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Ohio's Professional and Business Services Sector

Professional and business services comprise a broad and diverse segment of the Ohio economy. This industry sector provided a total of 689,000 jobs statewide in 2013 – 25,000 more than manufacturing. Since the recession ended, employment in professional and business services firms has increased by more than 10 percent, more than twice the employment growth of the total Ohio economy. The net increase of 64,500 in this sector during the past three years accounts for one-third of the state's total employment growth.

Composition of the Professional and Business Services Sector

The professional and business services sector is composed of three primary subsectors:

- Professional and technical services: non-medical professional offices, research, development, consulting, computer, and marketing services.
- Management of companies and enterprises: business headquarters and division managing offices. This subsector has no component industry groups and includes managing offices of all types of businesses.
- Administrative, support, and waste services: support services for businesses, facilities, and dwellings; employment services, including temporary employment; and waste collection, remediation, and recycling services.

Table 1 shows the structure of the sector, along with 2013 employment of the individual components and their location quotients. The location quotient is a measure of relative concentration. It is the percentage of total Ohio employment in a specific industry divided by the percentage of total national employment in that industry. Thus, a location quotient greater than one indicates an employment concentration greater than average.

The structure shown in Table 1 is that of the North American Industry Classification System (NAICS). NAICS is a hierarchical classification; the hierarchy here is shown by greater indentation of the more specific titles below the broader one. The broad professional and business services sector is composed of the three primary subsectors described above. These are in turn composed of more detailed industry groups. Some of these industry groups are made up of several detailed industries. These are generally not shown, except for those in the miscellaneous "other" groups.

Table 1
Structure, Employment, and Relative Concentration in Ohio's Professional and Business Services Sector, 2013

	Employment	Location quotient
Professional and business services	688,736	0.978
Professional and technical services	244,398	0.789
Legal services	34,037	0.788
Accounting and bookkeeping services	30,673	0.857
Architectural and engineering services	39,698	0.776
Specialized design services	6,521	1.391
Computer systems design and related services	53,711	0.828
Management and technical consulting services	26,969	0.596
Scientific research and development services	16,577	0.687
Advertising, PR, and related services	14,028	0.823
Other professional and technical services	22,184	0.938
Marketing research and public opinion polling	4,759	1.210
Photographic services	2,591	1.151
Translation and interpretation services	962	0.920
Veterinary services	12,118	1.001
All other professional and technical services	1,754	0.407
Management of companies and enterprises	132,821	1.669
Administrative, support, and waste services	311,478	0.988
Office administrative services	16,786	0.973
Facilities support services	3,266	0.653
Employment services	134,939	1.086
Business support services	37,818	1.165
Travel arrangement and reservation services	3,189	0.433
Investigation and security services	22,986	0.722
Services to buildings and dwellings	66,868	0.934
Other support services	10,470	0.926
Packaging and labeling services	2,571	1.319
Convention and trade show organizers	827	0.464
All other support services	7,072	0.933
Waste collection	5,055	0.868
Waste treatment and disposal	4,245	1.183
Remediation and other waste services	5,856	1.195

Source: Quarterly Census of Employment and Wages, U.S. Bureau of Labor Statistics.

As Table 1 shows, 35.5 percent of business and professional services employment is in the professional and technical services subsector, 19.3 percent is in management of companies and enterprises, and the remaining 45.2 percent is in administrative, support, and waste services. The statewide location quotients of many of these industries indicate an employment concentration below average. However, the management of companies subsector has employment 67 percent greater than average – a very high concentration in any case, but especially in a statewide analysis. These firms hire predominantly college graduates; the average wage statewide was $101,600 in 2013, more than twice the $44,700 average for all employment in Ohio and among the highest of any industry.

Other industry groups with high statewide concentrations include specialized design services, marketing research and public opinion polling, photographic services, business support services, packaging and labeling services (supporting transportation and distribution), and waste treatment, disposal, and remediation. Specialized design services include interior design, industrial design (supporting manufacturing and distribution), graphic design, and fashion and jewelry design. Business support services include document preparation, telephone call centers and telemarketing services, business service centers and copy shops, collection agencies, and credit bureaus. The diversity of Ohio's economy implies that these high statewide concentrations probably obscure far higher concentrations in local areas. As will be discussed later, however, the ability to assess these local concentrations with available data is limited.

