## Issue Brief: What happened to Illinois' Economy following the January 2011 Tax Increases? A Midwestern Comparison Andrew Crosby and David Merriman

In January 2011, Illinois enacted legislation that:

- changed personal income tax rates from 3.0 percent, to 5.0 percent in 2011-2014, to 3.75 percent in 2015-2023, and 3.25 percent thereafter.
- changed corporate income tax rates from 4.8 percent to 7.0 percent in 2011-2014, to 5.25 percent in 2015-2023, and 4.8 percent thereafter

# These tax increases are scheduled to begin to phase-out in the near future, and discussion about their impacts is intensifying. One key issue is their impact on Illinois' economy.

A large literature in economics studies the relationship between taxation and economic activity. Economists reason that tax increases may depress economic activity to the extent that taxes raise the cost of doing business relative to other states, and if taxes reduce after tax income, they also may depress household consumption (a key component of economic activity). On the other hand, if tax increases are used to finance desired public services, they could make a location relatively more desirable and result in increased economic activity. Empirical studies yield mixed results. Poot found that several of the articles he reviewed linked higher tax rates with lower growth, and other studies reported inconclusive results, no effect of taxes on growth, or complex effects<sup>1</sup>. Similarly, a more recent literature survey concluded that tax impacts on state economic growth are "highly variable"<sup>2</sup>.

A large literature also specifically studies the relation of income taxes to labor supply. Except for some disagreement as to the magnitude of the effect of taxes, the consensus is generally that increased income taxes cause a reduction in labor effort – that is, people work less<sup>3,4</sup>. However, some highly regarded scholars question even this consensus<sup>5</sup>.

<sup>&</sup>lt;sup>1</sup> Poot, J. (2000). A Synthesis of Empirical Research on the Impact of Government on Long-Run Growth. *Growth and Change*, *31*, 516-546.

<sup>&</sup>lt;sup>2</sup> Alm, J., & Rogers, J. (2011). Do State Fiscal Policies Affect State Economic Growth? *Public Finance Review*, 39(4), 483-526.

<sup>&</sup>lt;sup>3</sup> Manski, C. F. (2012, August 23). Income tax and labour supply: Let's acknowledge what we don't know. In *Vox*. Retrieved September 27, 2013, from http://www.voxeu.org/article/income-tax-and-labour-supply-let-s-acknowledge-what-we-don-t-know

<sup>&</sup>lt;sup>4</sup> Keane, M. P. (2011, December). Labor Supply and Taxes: A Survey. Journal of Economic Literature, 49(4), 961-1075.

<sup>&</sup>lt;sup>5</sup> Manski, C. F. (2012, August 23). Income tax and labour supply: Let's acknowledge what we don't know. In *Vox*. Retrieved September 27, 2013, from http://www.voxeu.org/article/income-tax-and-labour-supply-let-s-acknowledge-what-we-don-t-know

**How did Illinois' economic activity change after January 2011?** Using several years of data compiled by the U.S. Bureau of Labor Statistics (BLS), we examine three indicators of economic activity: employment, the unemployment rate, and average weekly earnings<sup>6</sup>.

Despite Chicago's stature as a global city, Illinois' economy is still closely linked to its regional (Midwestern) neighbors<sup>7</sup>. Illinois sells many services (especially business services such as accounting and legal services) to these states, and it purchases many good and services from these states. These states compete in the same labor market and are buffeted by similar economic winds. Thus, after the January 2011 tax increase, it is reasonable to compare Illinois' economic performance relative to its Midwest neighbors<sup>8</sup>. We use a very simple device to do that here—we collected data on Illinois and on the rest of the Midwest (ROM) and compare Illinois' performance relative to its Midwest neighbors after January 2011, i.e. the date of Illinois' tax increase, to its relative performance prior to that time. During the months after January 2011, no other Midwest states implemented broad-based increases in their tax rates as Illinois did (in fact, some states cut their rates during this time)<sup>9</sup>. The performance of both Illinois and ROM at other time points is measured relative to their level in January 2011.

#### **Employment**

Figure 1 shows Illinois' total employment from January 2000 to October 2013 using Local Area Unemployment Statistics (LAUS) from BLS. LAUS is the source of popular state and local unemployment rates often discussed by policymakers. Using LAUS data, both Illinois and ROM experienced substantial declines in employment from early 2001 through mid-2003 and both made significant gains in employment from late 2003 through early 2008. Late 2008 and 2009 were disastrous in terms of employment for both Illinois and ROM but both made steady gains beginning in early 2010.

After January 2011, (the vertical yellow line in Figure 1) Illinois employment growth generally tracked the direction of employment growth in ROM through July 2012, but stayed slightly lower than ROM during this time. Beginning in August 2012, Illinois briefly tracked above ROM until it peaked in December 2012 and began a rapid descent. In December 2012, Illinois' employment level was 101.5 percent of its January 2011 level. In just ten months, Illinois fell to less than 100 percent of January 2011 employment, while at the same time ROM climbed to 101.7 (as of October 2013).

