

Small Firm Growth: Important for Success

TIMOTHY E. ZIMMER

Director, Research and Analysis Division of the Indiana Department of Workforce Development

It is rare for smaller firms to make splashy headlines with growth announcements or expansions. However, in aggregate, small firms are vital to employment and economic growth of the state. Nurturing an environment for small firm development in a diversified mix of industries is a sensible approach to achieving the longer term goals of economic and employment growth within a state. 1

This article analyzes the influence of small firm concentration on state employment and economic growth. While not exhaustive, the results suggest employment benefits of a diversified approach to develop small firms in multiple industries. The findings highlight the importance of small firms on state employment and the need for policies aimed at producing efforts to ensure the state becomes an incubator of small firm development.

The Data

The study examined publicly available statewide data for the 50 states and the District of Columbia between 2001 and 2011. CES employment data from the Current Employment Statistics data set, as well as industry concentration and firm size data from the Quarterly Census of Employment and Wages (QCEW) data set were collected from the Bureau of Labor Statistics (BLS).²

Table 1 shows the industry and firm size categories used in this analysis. Within each industry category for a state, firm sizes were calculated as a percent of QCEW employment. Some of the data were missing, with the largest source of missing data found in 2011 (as certain categories of data had not yet been posted at the time of collection). Additionally, data were cleaned from the panel where inconsistencies existed between total employment and the sum of industry parts.

Table 1: Industry and Firm Size Categories

Industry Categories	Firm Size Categories
Goods	Small
Natural Mining and Resources	1 to 5 Employees
Construction	6 to 99 Employees
Manufacturing	Medium
Services	100 to 249 Employees
Trade, Transportation and Utilities	250 to 499 Employees
Information	Large
Financial Activities	500 or More Employees
Professional and Business Services	
Education and Health Services	
Leisure and Hospitality	
Other Services	
Unclassified	

Source: Indiana Department of Workforce Development

Results

Regression models were used to test the influence of firm size and industry concentration on employment and economic growth. **View the regression methodology and results**.

The results confirm the close link between economic output and employment. They also suggest a lingering impact of economic

growth on employment. Economic growth not only impacts the present, but also has a positive employment influence into the future. The model indicates that for every 1 percent growth in current state GDP, state employment will increase by approximately 0.69 percent.

The size class variables are also shown to be highly significant with respect to employment. A state having a higher percentage of their workforce in either large or small firms is likely to have more employment growth potential. While firms of all sizes are a benefit to the state, the results further suggest that small firm concentration is likely more of a positive influence on employment than large firm concentration. With regard to economic output, the firm size variables were insignificant. While firm size seems to have an impact on employment, the influence did not carry over into economic growth.

The industry concentration variables are largely insignificant with respect to employment. However, there are some muted benefits on state economic growth with respect to a higher concentration in the information/technology sector. While targeting specific industries for expansion does not appear to influence employment levels, the information sector does provide a slight positive influence on state economic growth.

Conclusion

The results suggest a positive correlation between small firm concentration and positive employment growth. While the results did not carry through to show a significant impact on economic growth, the benefits afforded employment warrant additional policy consideration to ensure small firm success in the state. Achieving small firm development in a well-diversified mix of industries will benefit the state's employment and economic aims.

Notes

- See E.L. Glaeser and W.R. Kerr, "The Secret to Job Growth: Think Small," Harvard Business Review, July 2010, as well as
 Rick Haglund, "Desperate for Diversification," Dome Magazine, January 16, 2010, http://domemagazine.com/features/cov0110.
- The data were extracted from the BLS website (www.bls.gov) on June 8, 2012.



Fast Facts about Foreign Direct Investment in Indiana

TANYA HALL

Economic Research Analyst, Indiana Business Research Center, Indiana University Kelley School of Business

TIMOTHY F. SLAPER

Director of Economic Analysis, Indiana Business Research Center, Indiana University Kelley School of Business

Foreign direct investment (FDI) has long played an important role in Indiana's economy, particularly in the manufacturing sector. Since the Great Recession, FDI investments have rebounded nationally and within Indiana. This article highlights some key facts about this important part of the state's economy.

