UNEMPLOYMENT, LABOR FORCE PARTICIPATION
AND THE ILLINOIS WORK FORCE

By Norman Walzer and Brian Harger

Editor’s Note: This interim report provides a critical look at the economic trends affecting Illinois’ workforce in both metropolitan and non-metropolitan (rural) areas. It finds that the state’s workforce participation rate is falling behind adjacent states. The report concludes that strategies to reverse trends in Illinois may differ in urban and rural areas.

The relatively slow economic recovery in Illinois following the 2009 recession has been a frequent topic of debate among policymakers, business leaders, and the news media, with each group judging the state’s performance using a different measure. Business starts and employment, or unemployment, rates are commonly cited, but others argue that changing labor force participation rates may have caused unemployment rates to lose some of their traditional meaning.

Declines in unemployment rates are not as clear a measure of economic change when fewer people are actively seeking employment. Thus a more careful look at numbers employed and similar measures is warranted, especially when employers seriously question whether they can find enough qualified workers to fill job openings to meet the needs of their expanding businesses.1

An important question, then, is whether the recent drop in Illinois’ unemployment rates resulted from an actual increase in employment or from a reduction in the number of people in the labor force (otherwise known as the Labor Force Participation rate, or LFP).2 Employers need to know this when designing strategies to recruit new workers to fill their job openings. It is also important to know if rural and metro areas in Illinois differ in the cause of their changing unemployment rates.

This analysis addresses the causes of Illinois’ declining unemployment rate. First, it will explore how Illinois compares with surrounding states in employment gains and to what extent its lower unemployment rates reflect less participation in the job market.

Second, it will consider how these factors are associated with LFP in various regions in Illinois and why? Special attention will be paid to non-metropolitan counties which seem to struggle more than metro areas because of outmigration, aging population, and other factors.

Third, it explores options Illinois has available to help expand its labor force and compete more effectively with surrounding states. Finally, we examine what has worked in other states that could be tried in Illinois.

* Norman Walzer is Senior Research Scholar and Brian Harger is Research Associate in the NIU Center for Governmental Studies. The authors thank James Banovetz and Andy Blanke for comments and edits on previous drafts. This publication can be downloaded at http://cgs.niu.edu/reports/. The views expressed belong solely to the authors and do not necessarily represent those of the CGS or the officers and trustees of Northern Illinois University. Comments should be sent to: Norman Walzer (nwalzer@niu.edu).
In the past, CGS publications have described population projections with insights into long-term work force issues in downstate Illinois, especially in more rural areas where long-term population declines suggest serious issues in the future. Of special importance in these discussions was the expected declines in labor force participation by elderly residents—the fastest growing age cohort in Illinois—and young adults delaying entry into the labor force because of higher education.

How has the employment picture in Illinois changed?

It is well-documented that Illinois has underperformed most Midwestern states in employment changes since the previous recession. Despite recent gains in key sectors, such as health care and business and professional services, most other sectors are struggling to reach pre-recession levels (see Figure 1). The information, finance, and insurance sectors, for example, have continued to shed jobs in the past five years, especially in the Chicago area.

Although Illinois continues to rank in the top five states in manufacturing employment, this industry now represents only seven percent of total employment. More than 100,000 Illinois manufacturing jobs were lost in the past recession, with only a net gain of 4,500 since the recession officially ended. Even this small gain may be short-lived as several important manufacturing sectors continue to lose jobs. Moving to high-growth sectors like professional and business services and health care and social assistance is necessary to stabilize the employment picture in Illinois.

