

WHERE THE JOBS ARE



A Report on Job Creation in Indiana

January 2012



KELLEY SCHOOL OF BUSINESS

INDIANA UNIVERSITY
Indiana Business Research Center

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January 2012

**Research conducted by the
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This research was conducted by the IBRC in the Kelley School of Business and was not sponsored by any group. The conclusions and views of the authors expressed herein do not necessarily state or reflect those of the Indiana Business Research Center, the Kelley School of Business or the Trustees of Indiana University. Any errors in this report are the responsibility of the authors.



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Without data, so the saying goes, you are just another person with an opinion.

Over the last year, job creation has been a hot topic and it will get only hotter as the election cycle heats up. A familiar assertion lately is that small businesses are the engines of job creation. By extension, many contend that the Affordable Care Act (ACA) and the penalty that the ACA establishes (the ACA calls this an assessment) for businesses that do not provide health insurance, will stifle job creation by small business. If this is true, one question yet to be addressed is just how many jobs would be at risk.

Another question regarding the sources of job growth relates to Indiana's ability to attract outside investment in job creation. This is particularly relevant as the state legislature considers becoming a right-to-work (RTW) state.

What do the data tell us about job creation in Indiana?

Job creation depends on small businesses and investment coming into the state. During the last economic expansion, most Indiana businesses shed jobs. Allow us to repeat: even as the economy was growing, most businesses lost jobs. Were it not for small firms hiring and the state's ability to attract investment from outside the state, Indiana would have lost more than 100,000 jobs from the third quarter of 2003 to the second quarter of 2008.

Methodology

Quarterly Census of Employment and Wages (QCEW) data reported by the Bureau of Labor Statistics allow us to track employment dynamics by company size and industry. Rather than having to adjust our results for the job loss of the Great Recession, we selected a five-year period during the last economic expansion and before the economy fell off the cliff, from the

third quarter of 2003 to the second quarter of 2008.¹

First, we distinguished small, growing firms from all others. While the Small Business Administration and other business advocacy groups may debate what constitutes a small business, the definition for our analysis was informed by the ACA—namely, any business with fewer than 50 employees. Our goal was to measure the job growth in Indiana that could be attributed to unarguably small firms that grew into larger firms. Those Indiana firms that started small—49 or fewer employees—and at some point in the five-year study period passed the 50 employee threshold, but by no more than 100 from one quarter to the next, are classified as “homegrown.” These firms were small in the third quarter of 2003, grew over the study period but, as of the second quarter of 2008, were still relatively small.

The quarter-to-quarter growth limit of 100 employees differentiates homegrown firms from what we refer to as “parachute” firms. Parachute firms are those that crossed the 50-employee threshold at some point in the study period, but at a rate so fast that the required investment to support those new jobs would have to come from very deep pockets. They are parachute firms because their employment footprint swells so quickly within one quarter it is as though hundreds (or even thousands) of jobs parachuted into the state. The Honda facility in Greensburg would be an example of such a parachute firm. Often, parachute firms have a small team on the ground well before the majority of their workers get on the payroll.

