

Misery Index: 2017 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

									Change					
		Index	% Change in Index				in Index Components							
		2017 Q3	2017 Q2	Qι	ıarterly		Annual		HPI		CPI		UR	
	U.S.	4.40	4.23		4.3%	\triangleright	-11.2%	\triangleright	-0.012	4	0.001	4	0.167	
	Kansas	3.94	3.71		6.1%	\triangleright	-12.3%	\triangleright	-0.025	4	0.001	4	0.200	
Kansas	Wichita, KS	4.52	4.20		7.6%	\triangleright	-11.2%	\triangleright	-0.018	4	0.000	4	0.300	
	Kansas City, MO-KS	4.03	3.71		8.8%	\triangleright	-13.3%	\triangleright	-0.025	4	0.001	4	0.300	
	Lawrence, KS	3.52	3.30		6.7%	\triangleright	-10.8%	\triangleright	-0.053	4	0.000	4	0.167	
	Topeka, KS	3.85	3.65	4	5.5%	\triangleright	-9.9%	\triangleright	-0.066	4	0.000	4	0.133	
Region	Oklahoma City, OK	4.09	4.03		1.5%	\triangleright	-6.2%		0.007	4	0.000	4	0.067	
	Omaha, NE	2.87	2.98	\triangleright	-3.9%	\triangleright	-16.1%	\triangleright	-0.018	4	0.000	\triangleright	-0.133	
	St. Louis, MO-IL	3.87	3.90	$\overline{}$	-0.7%	$\overline{}$	-21.4%		-0.004	4	0.001	\triangleright	-0.033	
	Tulsa, OK	4.78	4.69		1.9%	\triangleright	-8.4%	\triangleright	-0.021	4	0.000	4	0.067	
Peer	Akron, OH	5.04	4.71		7.1%		1.6%	$\overline{}$	-0.034	_	0.000	_	0.300	
	Grand Rapids, MI	3.85	2.77		39.0%	4	3.7%	\triangleright	-0.013	4	0.000	4	1.067	
	Greenville, SC	3.90	3.51		11.3%	\vee	-13.1%		0.006		0.001		0.400	
	Lancaster, PA	3.93	3.87	4	1.6%	\triangleright	-12.0%	4	0.001	$\overline{}$	-0.005		0.067	

Values are impacted by rounding.

Between the second and third quarters of 2017, the general level of misery experienced by people in the United States and Kansas increased, but remained below the 2016 level, reversing the improvements of the second quarter. This can be attributed to increases in the unemployment rate and inflation. There were also decreases in housing prices.

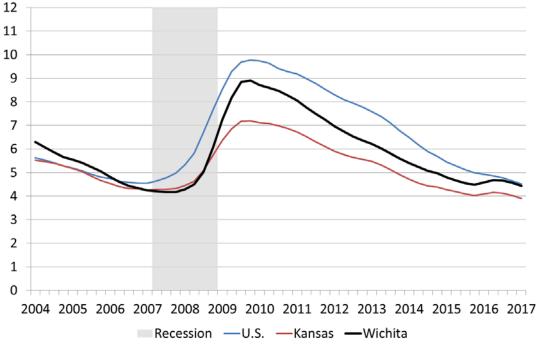
Change

This is also true of each of the metropolitan areas in Kansas. Among the metropolitan areas in the state, Wichita and Kansas City both have levels of misery above the state level. The level of misery in Wichita is above the national level, all other areas in Kansas are below the national level.

Within the region, Tulsa continues to have the highest level of misery, followed by Wichita and Oklahoma City. The lowest level of misery in the region is in Omaha, followed by Lawrence. Omaha and St. Louis both experienced decreases in misery in the third 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 Wichita. Grand Rapids has the lowest level of misery among the peer communities.



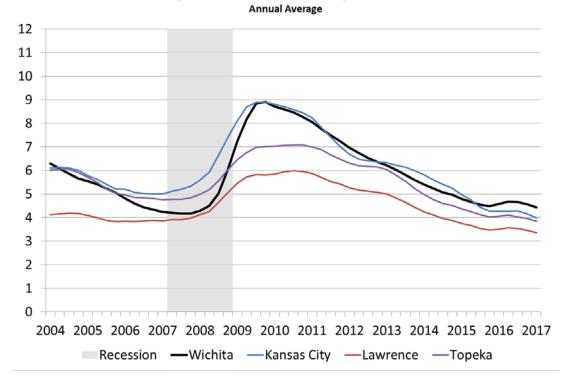


Misery Index: Regional Metropolitan Areas Annual Average

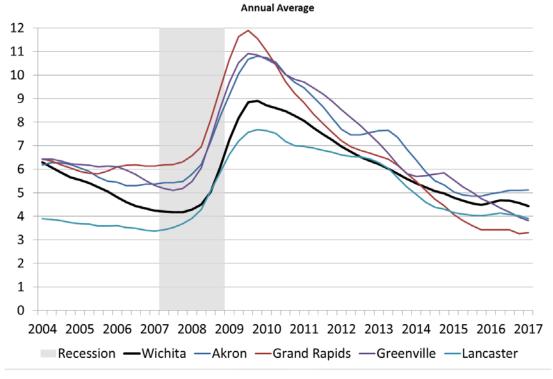
12
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2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017

Recession —Wichita —Oklahoma City —Omaha —St. Louis —Tulsa

Misery Index: Kansas Metropolitan Areas



Misery Index: Peer Metropolitan Areas



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 Statistics¹
- House Price Index (HPI) from the Federal Housing Finance Agency²
- Unemployment Rates (UR) from the Bureau of Labor Statistics³

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 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 28, 2017.

² http://www.fhfa.gov/Default.aspx?Page=87 Data accessed November 28, 2017.

³ http://www.bls.gov/bls/unemployment.htm Data accessed November 28, 2017.

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 <u>HERE</u>.