**Figure 1. Employment Change by Major Industry Sector**

*State of Illinois*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td>Total Non-Farm Employment</td>
<td>-344,100</td>
<td>-5.7</td>
</tr>
<tr>
<td>Mining and Logging</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Construction</td>
<td>-36,100</td>
<td>-13.7</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>-102,600</td>
<td>-15.2</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>-20,600</td>
<td>-6.6</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>-69,200</td>
<td>-10.4</td>
</tr>
<tr>
<td>Utilities</td>
<td>800</td>
<td>3.4</td>
</tr>
<tr>
<td>Transportation and Warehousing</td>
<td>-23,900</td>
<td>-9.5</td>
</tr>
<tr>
<td>Information</td>
<td>-9,300</td>
<td>-8.0</td>
</tr>
<tr>
<td>Finance and Insurance</td>
<td>-18,300</td>
<td>-5.6</td>
</tr>
<tr>
<td>Real Estate and Rental and Leasing</td>
<td>-6,100</td>
<td>-7.4</td>
</tr>
<tr>
<td>Professional and Business Services</td>
<td>-89,300</td>
<td>-10.3</td>
</tr>
<tr>
<td>Educational Services</td>
<td>-500</td>
<td>-0.4</td>
</tr>
<tr>
<td>Health Care and Social Assistance</td>
<td>18,800</td>
<td>2.8</td>
</tr>
<tr>
<td>Leisure and Hospitality</td>
<td>16,600</td>
<td>3.2</td>
</tr>
<tr>
<td>Other Services</td>
<td>1,100</td>
<td>0.4</td>
</tr>
<tr>
<td>Government</td>
<td>-5,500</td>
<td>-0.6</td>
</tr>
</tbody>
</table>

sub-sectors—automobile assembly and farm, mining and construction machinery—have succumbed to global competitive pressures and declining demand. For example, Mitsubishi Motors closed its production facility in Bloomington in November 2015 and Caterpillar recently eliminated more than 1,000 jobs across Illinois and has indicated more planned layoffs through 2018.

Several explanations have been offered for employment declines in Illinois, especially in manufacturing which provides relatively high-paying jobs. Illinois, a high wage state, has many mature manufacturing firms with routine jobs vulnerable to automation, outsourcing, and off-shoring. In addition, some business services jobs such as finance, insurance, and real estate that have been mainstays of the Illinois economy were sharply reduced in the recent recession and are struggling to regain their momentum. This may explain the lags in real GDP changes relative to surrounding states and weak performance in recent years relative to U.S. GDP growth (see Figure 2).

While automation can improve productivity and efficiency in meeting increased demand, the post-recession period’s growth in demand did not increase sufficiently to offset the labor-saving techniques. Thus, firms in some industries can meet demand with more capital and slower employment growth. Areas with a concentration in these industries recovered more slowly when measured by employment even though they have experienced higher gross regional product and output.

Equally perplexing is the fact that many jobs associated with higher levels of automation require more advanced knowledge and skills. Thus, automation not only reduces labor requirements to meet production targets, but it also requires higher skill levels not always available, especially in rural areas. Many workers displaced during the recent recession lack the skill levels now required for employment in industries advertising current job openings.
So, what has happened in Illinois?

The unemployment rate in Illinois has fallen from a high of 10.5 percent in 2010 at the end of the recession to 5.9 percent in 2015 (see Figure 3). Even so, Illinois’ unemployment rate remains substantially above the average of surrounding states (4.8 percent) or the U.S. (5.3 percent). The Illinois Department of Employment Security released an analysis of 2016 conditions in Illinois.7

The annual average non-farm employment in Illinois increased from 5,610,400 in 2010 to 5,960,600 in 2015. While this change suggests a positive recovery, it should be noted that the labor force in Illinois (those who are employed or are actively seeking employment) declined by nearly 113,000 people between 2010 and 2015.

An analysis of labor force participation rates (LFP), especially in non-metro areas, helps to explain what happened in more detail. LFP rates compare the number of people 16 years of age and older working, or seeking employment, with the total number of people in this age group. Labor force participation rates in the U.S. peaked in the late 1990’s and began a gradual decline through much of the following decade. But since 2008, the pace of this decline quickened considerably as the LFP in the U.S. went from 66.0 percent to 62.7 percent in 2015. At the same time, labor force participation in Illinois fell from 65.7 percent to 63.6 percent.