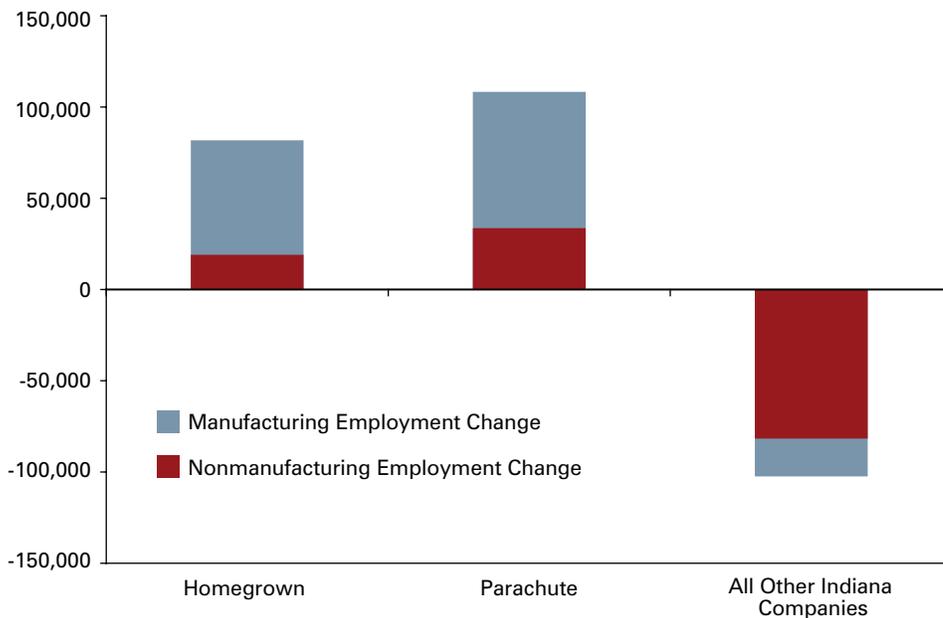
We assumed that most parachute firms existed outside the state prior to their initial investment in Indiana because their presence in the state grew so rapidly. This type of rapid growth would require access to large sources of capital. By contrast, we assume the homegrown firms come

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into existence within Indiana. This assumption and estimation technique does introduce the potential for some homegrown firms to be misclassified as parachute firms in cases where an Indiana homegrown company experienced neck-breaking employment growth, i.e., growing by more than 100 employees in one quarter. That said, the total job growth numbers are still valid, but a few of the job creation values may appear in the parachute category when they should have been categorized as homegrown.

While easy, straightforward data and analysis are much preferred, it is not always possible. Over a five-year period, there is considerable business churn. The source data reflect businesses—or business locations (establishments) within a company—that change ownership, as well as the many cases when a business starts and fails. The data also track employment changes quarter to quarter that may result from seasonal hiring variation as well as business expansions and contractions. Thus, adjustments were made to the data because we did not want to count a job as having been created when the only thing “new” was the owner. In addition, we did not count a job as

FIGURE 1: Sources of Employment Change in Indiana, 2003 to 2008



Source: IBRC, using Quarterly Census of Employment and Wages data

having been created if the business started, only to fail and have the job lost by the end of the study period, or if the job gains were merely temporary due to seasonal variations.

Collectively, the homegrown and parachute categories of firms consist of all Indiana companies that had fewer than 50 employees in the third quarter of 2003 and grew their Indiana employment to 50 or more at some point in the following five years. The criteria excluded firms that began with more than 50 employees, then dropped below and subsequently rose back above that level. In addition, in calculating the employment growth of Indiana firms, we excluded any employees

transferred from one company to another as an establishment changed ownership. Ownership churn does not fit our criteria for job creation because the same employees are working at the same establishment over the five years. In other words, a change in company ownership does not necessarily create new jobs. That said, we included any employees added to an establishment following a change in ownership, as these represent real job growth. If an out-of-state company purchased a 150-employee fabricating plant and expanded employment to 200, those new 50 jobs were counted.

“Parachute firms added a considerable number of jobs to Indiana’s employment total, but they merely compensated for the losses associated with the vast majority of Indiana firms.”

Employment Dynamics

Figure 1 graphically depicts the stark contrast of job gains and losses by firm type.

Table 1 shows that homegrown and parachute firms together make up only 2.5 percent of the firms that existed in Indiana over the five-year period of study. Despite their small number, these roughly 4,500 firms created more than 190,000 jobs over a period for which the entire state of Indiana generated a net 86,395 new jobs. Table 1 also shows that homegrown and parachute jobs pay, on average, more than the average wage in Indiana. Homegrown firms pay employees about \$600 above the state average annually, and parachute companies pay about \$1,700 above the state average. So, not only is this 2.5 percent of Indiana firms making up for the jobs lost at the other 97.5 percent, the new jobs pay more and help close the income gap between the state and the national average.