Professional and Business Service Employment Growth

As indicated at the beginning of this article, professional and business service employment growth has far exceeded the state average during the recovery. This section will explore the sector's employment growth over the past 12 years compared to state and national averages.

Table 2 begins this analysis by comparing total and sector employment changes between 2001 and 2013 and for each of the four economic regimes during that period: the 2001-2003 recession and "jobless recovery," the 2003-2007 labor market expansion, the 2007-2010 recession and its immediate aftermath, and the employment recovery that began in 2010.

Table 2
Annual Employment Changes by Sector, Ohio and the U.S., 2010-2013 and 2012-2013

	2001-13	2001-03	2003-07	2007-10	2010-13
Total nonfarm employment					
Ohio	-6.0%	-2.8%	0.5%	-7.5%	4.1%
United States	3.3%	-1.4%	5.9%	-5.6%	4.8%
Professional and business services					
Ohio	9.7%	-2.8%	9.6%	-6.6%	10.3%
United States	13.1%	-2.9%	12.6%	-6.4%	10.5%
Professional and technical services					
Ohio	3.1%	-4.5%	8.9%	-3.4%	2.6%
United States	18.2%	-3.4%	15.0%	-2.3%	8.9%
Mgt. of companies and enterprises					
Ohio	65.0%	9.2%	20.4%	2.0%	23.0%
United States	21.6%	-3.3%	10.8%	0.8%	12.5%
Admin. support and waste services					
Ohio	0.5%	-4.7%	6.9%	-11.9%	12.0%
United States	6.9%	-2.3%	10.9%	-11.8%	11.7%

Source: Quarterly Census of Employment and Wages, U.S. Bureau of Labor Statistics.

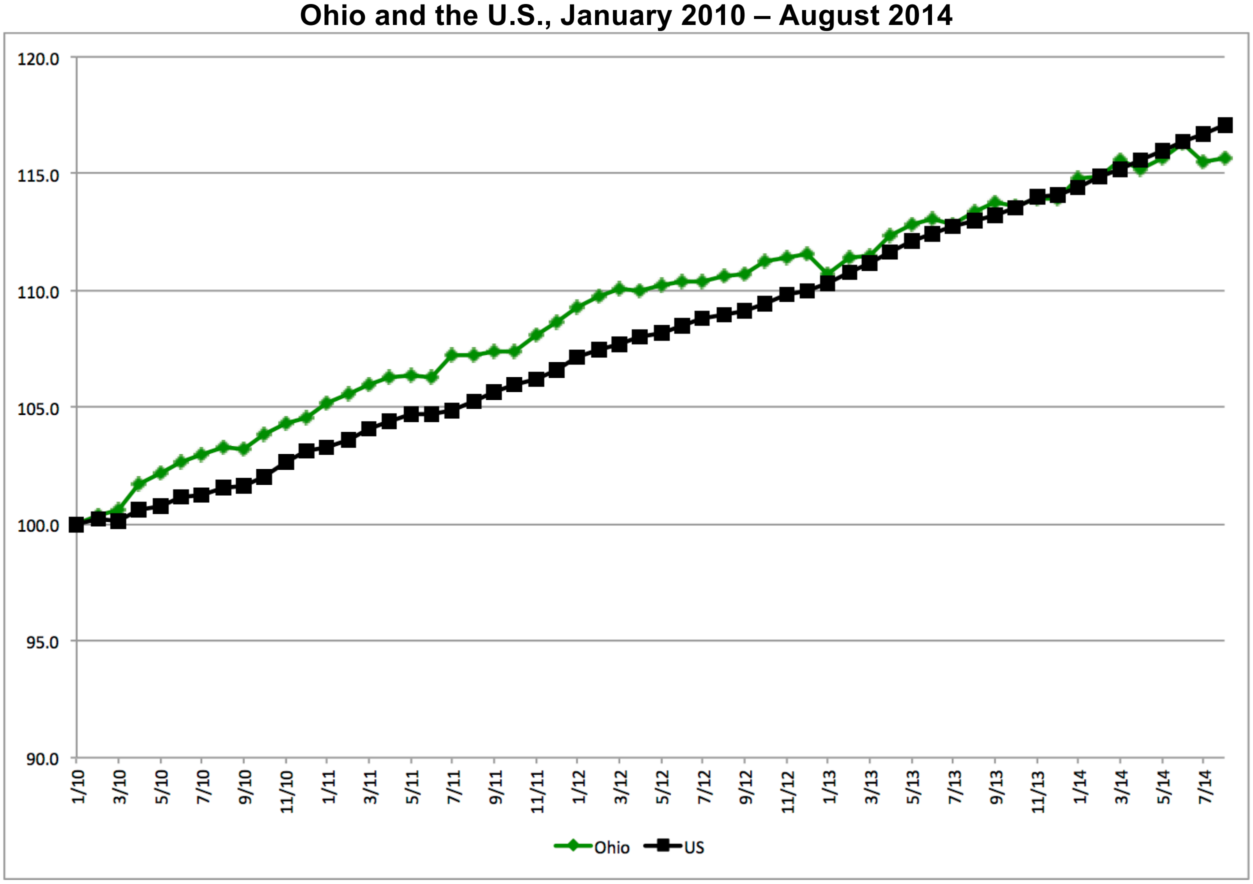
Table 2 makes clear that the professional and technical subsector was the one segment seriously underperforming the national average throughout the period. This was true of most of the industry groups within this subsector. Legal services and accounting and bookkeeping performed worst. Computer design and related services enjoyed good growth in Ohio before the recession; however, employment has been flat in Ohio during the recovery while growing nearly 18 percent nationally. On the other hand, specialized design services employment grew 30 percent in Ohio between 2001 and 2013 while declining five percent nationally. The decline of design services employment during the recession was one-third the national average and its growth subsequently has been nearly twice the average. Scientific research and development's growth has also been far above average – 37 percent versus 19.1 percent nationally. Employment in the small translation and interpretation services industry more than tripled nationally, but grew more than 13 times in Ohio. The increasing diversity of the Ohio population increases the need for these services.