Employment

Indiana ranks 14th in the nation in majority-owned U.S. affiliate (MOUSA) employment—that is, employment in a business where the combined ownership of all foreign parents exceeds 50 percent—as of 2010 (the most current year available at the time of writing). Nearly 5.7 million U.S. workers are employed by these enterprises, with 133,600 of these workers in Indiana.

Japan, the United Kingdom and Germany are the largest sources of MOUSA employment in Indiana (see **Figure 1**). Japan alone accounts for nearly 27 percent of MOUSA employment in the state. Nationally, the same three countries are at the top, but Japan comprises a much lower 12 percent of the total.

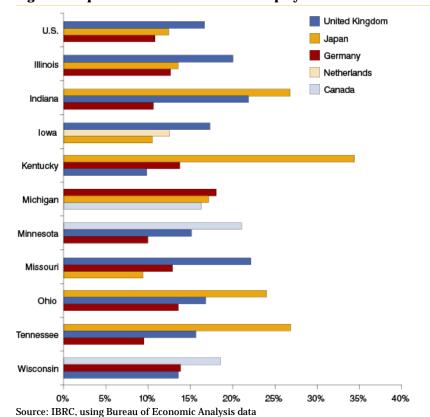


Figure 1: Top Three Sources of MOUSA Employment for Midwestern States, 2010

Roughly 5.7 percent of Indiana private employment is in MOUSAs states. In the Midwest, only Kentucky (6.2 percent) exceeds this figure.

The recovery from the Great Recession in terms of FDI-related employment has been very different across states (see **Figure 2**). Between 2008 and 2010, the majority of states (including all of the Midwestern states) had MOUSA job losses. However, Indiana had the smallest job decline in the Midwest at 4.8 percent.

WA ND VT SD NH WY MA PA NE ОН N۷ CT CO KS MO NJ OK NM AR GΑ ΑL MD ΤX Increases More than 10% (3 states) 0% to 10% (5 states) Decreases 0% to 10% (30 states) 10% to 20% (9 states)

Figure 2: Percent Change in MOUSA Employment, 2008 to 2010

Source: IBRC, using Bureau of Economic Analysis data

The manufacturing industry captures the largest share of MOUSA employment nationally at 37.7 percent. Indiana exceeds this, with manufacturing accounting for 63.2 percent of MOUSA employment (see **Figure 3**). These 84,400 manufacturing jobs equate to 18.9 percent of Indiana's total manufacturing employment (and account for 3.6 percent of the state's private employment).

More than 20% (3 states)
 No data disclosed (1 state)

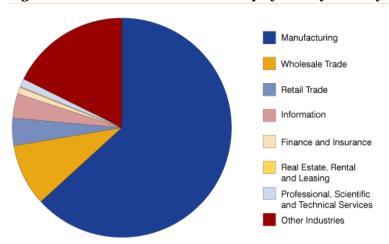


Figure 3: Indiana's Share of MOUSA Employment by Industry, 2010

Source: IBRC, using Bureau of Economic Analysis data

Recent FDI Announcements

Between 2010 and 2012, there were 4,347 FDI announcements for the country as a whole, valued at \$170.9 billion with 365,270 expected jobs. Indiana had 143 FDI announcements valued at \$4.7 billion. These investments are projected to create a total of 12,400 jobs, or about 4,100 new jobs per year.

The automobile and components industries captured the largest share of Indiana's expected FDI jobs at 5,600 new positions, 45.1 percent of the total anticipated FDI jobs announced between 2010 and 2012 (see **Figure 4**). This averages over 1,850 new jobs in manufacturing per year.