TABLE 1: Employment Dynamics in Indiana—Jobs Created or Lost—3rd Quarter 2003 to 2nd Quarter 2008

	Homegrown	Parachute	All Other Indiana Companies	Total
Number of Firms	3,299	1,193	177,044	181,536
Percentage of Total Firms	1.8%	0.7%	97.5%	100%
Employment Growth, 2003-2008	81,786	108,286	-102,402	86,395
Employment Growth per Firm, 2003-2008	24.8	90.8	-0.6	0.5
Average Q2 2008 Wage Paid	\$35,549	\$36,635	\$34,926	\$34,948

Source: IBRC, using Quarterly Census of Employment and Wages data

Table 2 identifies the leading job creators by industry classification. Several of the same industries top the list for both homegrown and parachute firms. Administrative and support services ranked highly

in both categories, as did food services and drinking places. **Table 2** also shows that Indiana is still a friendly home for manufacturing; for example, primary metal manufacturing is also in the top five

parachute industries. With more than 11,000 jobs created, transportation equipment manufacturing is the third-highest job growth industry among parachute firms. This is especially interesting given that this

TABLE 2: Top Job-Creating Industries in Indiana by Company Type, 3rd Quarter 2003 to 2nd Quarter 2008

	Industry	Employment Change
Homegrown	722 - Food Services and Drinking Places	10,864
	561 - Administrative and Support Services	8,674
	621 - Ambulatory Health Care Services	5,275
	541 - Professional, Scientific, and Technical Services	4,375
	238 - Specialty Trade Contractors	4,172
Parachute	561 - Administrative and Support Services	15,379
	722 - Food Services and Drinking Places	11,252
	336 - Transportation Equipment Manufacturing	11,235
	331 - Primary Metal Manufacturing	9,621
	621 - Ambulatory Health Care Services	6,369
All Other Indiana Firms	611 - Educational Services	47,753
	541 - Professional, Scientific, and Technical Services	4,480
	622 - Hospitals	3,935
	523 - Securities, Commodity Contracts, Other Financial Investments, and Related Activities	1,123
	624 - Social Assistance	1,079

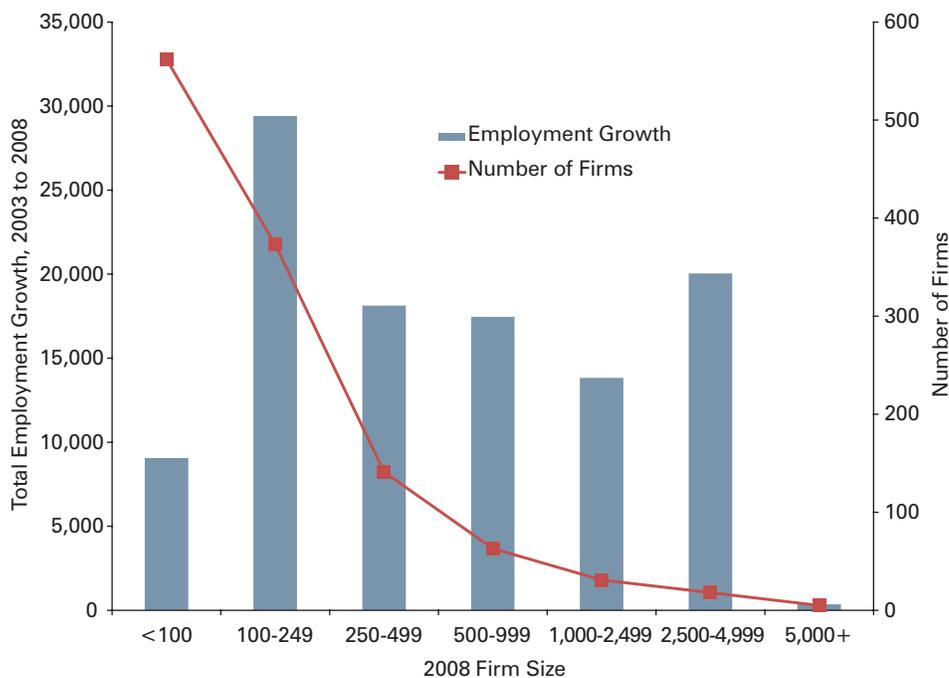
Source: IBRC, using Quarterly Census of Employment and Wages data

TABLE 3: Industries Experiencing the Greatest Job Losses by Firm Type, 3rd Quarter 2003 to 2nd Quarter 2008

