

# Behind the numbers

## ANALYZING UNEMPLOYMENT

Every trendline tells a story ... or, actually, more than one story. A good example is the Unemployment indicator that FCFC has been tracking since the release of *Turning the Curve*. The unemployment rate is one of the most widely used barometers of the health of an economy. It is regularly reported in the media and most people have a basic understanding of what it means.

In this year's *Report*, we can see that the unemployment rate for Montgomery County in 2003 was 6.3 percent, the highest it has ever been in the time period covered by this indicator, going back to 1990. Over the years, the county's unemployment rate has moved up and down in synchrony with the unemployment rates for Ohio and the USA, as can easily be seen by examining all three trendlines (Fig.1)<sup>1</sup>. It can also be seen that 2003 marks the first time in this period that the county's rate is *higher* than the rates for Ohio and the USA. So one story the trendline tells us is that, while we have ups and downs in step with the rest

of the country, we are experiencing the most recent rise in unemployment a little more sharply than we have in the past.

The unemployment rate is based on the entire working age population. It can actually be broken down into rates for specific segments of the population based, for example, on race or gender. In this way a given trendline can be taken apart to tell additional stories. How, for example, do the unemployment rates for blacks and whites compare?

Fig. 2 shows the black unemployment rate to be higher than the white unemployment rate in the Dayton-Springfield Metropolitan Statistical Area (MSA)<sup>2</sup>. (In fact, for the years shown in the graph, it averaged about 225 percent higher.) It appears from this graph that black unemployment increased during a time (1997 – 99) when the white unemployment rate as well as the total unemployment rate was decreasing. In the following year, 2000, it showed a large decrease while the total rate dropped modestly and the white rate increased slightly.

Since then, all three have risen. What story is the black unemployment trendline trying to tell? Certainly it is a concern that the black rate is consistently higher. But why was the black unemployment rate *rising* during the time that total unemployment was *dropping*?

It stands to reason that when unemployment drops, *more* people have jobs. In fact, the percentage of the black population that is employed (called the employment/population<sup>3</sup> or e/p ratio) rose substantially during the time in question, from 48.1% to 55.8% (Fig. 3). What was going on? How could more people be working and the unemployment rate be going up at the same time?

The answer lies in yet another statistic, the rate of labor force participation (Fig. 4). Only people who are working or looking for work are considered participants in the labor force. Therefore, people who are not working are NOT counted as unemployed IF they are not looking for work.

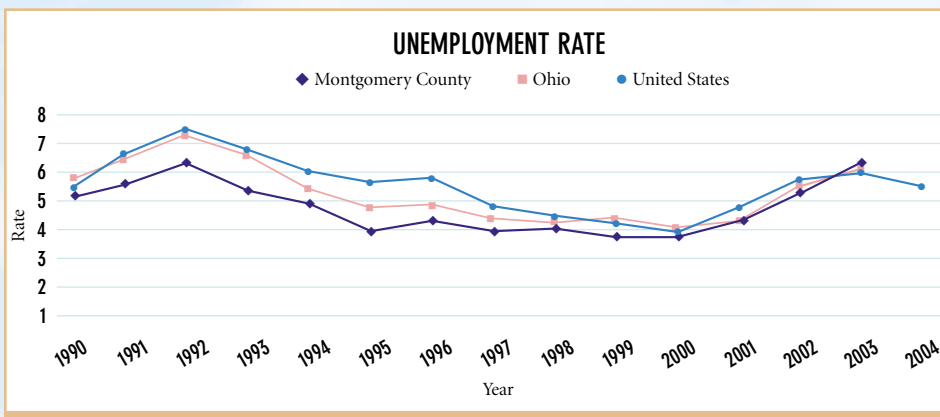


Fig.1

Unemployment rates for Montgomery County, Ohio and the USA. Until recently, the Montgomery County rate was noticeably lower than the other two.

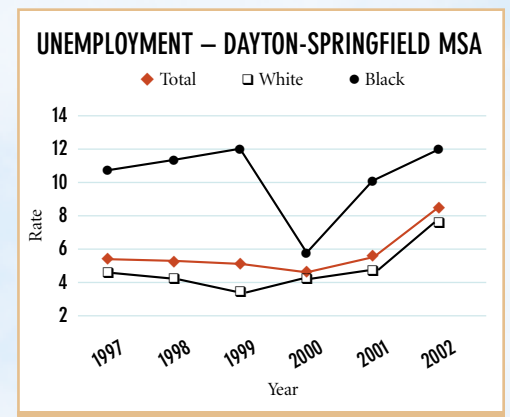


Fig.2

Unemployment by race in the Dayton-Springfield MSA. Black unemployment rose during a time when total unemployment and white unemployment were dropping.