Automobile and Components

Electronic Components

Metals

Plastics

Business Services

Food and Tobacco

Transportation

Industrial Machinery, Equipment and Tools

Software and IT Services

Aerospace

0% 5% 10% 15% 20% 25% 30% 35% 40% 45%

Percent of Total

Figure 4: Top 10 Industries for FDI Project Announcement Employment, 2010 to 2012

Source: IBRC, using fDi Markets data

Manufacturing remained the most popular business activity for foreign investment in Indiana, comprising 74 percent of all expected jobs compared to 44.8 percent nationally. (Business activity classifies FDI projects based on the primary task undertaken at a facility rather than on the type of product or service a company produces. An automotive industry FDI announcement, for instance, could be primarily involved in one of several activities, such as manufacturing, research and development, servicing a customer service center, or a company headquarters.)

Behind manufacturing, headquarters activities captured the second-largest share of FDI employment in Indiana, accounting for 9 percent of total job announcements over the three-year period.

Learn More

For a more in-depth look at FDI in the state, as well as the global FDI environment, see *Capturing the Flag 2013: Foreign Direct Investment in Indiana* for the full analysis.

Notes

- 1. Data in this section come from investment tracking service, fDi Markets (www.fdimarkets.com). fDi Markets "counts" the FDI project the year it is announced with the understanding that it may take years before the investment is fully realized, if the project is realized at all. Additionally, an important difference compared to BEA data is that fDi Markets collects data on greenfield and expansion projects only and not mergers and acquisitions. One must exercise some caution when using and interpreting these data because fDi Markets uploads the data as announcements are made (thus enhancing its timeliness), but subsequent announcements or adjustments to that particular announcement may not be reflected in the database. Additionally, if investment or employment values are not announced explicitly, fDi Markets estimates these values with varying degrees of accuracy. Despite these inherent shortcomings, fDi Markets is our best source for current FDI activity.
- 2. To provide a more accurate view of Indiana's FDI announcements, the IBRC adjusted the fDi data for Indiana after attempting to double-check each announcement to confirm or deny the fDi-reported employment and capital figures reported for the state.



Born Abroad: Recent Immigrants to Indiana

RACHEL STRANGE

Geodemographic Analyst, Indiana Business Research Center, Indiana University Kelley School of Business

Indiana is not only becoming more racially diverse, but we are becoming more internationally diverse as well. This article explores data on the foreign-born population from the 2011 American Community Survey (ACS) in addition to recent immigration statistics from the U.S. Department of Homeland Security.

Indiana's Foreign-Born Population

The state's foreign-born population totaled 307,194, accounting for approximately 5 percent of Indiana's population, according to the 2011 ACS. This share of the population has seen consistent increases since 2000. In fact, about half (49 percent) of Indiana's foreign born are fairly new to the country, entering the U.S. in the year 2000 or later.

Nearly half of the foreign-born population hails from Latin America (for both total and recent entrants). Among those entering the U.S. since 2000, we see fewer Europeans and more Asians and Africans living in the state relative to the total (see **Figure 1**).

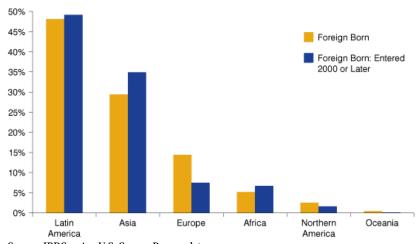


Figure 1: Region of Birth for Indiana's Foreign Born, 2011

Source: IBRC, using U.S. Census Bureau data

Looking at the population age 25 and older, 33 percent of Indiana's foreign-born population has less than a high school education, compared to 12 percent of the native population (see **Figure 2**).

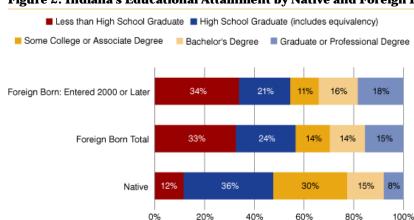


Figure 2: Indiana's Educational Attainment by Native and Foreign Born, 2011

Note: The differences in the levels of attainment between the foreign-born total and recent entrants are not statistically significant. Likewise, the percentage of native-born Hoosiers with bachelor's degrees is not statistically different from the other bachelor's degree percentages. Source: IBRC, using U.S. Census Bureau data

However, a much higher percentage of the foreign-born population has a graduate or professional degree (15 percent) compared to the native-born population in Indiana (8 percent). This higher level of educational attainment might be partially explained by immigration policies that give preference to high-skilled workers, such as the H-1B temporary visa program.