	Industry	Employment Change
Homegrown	492 - Couriers and Messengers	-70
	515 - Broadcasting (Except Internet)	-55
	525 - Funds, Trusts, and Other Financial Vehicles	-51
	316 - Leather and Allied Product Manufacturing	-48
	516 - Internet Publishing and Broadcasting	-30
Parachute	541 - Professional, Scientific, and Technical Services	-584
	325 - Chemical Manufacturing	-268
	483 - Water Transportation	-245
	335 - Electrical Equipment, Appliance, and Component Manufacturing	-191
	322 - Paper Manufacturing	-117
All Other Indiana Firms	336 - Transportation Equipment Manufacturing	-17,977
	331 - Primary Metal Manufacturing	-16,257
	522 - Credit Intermediation and Related Activities	-10,327
	561 - Administrative and Support Services	-10,194
	722 - Food Services and Drinking Places	-8,281

Source: IBRC, using Quarterly Census of Employment and Wages data

■ FIGURE 2: Parachute Firm Size and Employment Growth⁵



⁵ Recall that “jobs created,” or employment growth per firm, is not necessarily related to the size of the firm. Employment growth in this study is defined as new jobs that are created over the study period, irrespective of the initial size of the firm. For example, the number of jobs created at 5,000-plus employee firms is relatively small because it does not include the jobs transferred from one company to another through a change of ownership. While the Indiana operations of a firm may have employed 6,000 workers in 2008, the Indiana firm might have had 5,500 employees when an out-of-state company purchased it in 2005, thereby resulting in the creation of 500 net new jobs as operations expanded. Source: IBRC, using Quarterly Census of Employment and Wages data

industry experienced the largest job loss among all other Indiana firms, as shown in **Table 3**.

As **Figure 2** shows, parachute job growth derives from all different sizes of firms. The two categories that created the largest number of jobs were the 373 firms with between 100 and 250 employees and the 18 firms with between 2,500 and 5,000 employees in the state by the second quarter of 2008.

Policy Implications

Clearly, parachute firms added a considerable number of jobs to Indiana’s employment total, but they merely compensated for the losses associated with the vast majority of Indiana firms. The conclusion that one reaches based on these data may depend on which side of the right-to-work divide one falls. Those not in favor of Indiana becoming a RTW state would look at these results and conclude that Indiana has

been relatively successful attracting parachute firms and the jobs they create even without RTW status.

On the other hand, those advocating for Indiana becoming a RTW state would reach a different conclusion based on this analysis. Given Indiana’s dependence on parachute firms investing in Indiana and creating jobs, why put the state at a competitive disadvantage? The average Hoosier may have had an unconscious understanding about the importance of out-of-state investment for job creation, but probably was not aware that such investments, together with small businesses, were the only sources of net job creation in the state.

The homegrown category of firms was largely responsible for putting Indiana’s job growth in positive territory. Without those firms, Indiana would have gained less than 6,000 new jobs during the last economic expansion. Instead, because of the net new jobs created by small

“12,698 jobs would have been at risk during the last expansion had the dictates of the ACA been in force.”

firms that grew into larger firms, the state gained over 86,000. To put these figures in perspective, consider that total private employment in Indiana was 2.5 million in 2008. While 86,000 is not a large percentage of the total, 6,000 does not even qualify as a rounding error.

Since these are firms that, at some point between 2003 and 2008, crossed the 50-employee threshold (and remained above that threshold until the second quarter of 2008), the question then becomes: how many jobs would have been forfeited if those small homegrown companies instead had remained at only 49 employees? That is, how many jobs were at risk of not being created if the companies had chosen not to cross the 50-employee threshold?

