Business Dynamics in Rural Indiana

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Introduction

Rural Indiana is home to more than 60,000 business establishments. Together, they provide employment for more than 350,000 people throughout Indiana's 42 rural counties (details on the classification of Indiana's 92 counties into rural, rural-mixed, and urban categories are in Ayres, Waldorf, McKendree, and Hoelscher, 2012). While some communities in the US have been hit hard by the Great Recession and had difficulties recovering (Scott and Beaulieu 2015a, 2015b; Dobis et al. 2015), rural Indiana, by and large, gained back the employment and establishments it lost during the recession. Overall, rural Indiana has been successful in attracting new business and growing employment, but at a lower rate than the rest of the state and the US as a whole.

The disadvantageous effects of the Great Recession on labor markets began in 2007 and extended until 2009. After the period of shock, labor markets have recovered slowly as uncertainty about the future of the economy faded, consumption picked up, and firms started to hire again (Elsby et al. 2010, 2011).

The impact of the recession on rural Indiana's business dynamics has not received sufficient attention. In this publication, we first provide an inventory of business establishments in Indiana's rural counties. Next, we zoom in on business startups. Startups and young businesses are very important for a

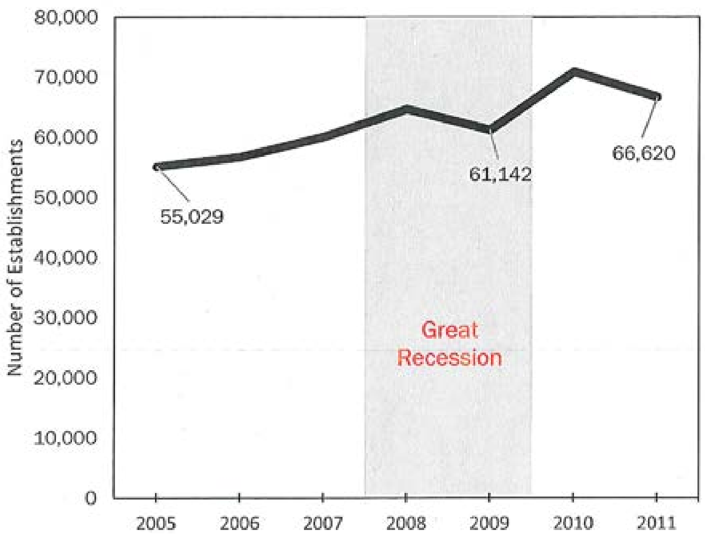

Figure 1. Business Establishments in Rural Indiana, 2005-2011

The Rural Indiana Issues Series

Audience: Local and state leaders who work with rural communities.

Purpose: To find data about issues of concern in rural communities and to interpret these data in meaningful ways to aid in decision-making.

Method: Data analyzed across the county groupings — rural, rural/mixed, urban.

Potential Topics: Demographic changes, business development, health, health care, local government, taxes, education, agriculture, natural resources, leadership development, etc.

Outcome: Better, more informed decisions by rural decision-makers.

region: they contribute to job creation and productivity growth (Haltiwanger et al. 2009a, b). The discussion of business startups is followed by a focus on establishments that went out of business. Moreover, we show how the recession that began in 2007 and escalated until 2009 influenced firms and employment until 2011. Finally, we conclude with some thoughts on attracting and retaining business in rural Indiana.

An Inventory of Business Establishments in Rural Indiana

Our inventory is based on the National Establishment Time Series (NETS). The NETS database provides information on all business establishments in Indiana's rural counties during the period 2005 to 2011. A business establishment is the physical location of a firm. Note that a firm may have more than one establishment. The NETS database is unique in its comprehensiveness, both in terms of the number of companies included and the sectors included.

During the seven-year period from 2005 to 2011, the number of establishments in rural Indiana increased by 21%, or 11,591 new businesses, from 55,029 in 2005 to 66,620 in 2011. As shown in Figure 1, the growth in the number of establishments was interrupted by the Great Recession. Before the Great Recession, the overall number of establishments grew by 5.8% annually, declined by 5.4% during the Great Recession, but recovered thereafter with 4.5% annual growth. The recovery is not unique to rural Indiana. Both the Indiana economy as a whole and the US economy saw a robust growth in establishments in the years following the Great Recession (see Table 1).