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Table 1 helps tell this story. Between 1997 and 1999, the black unemployment rate in the Dayton-Springfield MSA rose 11.2%<sup>4</sup> despite the fact that the percentage of black people employed rose a whopping 16.0%. The fact that black labor force participation went up even faster, 17.6%, suggests there was also a large increase in the number of people who were unemployed but who now identified themselves as looking for work. Here is a situation where the combination of more people working plus more unemployed people looking for work resulted in an increase in the unemployment rate.

Like any good story, this one raises even more questions. How, for example, do the local trendlines for labor force participation and employment/population ratio compare to those of other counties, of the state of Ohio, and of the USA? If they are different, what does that

say about the local economy and workforce? What policy and practice choices exist in order to narrow the chronic gap between black unemployment and white unemployment? These and other questions (How does the structure of the local labor market compare to other localities? How is it projected to change in the future?) are beyond the scope of this *Report* but are the type that need to be asked – and are being asked – by those interested in achieving the Economic Self-Sufficiency outcome.

**So by asking one trendline – in this case, the total unemployment rate for Montgomery County – to tell its story we have heard several stories and piqued our curiosity about several more. That is what a good community indicator does. It starts a discussion about what is happening in efforts to achieve a community outcome. It is up to us to continue that discussion and, more importantly, to act. Our plans for Phase II (page 16) include doing more of this.**

Table 1

When the growth in labor force participation exceeds the growth in the employment/population ratio, the unemployment rate goes UP even though more people are working. Compare “black” to “white” or “total.”

% CHANGE, 1997 – 1999 DAYTON-SPRINGFIELD MSA			
	Unemployment Rate	Labor Force Participation	Employment/Population
TOTAL	-9.4%	+4.5%	+5.1%
WHITE	-17.8%	+2.9%	+3.8%
BLACK	+11.2%	+17.6%	+16.0%

<sup>1</sup>With a general readership in mind, only the reported values are shown in each graph for clarity. Upper and lower limits for error ranges are known and should be considered as part of a thorough examination of these data.

<sup>2</sup>Unfortunately, the sampling procedure used to determine the unemployment rate for an area the size of Montgomery County does not produce valid results for just one segment of the population. The smallest area for which the unemployment rate by race is available is a multi-county area known as the Dayton-Springfield Metropolitan Statistical Area (MSA). At the time of publication the most recent data are for 2002.

<sup>3</sup>The unemployment rate tells what percentage of the *labor force* (those working or looking for work) is unemployed so the e/p ratio and the unemployment rate do NOT add up to 100%. More detailed information can be obtained at [http://stats.bls.gov/cps/cps\\_faq.htm](http://stats.bls.gov/cps/cps_faq.htm)

<sup>4</sup> % change = 100 \* (1999 value – 1997 value)/1997 value = 100 \* (11.9 – 10.7)/10.7 = 11.2.

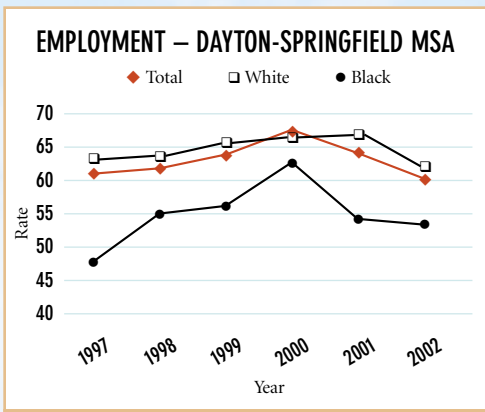


Fig.3

The employment/population ratio. The percentage of the population that was employed rose for both blacks and whites between 1997 and 2000. Compare to Fig. 2 which shows black unemployment rising while white unemployment dropped.

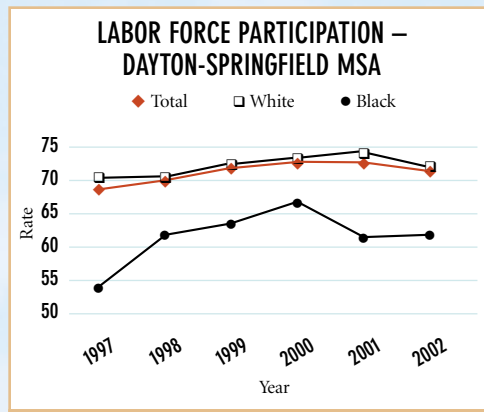


Fig.4

Labor force participation rates. The dramatic rise in the rate for blacks occurred while the black unemployment rate was also rising.