Indiana's New Legal Permanent Residents

Using data from the U.S. Department of Homeland Security, the number of individuals obtaining legal permanent residence in Indiana (i.e., "green card" recipients) has increased over the past 10 years (see **Figure 3**). In fiscal year 2012, 8,359 people obtained their green card in Indiana, up 59 percent from 2003 levels.

10.000 9,000 8,000 7,000 6,000 5,000 4,000 3,000 2,000 1,000 2003 2004 2007 2008 2010 2011 2012

Fiscal Year

Figure 3: Persons Obtaining Legal Permanent Resident Status in Indiana, 2003 to 2012

Source: IBRC, using 2012 Yearbook of Immigration Statistics data $% \label{eq:control} % A = \{A_{i}, A_{i}, A_{i}$

More than half of the 2012 green card recipients were from Asia. Figure 4 shows the top 10 countries of birth.

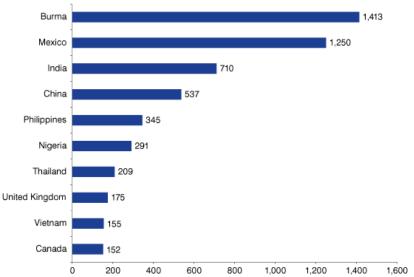


Figure 4: Leading Countries of Birth for Indiana's 2012 Legal Permanent Resident Recipients

Source: IBRC, using 2012 Yearbook of Immigration Statistics data

Burmese refugees have topped this list since fiscal year 2009. Figure 5 shows how the influx of immigrants from the four leading countries has shifted over time.

1,800 1.600 Persons Obtaining Legal Permanent 1.400 1.200 1.000 800 600 400 200 0 2006 2003 2004 2005 2007 2008 2009 2010 2011 2012 Year Fiscal

Figure 5: The Changing Origin of Indiana's New Legal Permanent Residents, 2003 to 2012

Source: IBRC, using U.S. Department of Homeland Security data

Both Fort Wayne and Indianapolis are home to some of the largest Burmese refugee communities in the nation.² For fiscal year 2012, Indiana ranked third in the U.S. in the number of Burmese obtaining permanent legal status, behind New York and Texas.

Temporary Nonimmigrants

Some of the foreign-born population only plan to stay in the U.S. temporarily (students and temporary workers, for example). Indiana's nonimmigrant admissions for 2011 (the most current data available as of the time of this writing) included about 24,500 academic student admissions, along with 18,610 temporary worker and family admissions.

Intracompany transferees (L-1 visas) was the largest category for temporary worker visas in Indiana, with 4,267 admissions. This status is used when a U.S. employer transfers an executive, manager or professional with specialized knowledge from one of its affiliated foreign offices; it is also used when a foreign company sends a manager to the U.S. to establish an office here.³

H-1B visas allow companies to hire foreigners in specialty occupations with hard-to-find skills. This was the next largest category of temporary workers for Indiana with 3,337 admissions in 2011. According to research published by the Brookings Institution last year, the Columbus metro had the second-highest demand intensity for H-1B visas among all U.S. metros (that's calculated as the number of H-1B requests per 1,000 workers) and the vast majority were for engineers or computer specialists.

Indiana's Unauthorized-Immigrant Population

Legal immigrants and temporary nonimmigrants are only part of the equation, but estimating the number of people here without a visa is difficult. The Pew Hispanic Center estimates that Indiana has around 110,000 unauthorized immigrants (based on a 2009-2010 average), with a 90 percent confidence interval of 70,000 to 160,000. This is about 1.8 percent of the total population, lower than the nationwide rate of 3.7 percent. While California has the largest unauthorized-immigrant population at nearly 2.6 million, Nevada has the largest share as a percent of its total population (7.2 percent).