The LFP in Illinois (65.7 percent) was still above the national average with North Dakota leading the list (71.0 percent) and West Virginia at the bottom (53.0 percent). Other Midwestern states including Minnesota (70.2), Iowa (69.9), and Wisconsin (68.0) were higher than Illinois. However,

---

7 In this report, non-metro includes the 62 Illinois counties not included in a MSA (Metropolitan Statistical Area) as defined by the Office of the Budget in 2015. Rural is defined as counties in neither a MSA or classified as micropolitan which are counties or groups of counties with a city of at least 10,000 but less than 50,000 population.
Indiana (63.7), Michigan (60.3) and Kentucky (56.8) were lower. Illinois also compares favorably with other large industrial states such as Texas (63.7), Ohio (62.5), California (62.2), and New York (61.1).

The LFP rates differ substantially within Illinois with lower rates in many rural counties. For instance, the average LFP in micropolitan Illinois counties was 59.5 percent compared with 57.5 percent in rural counties in 2015 (see Figure 4). These rates compare with 62.1 percent in downstate metro counties and 64.7 percent for the state of Illinois as a whole. The 57.5 percent in rural Illinois counties is below the average (59.0 percent) for similar counties in surrounding states, but the difference is not statistically significant.

A closer examination of changes in LFP rates in 2010 and 2015 reveals that rural counties in Illinois declined 3.0 percentage points compared with a decline of 3.7 percentage points in micropolitan counties, 3.1 percentage points in downstate metro counties, and a 0.9 percentage points statewide. LFP rates in smaller Illinois counties (micropolitan and rural) were lower than metro counties, especially the Chicago MSA which had a decline of only 1.6 percentage points, a rate of decline closer to those experienced in surrounding states’ metropolitan areas. In 2010, early in the recovery, rural counties averaged 60.5 percent, slightly above the 60.0 percent in rural counties in surrounding states. Five years later, it was 1.5 percentage points below the comparable counties in neighboring states.

In 2010, early in the recovery, rural counties averaged 60.5 percent, slightly above the 60.0 percent in rural counties in surrounding states. Five years later, it was 1.5 percentage points below the comparable counties in neighboring states.

---

*Different population estimates are used by the Bureau of the Census in calculating total population that also affects the calculated LFP for each group.*
Of special importance for public policy is how LFP rates vary by region since many workforce and development issues are region-specific. Rural areas, for example, face an exodus of young adults to larger employment centers, ultimately leading to future population declines. Likewise, these counties often have lower LFP rates because of elderly populations and fewer employment opportunities.

Comparisons of LFP rates by county in 2015 clearly show that rural areas are below metro areas and the highest rates in in the Chicago MSA, except for Cook County which is still higher than most rural counties (See Figure 5). The counties in the northern half of the state clearly have higher LFPs and this may be partly because of better employment opportunities. Counties in deep southern Illinois, in some cases, have LFP rates of less than 50 percent, which may reflect their rural environment and less industry or more tourist activities.

Figure 5. Labor Force Participation Rate

Legend
- 70.0 and over
- 65.0 to 65.9
- 60.0 to 64.9
- 55.0 to 59.9
- 50.0 to 54.9
- Below 50.0

Publication Date: 10/20/2016
Why are LFP rates lower in rural areas

Lower LFP rates reflect several factors. Most often mentioned is that job-seekers, frustrated by an inability to find suitable employment, quit looking for work and are no longer counted. The decline in non-metropolitan employment between 2010 and 2015 helps explain the lower LFP rates since employment decreased 4.6 percent in rural counties and 3.7 percent in micropolitan counties.

Likewise, an aging work force with expected retirements and reductions in active full-time employment contributes to lower LFP rates. There is conflicting evidence about planned work activity. In some cases, this group has pressure to work longer because of wealth lost in the stock market declines. In other cases, seniors who are healthier and strongly committed to professions plan to work well past traditional retirement age.8

A third explanation is that some college-age adults delayed entry into the work force or have been unable to find suitable employment so quit looking and are pursuing other interests not shown in regular employment numbers. The next section examines these explanations in more detail.

Does age matter?

Replacing retiring highly skilled and experienced workers is a major concern for many businesses so recent experiences with pre-retirement age groups (55-64 years) and retirees (65 and older) are important to consider.