Corporate management employment has also been significantly outperforming the averages. Corporate headquarters have been a strength of Ohio for decades, but employment was only 12 percent greater than average in 2001, compared to the 67 percent currently (as shown in Table 1). Nineteen companies on the 2014 Fortune 500 list are headquartered in Ohio, and the state's location makes it a good choice for regional headquarters as well.

The administrative, support, and waste services subsector lagged nationwide growth prior to the recession, but has tracked the average subsequently. Waste remediation employment has increased 50 percent over the past three years versus national growth of 5.7 percent. Facilities support services and services to buildings and dwellings also outperformed the average in the recovery. Business support services, investigation and security services, and travel arrangement showed slower growth. Travel arrangement services employment decreased 32 percent nationally and 55 percent in Ohio over the 12-year period as those who formerly relied on travel agents to book flights and reserve hotels began using the internet to perform these services for themselves. Employment grew a modest 2.4 percent nationally between 2010 and 2013, but sagged a further 8.6 percent in Ohio.

The monthly Current Employment Statistics give a more timely view of employment growth in professional and business services. Figure 1 tracks employment on an index basis with the January 2010 national and employment level set to 100.0; consequently the chart shows cumulative state and national employment growth between then and August 2014. As the

Figure 1
Professional and Business Services Employment Growth
Ohio and the U.S., January 2010 – August 2014



Source: Current Employment Statistics, U.S. Bureau of Labor Statistics, September 2013.

graph shows, Ohio's employment growth exceeded the national average prior to December 2012 but settled back to average at the beginning of 2013. However, while earlier years' estimates are fairly reliable, the 2013 and 2014 estimates are preliminary and subject to possibly significant revision in March 2015. Thus, recent employment growth might have been somewhat better (or somewhat worse) than is shown in Figure 1.

Regional Trends

As regular readers of these articles know well, Ohio's economy is composed of a number of distinct urban and rural regional economies, each with different economic characteristics and economic performance. Thus, it is important to assess employment growth at a regional level. The regions are mapped in Figure 2. They include each of the six large Metropolitan Statistical Areas (MSAs) and seven other regions composed of the remaining 60 counties including Ohio's smaller MSAs and rural areas.

