the national level.

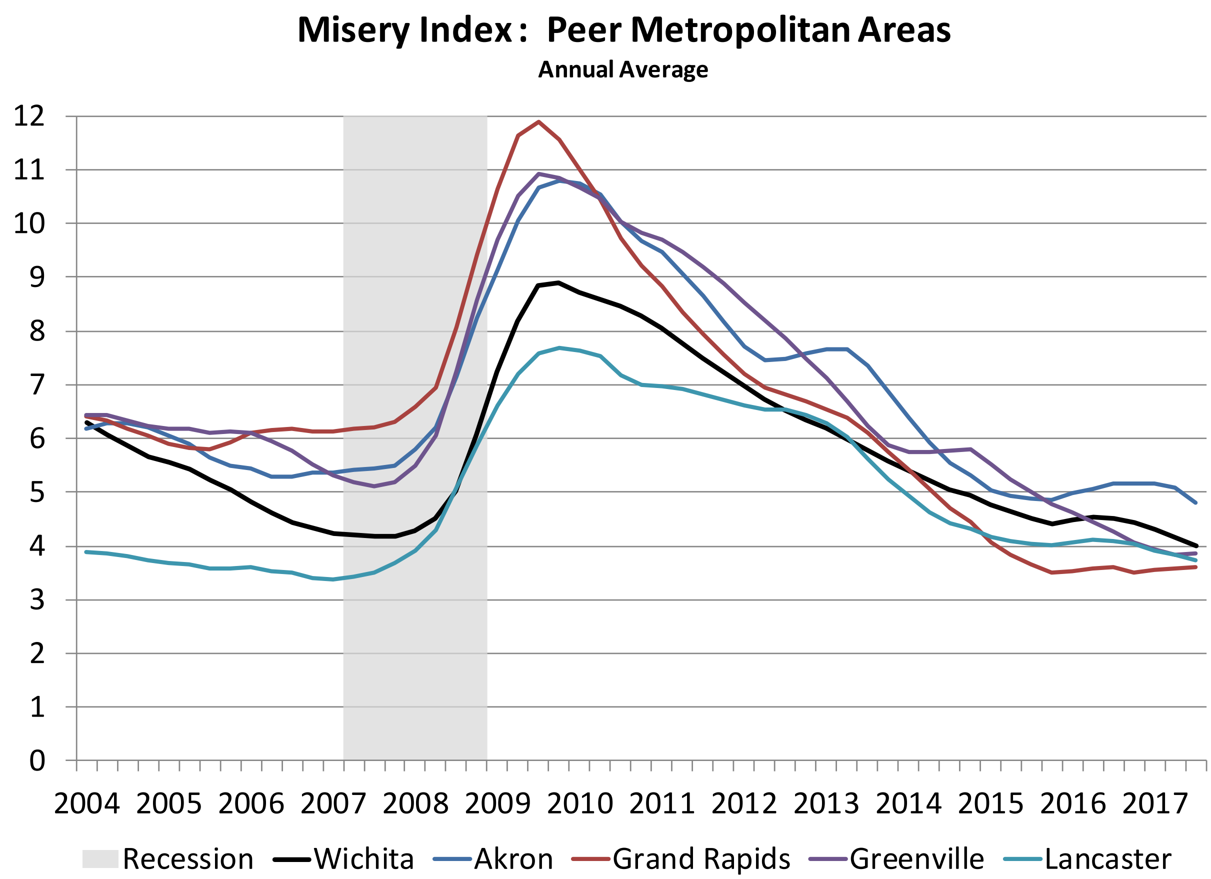
Within the region, Tulsa continues to have the highest level of misery, followed by Wichita and Kansas City. The lowest level of misery in the region is in Lawrence, followed by Omaha. All areas in the region experienced increases in misery this quarter.

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, Akron continues to have the highest level of misery due to their higher level of unemployment, followed by Greenville, SC, and Wichita. Lancaster has the lowest level of misery among the peer communities.




Misery Index : Regional Metropolitan Areas
Annual Average
12
11
10
9
8
7
6
5
4
3
2
1
0
2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017
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
2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017
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 the base year of 1982-84, was used for the St. Louis metropolitan area's inflation rates. Midwest – Size Class B/C, with a base year of December 1996, was used for the Wichita, Kansas City, Topeka, Lawrence, Grand

[1] http://www.bls.gov/cpi/ Data accessed May 25,2018.
[2] http://www.fhfa.gov/Default.aspx?Page=87 Data accessed May 25,2018.
[3] http://www.bls.gov/bls/unemployment.htm Data accessed May 25,2018.

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 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.