---

**Figure 6. Population Age 55 to 64 Years**


![Graph showing labor force participation rate for U.S. and Illinois from 2002 to 2015. The rates increase from 2002 to 2007, peak at 71.0% in 2008, and then decline to 63.9% in 2015. The Illinois line is consistently higher than the U.S. line.]

Pre-retirees. Nationally, the labor force participation rate for the pre-retirement group was 63.9 percent in 2015, down slightly from 64.9 percent in 2009. (see Figure 6). The Illinois experience was noticeably different with a sharp rise in 2009 (71.0 percent) followed by a step decline in the next several years until 2013 with an uptick to 66.9 percent in 2015. Nevertheless, the 2015 rate is substantially below the rate in 2009 but still above earlier rates. On a more positive note, the LFP rate in Illinois rebounded in recent years and is well above the national rate.

Elderly residents. Equally important are the LFP rates for residents of traditional retirement age (65 years and older) who can choose to continue working, leave the work force, or work part-time. The Illinois experience was erratic with a steep decline between 2012 and 2013, a sharp rebound during the next two years until reaching 19.9 percent in 2015 (only slightly less than the 20.7 in 2012). (See Figure 7).

The explanation for this decline is not obvious and similar changes are not shown for the U.S. which has had steady increases since the recession. The Illinois experience may partially reflect the cyclical nature of the Illinois economy which, in the past, has typically lagged the country: it lagged the country as it entered the recession and it also lagged in the recovery. Thus, displaced workers nearing or at traditional retirement age may have retired, but, after several years, returned to the labor force.

Figure 7. Population Age 65 Years and Older Years

The positive news, though, is that, except for 2013, the LFP rate for this group in Illinois has been substantially above the U.S. average during the post-recession period and is on the increase. Since this age group has recent work experience, it may be worth trying to find ways to keep them in the work force longer—either part-time or full-time work. These strategies may involve upgrading their work skills and may also require providing flexible work arrangements.
Young Adults. In the post-recession period, the LFP of youth (16 years to 19 years) started well below the U.S. average but steadily increased from 30.7 percent in 2009 to 38.2 percent in 2015, slightly above the U.S. average of 34.3 percent (see Figure 8).

The rising costs of higher education may have caused a larger number of potential young workers to participate in the labor market immediately after completing secondary school which, in the longer run, could mean lower earning potential with a potential drag on economic growth. However, since the LFP for this group has surpassed the U.S. rates with a positive trajectory since 2012, there may be a brighter future in store for the state’s workforce in the next several years. Better still, this data suggests that there will be more opportunities to use talent pipeline approaches to link young workers successfully with employment opportunities.

Figure 8. Population Age 16 to 19 Years


In summary, the rising LFP rates in the various age cohorts provides some confidence that the declines in unemployment rates in Illinois do not simply reflect discouraged workers leaving the workforce. At the same time, however, the LFP rates have not yet reached pre-recession levels, potentially limiting opportunities for business expansion and growth.

What factors affect LFP rates?

Differences in the LFP rates are affected by many factors, such as population size of county, age, employment, and other characteristics that should be examined to identify potential policies to increase LFP. A multivariate regression analysis was used to identify characteristics related to LFP in Illinois’ 102 counties during 2015, the latest year of available data with the following results.
When other characteristics are considered, LFP rates are significantly lower in rural versus metro counties. Likewise, growing counties (population increases between 2010 and 2016) have significantly higher labor force participation rates suggesting that people in these areas participate in the labor force. At the same time, however, the 2010 county unemployment rate (2010) is not related to LFP, suggesting the previous high unemployment did not significantly increase the number of discouraged workers in 2015.

Shifts in the economic structure of counties were examined using percentage change in manufacturing employment (2010-2016), but were not found to be significantly correlated with LFP rates. This finding suggests that declines or slow increases in manufacturing do not necessarily affect participation in the labor force. If manufacturing businesses are prevented from hiring workers due to lack of skills or knowledge, this effect is not being picked up in this relationship.

Average earnings per employee in the county, compared with national averages in this time frame, were positively associated with LFP rates, suggesting that areas with higher pay induce more people to participate in the labor force consistent with the conventional view. This finding could support the notion that higher wages paid by employers can precipitate increases in the workforce pool, but it does not suggest that the workers added to be pool necessarily would have the needed skills or experience levels.