Why would small companies forego expanding beyond 49 workers? As noted above, we based our definition of a small firm on the employee threshold set in the ACA. Starting in 2014, this law will require all U.S. businesses with 50 or more employees to provide their employees with health insurance or pay a \$2,000 assessment for each person employed at the firm, exempting the first 30. For larger firms or rapidly expanding firms, this might not be an issue, either because they already provide health insurance in order to attract high-caliber talent or because they are growing so quickly that a \$2,000 surcharge per employee is relatively inconsequential. On the other hand, for slower growing small companies in a challenging business climate, the marginal cost of that 50th employee

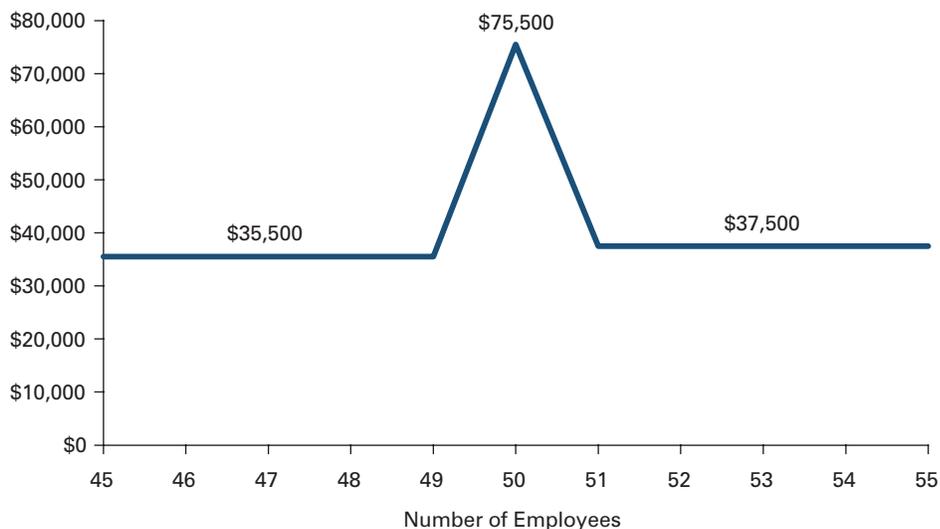
might pose quite an obstacle to growth. **Figure 3** shows the marginal labor cost curve for a small employer that does not currently provide health insurance (based upon the approximate average per worker for homegrown firms from **Table 1**), elects not to provide insurance and pays the assessment.

Because of the requirement to provide health insurance or pay the assessment, the firm faces a marginal cost of hiring a 50th employee that is more than double the marginal cost of hiring the 49th employee. Subsequent to the 50th employee, each new employee costs the firm an extra \$2,000 above salary to cover the ACA penalty. For a small business, paying essentially two salaries for one employee might be prohibitively expensive. For the firm looking to grow to 200 employees, this might not be much of a concern, but the firm wondering if it should expand from 49 to 55 employees might just choose to continue without hiring, costing Indiana six jobs it otherwise would have gained.

To model the predicted job loss from the ACA, we looked only at homegrown firms. Obviously, parachute firms would not devote much consideration to the added cost because they are very likely to have more than 50 employees already outside Indiana. In addition, Indiana would not have missed out on all of the jobs that were created by the homegrown firms, since most of the net new jobs were created before the firms reached the 50-employee threshold. Thus, we needed to account for only the jobs created by small firms that crossed over the 49th employee threshold.

Table 4 shows the number of firms at each employment level in the third quarter of 2003. Most of the threshold-crossers had no employees in the third quarter of 2003—these were new homegrown Indiana companies—but there were many small firms at all employment

■ **FIGURE 3: Marginal Cost of Labor**



Source: IBRC based on the ACA legislation

levels up to 49 workers. To calculate the number of jobs that would have been at risk had the ACA applied to company employment over the last expansion, we calculated the average growth per firm for each starting level of employment, and subtracted the number of employees that average firm hired beyond 49. For example, for firms starting with no employees, the average growth per firm past the 49th employee would be 5.6 jobs. We then multiplied the average growth per category over 49 by the number of firms in the category to find the total number of jobs that would have been at risk.

As **Table 4** shows, 12,698 jobs would have been at risk during the last expansion had the dictates of the ACA been in force. That is nearly 15 percent of the total employment growth in Indiana over the five-year period.