It is still too early to tell if Illinois' slow employment growth represents a permanent trend. Looking back at earlier periods, we can see from Figure 1 that Illinois and ROM's employment trends often diverge for significant periods of time only to converge again in later periods. However, using conventional measures of statistical reliability Illinois' employment growth per LAUS has been relatively poor compared to its Midwest neighbors after January 2011 and especially after December 2012.

<sup>&</sup>lt;sup>6</sup> We also conducted more complete and technical analyses using more advanced statistical measures. Those analyses reach essentially the same qualitative conclusions as those discussed here. A fuller explanation of our complete analysis and methods is available at <a href="http://igpa.uillinois.edu/fiscalfutures">http://igpa.uillinois.edu/fiscalfutures</a>

<sup>&</sup>lt;sup>7</sup> Hewings, Geoffrey and John B. Parr 2009. "The Changing Structure of Trade and Interdependence in a Mature Economy: The US Midwest" in P. McCann(ed.) Technological Change and Mature Industrial Regions: Firms, Knowledge and Policy, Cheltenham, UK, Elgar, pp.64-84.

<sup>&</sup>lt;sup>8</sup> We use "Midwest" as defined by the U.S. Census, which includes Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin. http://www.census.gov/geo/maps-data/maps/pdfs/reference/us\_regdiv.pdf

<sup>&</sup>lt;sup>9</sup> Smaller tax increases or changes to tax sunsets were enacted during this time. For example, Michigan began taxing pension income effective January 2012 (http://www.michigan.gov/documents/taxes/2012\_Pension\_Withholding\_Guide\_365268\_7.pdf). However, no broad-based increases occurred in ROM.

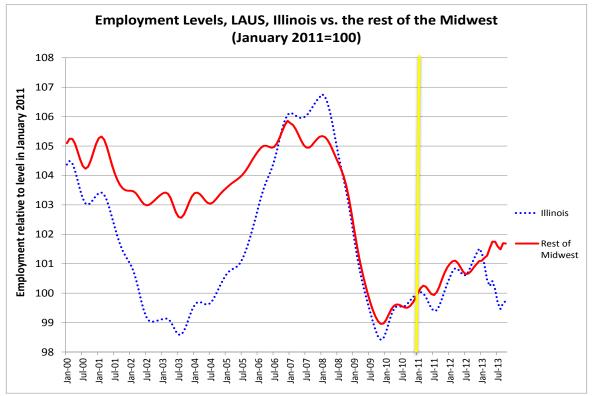


Figure 1: Employment, Illinois vs. the Rest of the Midwest, LAUS, January 2000-October 2013

### **Employment: A Different Approach**

Despite Illinois' poor showing using LAUS data, a different picture is shown through Current Employment Statistics (CES) (also known as the "Establishment Survey"), which is also published by BLS. CES data uses payroll records and is based on the number of jobs in an area regardless of where employees live, whereas LAUS is based on a household survey<sup>10</sup>.

As shown in Figure 2, using CES data, Illinois still tracks below ROM after January 2011; however, this difference is no longer statistically significant. One of several possible explanations for the diverging trends in employment is noted by Illinois' Commission on Government Forecasting and Accountability (COGFA). COGFA notes Illinois has a "growing number of part-time workers that now has reached a record high"<sup>11</sup>. If these part-time workers get a second part-time job, they could be doublecounted by  $CES^{12}$ .

<sup>&</sup>lt;sup>10</sup> Clark, H. (2005). Household vs. Payroll Surveys: Which is More Reliable. In Indiana Business Research Center at Indiana University's Kelley School of Business. Retrieved January 28, 2014, from http://www.incontext.indiana.edu/2005/november/7.asp <sup>11</sup> Boss, E. (2013, August). FY 2014 Monthly Briefings: August 2013: ECONOMY: Divergent Employment Trends. Retrieved January 28,

<sup>2014,</sup> from http://cgfa.ilga.gov/Upload/0813revenue.pdf <sup>12</sup> Ibid.

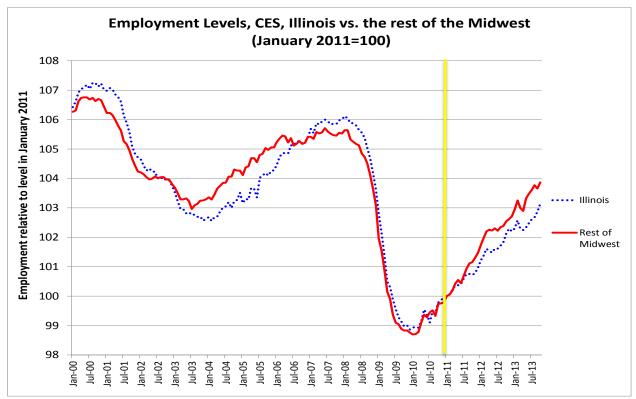


Figure 2: Employment, Illinois vs. the Rest of the Midwest, CES, January 2000-October 2013

#### **Unemployment Rate**

Figure 3 shows Illinois' unemployment rate from January 2000 to October 2013, using data from LAUS. Similar to employment, late 2008 and 2009 were particularly bad periods for both Illinois and ROM, but both made steady gains beginning in early 2010.