Learn More

For more information about the immigrant population in Indiana and across the nation, explore the following resources:

- Foreign-Born Population (American FactFinder)
- Immigration Data Sets (Office of Immigration Statistics, U.S. Department of Homeland Security)
- Unauthorized Immigration (Pew Hispanic Center)

Notes

- 1. Those granted refugee and asylum status are required to apply for adjustment to legal permanent resident status after one year of residence in the United States.
- 2. See Michael Puente, "Burmese Refugees Find New Home in Indiana," *National Public Radio*, September 30, 2007, www.npr.org/templates/story/story.php?storyId=14841071, and "Burmese Refugee Population in the U.S." Burmese American Community Institute, 2012, www.baci-indy.org/resources/burmese-refugee-population-

in-the-us.

- 3. For more information about the variety of temporary worker visas, see "Temporary (Nonimmigrant) Workers," U.S. Citizenship and Immigration Services, http://ow.ly/lK1U6.
- 4. Jonathan Rothwell and Neil G. Ruiz, "H-1B Visas and the STEM Shortage," Brookings Institution, May 10, 2013, www.brookings.edu/research/papers/2013/05/10-h1b-visas-stem-rothwell-ruiz.
- Neil G. Ruiz et al., "The Search for Skills: Demand for H-1B Immigrant Workers in U.S. Metropolitan Areas," Brookings Institution, July 18, 2012, www.brookings.edu/research/reports/2012/07/18-h1b-visas-labor-immigration#M18020.
- 6. Pew Hispanic Center, "Unauthorized Immigrant Population: National and State Trends, 2010," February 2011, www.pewhispanic.org/files/reports/133.pdf.



Exploring Hoosier Minority Groups: Indiana's Asian Population

RACHEL STRANGE

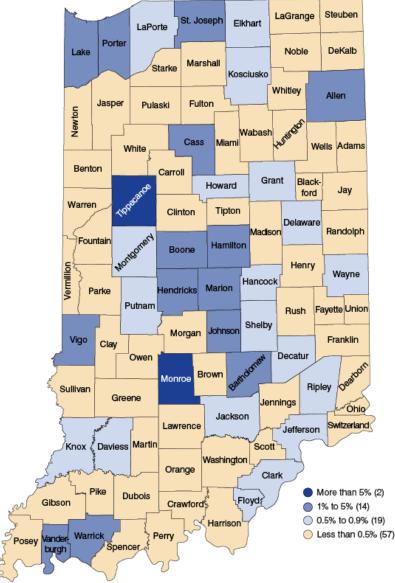
Geodemographic Analyst, Indiana Business Research Center, Indiana University Kelley School of Business

Indiana's population has become increasingly diverse in terms of race and origin. Results from the latest census count for 2010 provide us with a rich set of information from which to gain insight into our population diversity. This article is the third of four *InContext* articles to provide demographic snapshots of our minority population. Asians comprised 1.6 percent of Indiana's population in 2010 and will be the focus of this snapshot. (View the articles on **Indiana's black population** and **Indiana's Hispanic population**.) The overview that follows focuses on population, household formation, income and education.

Population

102,474 Hoosiers reported Asian as their only race ("Asian alone" in Census Bureau lingo) in 2010. Even though Marion and Hamilton counties had the largest numbers of Asians, only Monroe and Tippecanoe counties—home to Indiana University and Purdue University, respectively—had more than 5 percent of the total population as Asian (see **Figure 1**).

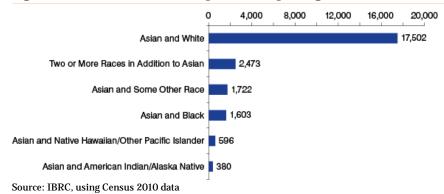
Figure 1: Asians as a Percent of Total Population, 2010



Source: IBRC, using Census 2010 data

All statistics in this article are for the Asian alone population, but it is worth noting that an additional 24,276 Hoosiers report having some Asian ancestry in combination with another race (see **Figure 2**). While the Asian alone population makes up 1.6 percent of Indiana's total population, those who specified their race as Asian alone or Asian in combination with another race account for 2 percent of the total population.