While approximately 12,700 jobs at risk is an estimate, a casual look at **Table 4** reveals that for most firm-size categories, firms that crossed the threshold did not grow significantly past the 50-employee mark. As noted above, the marginal cost of those last few hires can be considerable. Every firm will have different cost structures, and so the marginal cost

of a 50th employee will differ for each firm. However, assuming that this marginal cost would be prohibitively expensive for many firms, the effects on Indiana’s employment could be substantial. In addition, this analysis does not address the issue of firms with slightly more than 50 employees dropping to 49 to not run afoul of the mandate. As a result, there may be considerably more jobs at risk due to the ACA mandate than the 12,700 figure estimated here.

Conclusion

In conclusion, this evidence shows that job growth in Indiana derives primarily from small businesses and from out-of-state firms that invested in the state, parachuting thousands of new jobs into the state. Both of Indiana’s job-creating engines are at potential risk. Vis-à-vis right-to-work states, Indiana may be in a weaker competitive position to secure the out-of-state investment that creates the parachute jobs.

The Affordable Healthcare Act unquestionably puts thousands of jobs at small businesses at risk as the economy recovers. Our research shows that, absent small businesses and new investment creating jobs, Indiana would have hemorrhaged

■ TABLE 4: Total Employment Growth and Growth Above 49-Employee Threshold by Initial (3rd quarter 2003) Company Size

Starting Employment	Number of Firms	Growth per Firm	Total Growth	Growth over 49
0	1,119	54.6	61,138	6,307
1	34	95.8	3,257	1,625
2	24	54.0	1,295	167
3	13	57.6	749	151
4	14	62.6	876	246
5	13	31.2	406	0
6	16	32.0	512	0
7	17	50.1	852	138
8	13	53.8	700	167
9	20	30.5	610	0
10	9	30.6	275	0
11	17	25.0	425	0
12	14	27.6	386	0
13	16	27.6	442	0
14	22	28.2	621	0
15	20	37.7	753	73
16	35	37.9	1,326	171
17	20	46.6	932	292
18	23	36.2	832	119
19	30	40.6	1,218	318
20	26	32.0	831	77
21	21	21.7	456	0
22	31	26.2	811	0
23	35	23.8	833	0
24	32	47.4	1,516	716
25	33	12.5	413	0
26	37	26.9	994	143
27	30	13.9	417	0
28	47	34.8	1,636	649
29	29	20.9	606	26
30	52	20.2	1,052	64
31	51	22.1	1,127	209
32	53	12.8	681	0
33	56	18.4	1,029	133
34	51	16.3	829	64
35	66	5.9	388	0
36	64	6.8	436	0
37	59	15.7	925	217
38	65	11.7	759	44
39	68	11.0	746	66
40	68	9.0	611	0
41	79	4.9	387	0
42	75	3.4	257	0
43	88	1.3	112	0
44	83	-0.8	-70	0
45	90	-2.2	-200	0
46	96	-1.8	-172	0
47	120	6.3	756	516
48	103	-2.6	-263	0
49	102	-3.5	-361	0
Total ²				12,698

Source: IBRC, using Quarterly Census of Employment and Wages data

jobs, even during the last economic expansion. ■

Notes

1. Indiana employment peaked in the second quarter of 2007 and fell by more than 20,000 jobs by the second quarter of 2008. We elected to keep the fifth year of the series for two reasons: One, to attempt to capture the effects of the efforts by the state to attract out-of-state investment by improving the state's business climate—a key economic development goal of the Daniels administration. Two, by including a period of small employment contraction to estimate the impact of small businesses and out of state investment, the resulting estimates are understated.
2. An observant reader would notice that the sum of total employment growth (column 4) in Table 4 does not match the total growth presented in Table 1. This is because the total job growth reported in Table 4 also includes the job growth attributed to investors buying another established Indiana firm and expanding employment after the change in ownership. Homegrown firms presented in Table 1 were owned by a single Indiana entity. As stated above, the challenge is to remove the false signals of a new firm, and newly created jobs, when the owner was the only thing that was new. Imagine the owner of a small carpet cleaning company retiring and selling the business to another Hoosier. The researchers' goal was to avoid incorrectly counting the jobs as lost and then created. However, this in no way affects the final 12,698 job growth figure over 49 employees shown in Table 4. We constructed our data set to ensure that only actual employee growth is reflected in this number.