Figure 2
Ohio Regions

Northwest | Toledo MSA | West North Central | Cleveland MSA | Akron MSA
Northeast | West | Columbus MSA | East North Central | Dayton MSA
Cincinnati MSA | South | Southeast

Table 3 shows total professional and business service employment in each of these 13 regions, together with the location quotient and the employment change during the recession and the recovery. One unfortunate characteristic of the Quarterly Census of Employment and Wages data from which these statistics are drawn is that employment totals are suppressed in cases that would result in individual firms' employment being disclosed. This suppression – which is widespread in smaller counties – makes analysis of even the three primary subsectors' characteristics and growth in these regions quite difficult.

Table 3
Professional and Business Service Employment, Concentration, and Growth in Ohio Regions

Area	Employment 2013	Location quotient	Percentage changes	
			2007-2010	2010-2013
Ohio	**688,736**	**0.978**	**-6.6%**	**10.3%**
Large MSAs	**551,768**	**1.100**	**-7.6%**	**8.5%**
Akron MSA	48,062	1.130	-7.5%	4.0%
Cincinnati MSA*	130,686	1.223	-6.9%	6.8%
Cleveland MSA	138,814	1.020	-10.9%	10.8%
Columbus MSA	157,071	1.215	-3.0%	11.4%
Dayton MSA	44,432	0.922	-13.6%	2.4%
Toledo MSA	32,703	0.849	-7.8%	7.1%
Small MSAs and rural	**101,662**	**0.537**	**-8.1%**	**10.5%**
Northwest	2,960	0.310	3.4%	9.3%
West North Central	12,368	0.428	-5.8%	-3.3%
East North Central	7,152	0.474	-6.7%	8.0%
Northeast	41,646	0.670	-7.3%	9.0%
West	22,521	0.603	-13.1%	21.1%
South	8,196	0.424	-8.5%	22.0%
Southeast	6,819	0.402	-6.4%	7.5%

*Ohio portion only.
Source: Quarterly Census of Employment and Wages, U.S. Bureau of Labor Statistics.

As Table 3 makes clear, professional and business services employment is focused in the larger MSAs. These areas offer the concentration of business activity that provides a base for the development of business service firms. The strongest concentrations are in the Columbus and Cincinnati MSAs, but the Cincinnati concentration reflects only the four Ohio counties of the 15-county MSA. The concentration would likely be somewhat less if the outlying counties in Kentucky and Indiana were included.

However, recent growth has been tilted more to the small-metro and rural counties, especially the South and the West. The South's growth is from a small base – the West's much less so. As noted in the August 8, 2014, issue of *On the Money* (Vol. 130, No. 39) the West's total employment growth in the recovery was second only to that of the Columbus MSA, and professional and business services were a key contributor to that growth.

On the other hand, the weakest professional and business service employment growth has been in the West North Central region, the Dayton MSA, and to some extent the Akron MSA. As discussed in the August 8 *On the Money* article, total employment growth in these three regions was also especially weak (though paradoxically, it was weak in the South as well).

Growth in much of the professional and business services sector is driven by expanding activity in other business sectors, although some industries such as law offices, photography studios, veterinarians, travel agents, and some firms in the services to buildings and dwellings industry rely also on the growth of population and households. This has been weak in much of Ohio.

Workforce is a key need for the professional and business service sector. Because of the high touch of most of these businesses, expanding output often depends critically on expanding employment. Some of these industries, such as legal services, architectural and engineering services, scientific research and development, and translation services, require well-trained individuals with highly specialized skills. On the other hand, corporate managing offices require a broad array of skills, some of which are a function of the business that the company is in. These firms also require clerical support. While some of these support workers do not require a college degree, a relatively high percentage of workers in the sector do need a degree. The lack of a dependable flow of well-trained workers would at a minimum stunt the growth of these firms. In some cases, the lack of workers would be an inducement for these companies to leave the state and take their highly-paying jobs with them. The linkages currently being made between the needs of employers and the offerings of academic programs are thus critically important; both employers and educational institutions should be active participants in these efforts.