After January 2011, Illinois' unemployment rate remained close to its level in January 2011, and in several months went above this rate (April-December 2011, and February-March 2013). In October 2013, Illinois' unemployment rate was approximately 95 percent of its January 2011 rate (8.88 percent vs. 9.35 percent unemployment, respectively). During the same period, ROM unemployment rate has remained lower than January 2011 for every month, and as of October 2013 is just over 79 percent of the January 2011 rate.

Similar to employment, using conventional measures of statistical reliability Illinois' unemployment rate has been unusually high compared to its Midwest neighbors after January 2011.

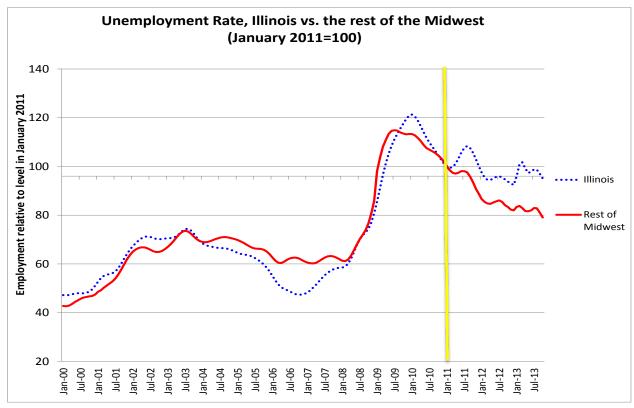


Figure 3: Unemployment Rate, Illinois vs. the Rest of the Midwest, January 2000-October 2013

#### **Weekly Earnings**

Next, we examine average weekly earnings in Illinois before and after January 2011. Figure 3 shows average weekly earnings of private employees from January 2007 to October 2013 for Illinois and ROM. Again, we compare the relative performance of Illinois and ROM before and after January 2011 and again we find important co-movements in the data. In this data series, we find **no evidence of a significant relative decline in Illinois' performance after January 2011**<sup>13</sup>.

<sup>&</sup>lt;sup>13</sup> Our analysis shows a statistically significant 1.38 percent decrease in Illinois' relative average number of hours worked after January 2011 but also shows a statistically insignificant 1.71 percent increase in Illinois employees' relative average hourly wage after January 2011. The net after January 2011 change in Illinois relative weekly earnings was not statistically significant.

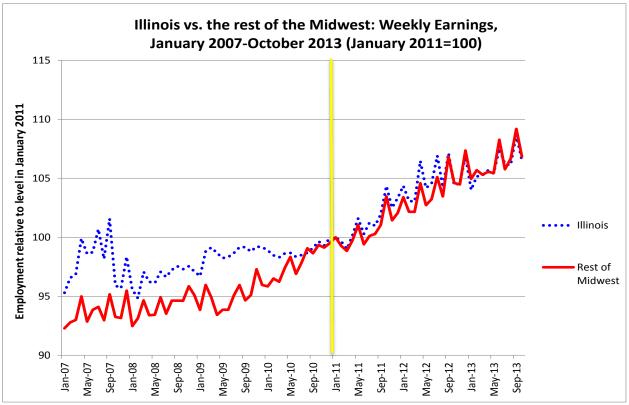


Figure 4: Average Weekly Earnings, Illinois vs. the Rest of the Midwest, January 2007-October 2013 (Not Seasonally Adjusted)

### **Discussion and Conclusion**

Ultimately, our statistical analyses demonstrate that (as of October 2013) Illinois' level of employment has been significantly below, and level of unemployment significantly above its peers since January 2011. However, average weekly earnings in Illinois have not been significantly different than expected.

Although our data are consistent with the hypothesis that Illinois' tax increase had a detrimental impact on its economy, we cannot rule out other explanations. For example, Illinois has continued to struggle fiscally since the tax increase and has delayed paying its vendors due to its backlog of unpaid bills. Such vendors may be reluctant to hire, and thus employment may suffer. Similarly, Illinois is projected to face its own fiscal cliff in 2015 when the January 2011 tax increase is scheduled to be phased out. Illinoisbased employers may be reluctant to hire because of uncertainty about Illinois' long-term fiscal health.

We hope that this analysis can be a useful component of fiscal discussions in Illinois moving forward.