Employment figures for rural Indiana show a similar pattern. They grew rapidly from about 361,810 employees in 2005, to 372,423 employees in 2008. Thereafter, employment figures dropped substantially during the recession, but climbed again after the Great Recession. By 2011, employment in rural Indiana had reached 376,111. Thus, during the entire seven-year period from 2005 and 2011, employment grew by 4%.

The reason why the rise in the number of establishments greatly exceeded the rise of employment — 21% versus 4% — is the change in establishment size. In 2005, establishments in rural Indiana had 6.6 employees on average. The vast majority of those establishments — almost 90 percent — were self-employment businesses (establishments without any employees) or micro-establishments (establishments with up to 10 employees). Small (10 to 100 employees) and medium-size (100 to 500 job positions) establishments accounted for slightly over 10%. Large establishments — those with at least 500 employees — were scarce: all of rural Indiana had only 40 large enterprises in 2005. They included establishments of big national companies, such as Tyson Foods and Kroger, but also locally based establishments such as DePauw University, Franklin Electric and Tipton Telephone Company.

By 2011, rural Indiana's establishments employed only 5.6 workers on average. This decline by — on average — one employee per establishment was triggered and strengthened by the Great Recession. Beginning with the Great Recession, downsizing and business closures caused notable shifts in the establishment composition of rural Indiana: micro-establishments and self-employment establishments became more frequent, whereas larger enterprises became even more exceptional. More specifically, the number of very small establishments rose substantially: self-employment establishments grew by 17% and micro-establishments grew by 29%. In contrast, some small and medium-size establishments had disappeared by 2011; their numbers declined by 4% and 3%, respectively. And the already small number of big establishments declined by 15%, from 40 to 34. For example, Duke Energy Indiana Inc. downsized to a medium-size establishment, whereas Raytheon Company is an example of a big establishment closure.

Startups in Rural Indiana

Entrepreneurship is the fuel for job creation, productivity and innovation (Haltiwanger et al., 2009b, Audretsch and Keilbach, 2004, Glaeser and Kerr, 2009, Glaeser et al., 2010, Scott and Beaulieu, 2015a). Rural Indiana has been successful in starting new businesses. Between 2005 and 2011, 34,111 new establishments were started in rural Indiana. During the same time period, only 22,772 establishments went out of business, yielding a net gain of more than 11,000 establishments added to rural Indiana's economy.

The number of startups in rural Indiana varied substantially over the years — between about 3,000 in 2011 and more than 12,000 a year earlier. Most of the startups are micro-establishments with up to 10 employees, and new businesses of self-employed persons. Nevertheless, together they contribute the bulk of newly created employment in rural Indiana. For example, in 2010, all startups taken together provided employment for 21,213 people. As Figure 2 shows, more than 30% were attributed to self-employment, and more than 50% belonged to micro-establishments. Only 9% of newly created employment was in small and medium-size establishments. None of the startups in 2010 was classified as a large establishment.

Table 1. Average Annual Change of Establishments Before, During and After the Great Recession

	Before	During	After	% Change, 2005-11
Rural Indiana	+ 5.8%	-5.4%	+ 4.5%	+21.1%
Indiana	+ 7.6%	- 9%	+ 6.9%	+27.1%
US	+ 8.6%	-9.4%	+ 7.4%	+30.8%

Source: *NETS*

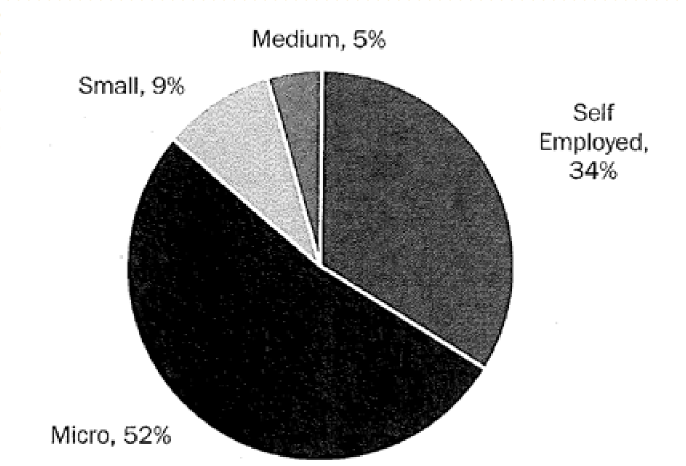

Figure 2. Employment Gained from 2010 Startups in Rural Indiana, by Establishment Size

Startups are only one side of the coin. The business dynamic is also influenced by establishments going out of business. Both contribute to the turnover and are typically assessed relative to the number of existing establishments. The entry rate is calculated as startups divided by total establishments; business closures divided by total establishments is referred to as exit rate.