The percentage of residents between 55 and 64 years of age (pre-retirees) is only weakly (10 percent) related to LFP. This finding suggests that residents who might have been displaced from previous employment did not permanently leave the work force in anticipation of retirement. In early analyses, a significant negative relationship was found between percent 65 years and older and LFP rates, but the percentage elderly was also correlated with other variables so was removed from the analysis. Recent evidence suggests that the traditional retirement age has been extended.10

Self-employed persons have more flexibility in number of hours worked and other work characteristics. In this analysis, the percentage self-employed in the county is positively associated with labor force participation as one might expect. The self-employed may also stay in the labor force longer, depending on tax advantages for health insurance, pensions, or other considerations. Nevertheless, this finding suggests that investing in small businesses adds to the local economic environment.

The claim that lower LFP rates relate to young adults attending higher education is supported by a positive and significant relationship (at 7 percent) between percent attending higher education and LFP. This is not a precise measure since some students work part-time, but perhaps not enough to be counted in the LFP rates, or they are counted in their home county while they attend higher education and work in another county.

The percent nonwhite in a county is not significantly associated with lower labor force participation in these counties, but multicollinearity among several variables may have affected the significance of this variable.
Female residents as a percentage of population in a county is strongly and positively related to LFP, indicating that they are actively working or seeking employment outside of the home. This may be another group to contact regarding unfilled employment openings or additional training opportunities to enhance skills.

**Can Illinois’ workforce be increased?**

The short answer is yes, but it may take different strategies in rural versus metro areas. After other factors have been considered, rural areas have significantly lower labor force participation rates. Reported worker shortages could potentially be reduced by increasing labor force participation, especially if residents in these areas can be enticed either to remain in school or to enroll in certification programs to build needed skills. In the case of older workers, retaining them in the work force longer may be an opportunity to pursue more aggressively.

*In-service programs* conducted by employers can build tailored skills as well as provide internal advancement opportunities. These efforts are underway within businesses as are talent pipelines linking potential workers with jobs.

However, there are many residents not currently in the work force who might be enticed with appropriate incentives.

Other states are aggressively pursuing strategies that could be implemented in Illinois. Given population projections that suggest future workforce declines, it is important to consider several approaches. First, *people entering the work-force can be steered into quality jobs and be given help in gaining the educational background and skills needed*. This approach is currently used with the support of various state and federal programs.

A second approach is to try to *attract additional workers to Illinois* to expand the work force. Other states have targeted Millennials in their efforts to revitalize rural areas. Nebraska, Minnesota, and Wisconsin, for instance, have each implemented programs targeted to Millennials starting their careers. These approaches also frequently involve subsidized housing opportunities and lowered relocation costs. Such programs have succeeded in increasing the work force in other states and could be considered in parts of rural Illinois.

None of the discussion in this *Policy Profiles* considers the outmigration from Illinois. Additional thought to ways to retain populations is needed including the impact of more Illinois students pursuing higher education in other states. Many of these students may not return to Illinois after graduation.

**What is the outlook for Illinois?**

Illinois is in a difficult position, having experienced substantial outmigration, relatively slow job growth, ongoing fiscal problems, and a reputation for a relatively unfavorable business climate. At the same time, it has excellent access to global markets, a high-quality transportation system, and a highly educated work force.
However, based on population projections, Illinois may face a shrinking work force during the next 10 years. Focusing on a pipeline to better equip young adults for quality jobs will help but may not be enough to make up for the numbers of people either not participating, or leaving the work force.

Additional attention to keeping older workers in the work force and attracting new groups, such as Millennials, will be needed. The information in this *Policy Profiles* can help identify positive directions in addressing a critical workforce issue.

**EndNotes**


8 [http://www.pewresearch.org/fact-tank/2016/06/20/more-older-americans-are-working-and-working-more-than-they-used-to/](http://www.pewresearch.org/fact-tank/2016/06/20/more-older-americans-are-working-and-working-more-than-they-used-to/)

9 *Ibid*

10 *Ibid*