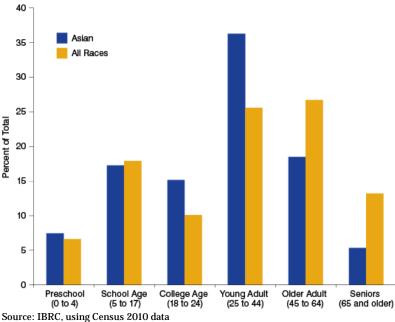
Figure 2: Indiana Multiracial Population Reporting Race as Asian in Combination with Another Race, 2010



Since 2000, Indiana's Asian population has grown by 73 percent—an increase of 43,348 people. While nine counties saw some decline in their Asian population, 18 counties saw this minority population more than double.

Figure 3 shows that more than a third of the Asian population (36 percent) is between the ages of 25 and 44, with an additional 15 percent in the college age range. The median age for Asians is 30.1 years, compared to 37.1 for the overall population.

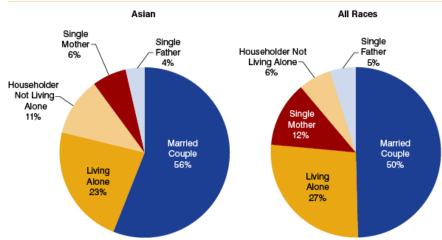
Figure 3: Indiana Age Distribution, 2010



Households

Census 2010 reports 18,235 Asian households in the state. (When it comes to race at the household level, the household is characterized based on the race of the primary householder.) The majority of Asian households are comprised of married couples—56 percent compared to 50 percent for the overall population (see Figure 4).

Figure 4: Indiana Households by Type, 2010



Note: The single-mother category is "female householder, no husband present" and the single-father category is "male householder, no wife present." Source: IBRC, using Census 2010 data

42 percent of the Asian population lives in rented units, relative to 28 percent of the total population (see **Table 1**).

Table 1: Indiana Homeownership, 2010

	Asian	All Races
Owned with a Mortgage or a Loan	49%	57%

Owned Free and Clear	9%	16%
Renter Occupied	42%	28%

Note: These percentages are based on the population in occupied housing units.

Source: IBRC, using Census 2010 data

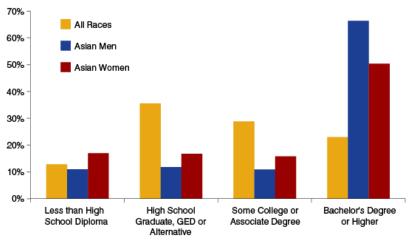
Income and Educational Attainment

Since Census 2010 did not collect any economic data, we must turn to the 2011 American Community Survey (ACS) for this information. Per capita income in 2011 was \$24,198 for Indiana's Asian population, higher than the \$23,524 for the overall population. Meanwhile, the median household income for Indiana's Asian households was \$50,648—that's about \$4,200 more than the median for all households in the state (\$46,438).

The poverty rate for Asians in Indiana was 19 percent according to the ACS, compared to 16 percent for the overall population.

Figure 5 shows educational attainment for the Asian population broken down by gender. Half of the Asian women living in Indiana and 66 percent of the Asian men have a bachelor's degree or higher—far surpassing the total population (23 percent) on this measure.

Figure 5: Indiana's Adult Educational Attainment, 2011



Note: Educational attainment statistics are calculated for those age 25 and older.

Source: IBRC, using American Community Survey data

Learn More

To access more data about Indiana's Asian population, visit American FactFinder from the U.S. Census Bureau at http://factfinder2.census.gov, which contains data from both Census 2010 and the latest American Community Survey.

For a look into Indiana's other minority groups, visit other articles in this series:

- Indiana's Black Population
- Indiana's Hispanic Population
- Indiana's Native American Population—Coming in the November-December Issue