Before the Great Recession, entry rates were higher than exit rates, resulting in the number of establishments growing (see also Figure 1). In 2009, the exit rate spiked: 13% of the establishments went out of business. Moreover, the entry rate was quite low, so that overall, the number of establishments dropped during the Great Recession. In the subsequent year, the exit rate fell to a much lower level again (4%), probably because vulnerable establishments already went out of business in 2009. At the same time, a large number of startups caused the entry rate to peak. In 2011, the exit rate once again exceeded the entry rate and took away some of the gains made in 2010.

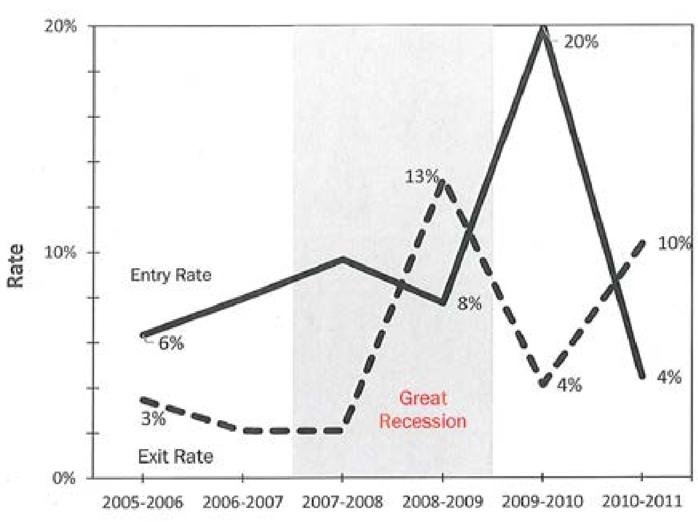

Figure 3. Establishment Turnover in Rural Indiana, 2005-2011

A similar pattern was replicated at the county level. That is, with the exception of 2009 and 2010, entry rates exceeded exit rates in all 42 rural counties, and thus the number of establishments increased in all rural counties. The rural counties do, however, differ with respect to the size of establishments that were attracted and retained. For employment growth it matters a lot whether the attracted business is a micro-establishment or a large establishment with more than 500 employees. For example, Carroll, Fountain, and Brown counties gained employment due to establishment turnover. In contrast, Posey, Gibson, and Randolph counties lost employment.

Conclusion

This paper looks at the business dynamics in rural Indiana in the years before, during and after the Great Recession. It demonstrates that these dynamics are strongly affected by the business cycle and economic shocks. During the booming years before the crisis we saw high growth of new establishments in rural Indiana. The economic downturn, on the other hand, prompted many establishments to go out of business. This resulted in a deep plunge of the number of establishments. After the Great Recession, rural Indiana recovered some of the losses, and the number of establishments rose again.

Of concern, however, is that the Great Recession also affected the composition of establishments. As a general trend, smaller establishments increased in numbers, whereas bigger establishments became fewer. On average, establishments employed only 5.6 persons after the Great Recession compared with 6.6 persons before the Great Recession. The trend may be partially due to workers being pushed into self-employment due to the job shortage during the Great Recession. This shift toward smaller establishments is of concern because smaller establishments are more susceptible to business closures than bigger establishments (Caves, 2007). As such, rural Indiana, with its growing reliance on new self-employment and micro-establishments, is becoming more vulnerable to economic decline.

It is often difficult for rural regions to successfully compete for high added-value services and manufacturing industries (Porter et al., 2004). Compared to urban populations, rural residents are older and less educated, which makes the labor force less attractive. Policy makers need to focus on investing in the skills and capabilities of rural residents, and attracting a few dynamic companies that will bring with them some highly educated workers. The biggest challenge is how to keep people and firms from moving away from rural Indiana. This calls for a mixed portfolio of strengthening economic opportunities, amenities, and quality of life.

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