

RESEARCH SUMMARY

Advocacy: The Voice of Small Business in Government







Small Business GDP, 1998-2014

Kathryn Kobe, Economic Consulting Services, Washington, DC 20036 Richard Schwinn, U.S. Small Business Administration, Office of Advocacy, 76 pages.

December 2018 No. 444

U.S. gross domestic product (GDP) is the market value of the goods and services produced by labor and property located in the United States. This research takes each component of private nonfarm GDP and estimates the proportions produced by small businesses (known as SGDP). This study is another installment in the series of studies sponsored by the Office of Advocacy on small businesses' contribution to GDP, the most recent of which was published in January 2012. In addition to estimating national SGDP, the report combines the series with other government data sources to provide 16 industrial profiles highlighting the roles of small businesses in each industry over the 1998–2014 period.

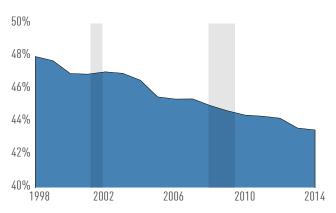
Key Findings

Small businesses are the lifeblood of the U.S. economy: they create two-thirds of net new jobs and are the driving force behind U.S. innovation and competitiveness.² Yet despite their central role, small businesses make up a smaller share of the economy than ever before.

Falling Small Business Share of Economy

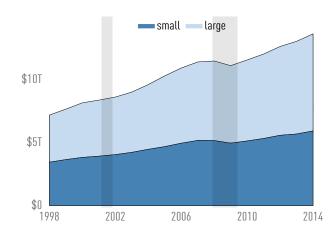
Figure 1 shows the declining share of GDP attributable to small businesses (shaded bars indicate recessions). The

Figure 1. Small Businesses' Share of GDP, 1998-2014



Source: Authors' analysis of data from the Burearu of Economic Analysis. *Small Business GDP*, 1998–2014, U.S. Small Business Administration, Office of Advocacy, 2018.

Figure 2. Small and Large Businesses' GDP, 1998-2014



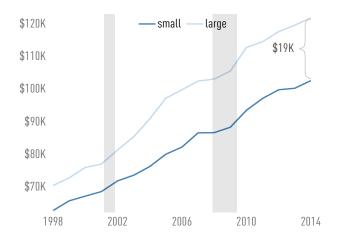
Source: Authors' analysis of data from the Burearu of Economic Analysis. *Small Business GDP, 1998–2014,* U.S. Small Business Administration, Office of Advocacy, 2018

This report contains data compiled under contract number SBAHQ-15-M-0146. The statements, findings, conclusions, and recommendations found in this study are those of the authors and do not necessarily reflect the views of the Office of Advocacy, the U.S. Small Business Administration, or the U.S. Government. This summary may contain additional information, analysis, and policy recommendations from the Office of Advocacy.

^{1.} For research purposes, the Office of Advocacy defines a small business as an independent business having fewer than 500 employees. For the industry-level definitions of small business used in government programs and contracting, see www.sba.gov/content/small-business-size-standards. The terms GDP, SGDP, and large business GDP refer to private non-farm nominal GDP and thus exclude owner-occupied housing, government, and agriculture unless otherwise noted.

^{2. &}quot;Frequently Asked Questions About Small Business," U.S. Small Business Administration, Office of Advocacy, 2018.

Figure 3. Real GDP per Employee, 1998-2014



Source: Authors' analysis of data from the Burearu of Economic Analysis. *Small Business GDP*, 1998–2014, U.S. Small Business Administration, Office of Advocacy, 2018

share fell sharply in 2000 and 2005 and declined steadily in most other years. In the 16 years from 1998 to 2014, the small business share of GDP fell from 48.0 percent to 43.5 percent. The declining small business share of GDP was not, however, due to a decline in the level of SGDP.

Fast Large Business Growth

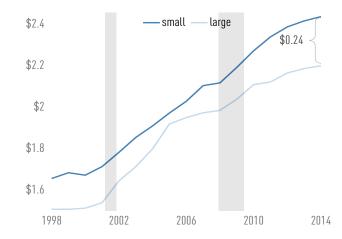
Figure 2 displays the levels of SGDP and large business GDP over time. SGDP stagnated briefly in 2001, declined steeply between 2007 and 2009, and did not recover to its 2007 level until 2011. By 2014, nominal SGDP had grown to \$5.9 trillion, 71.9 percent over its 1998 level. After adjusting for inflation, this translates to real growth of about 25 percent. Rising SGDP implies that the decline in the small business share of GDP is attributable to faster growth among large businesses. Specifically, after adjusting for inflation, real GDP for large businesses grew at 2.5 percent annually versus only 1.4 percent annually for small businesses.

Stagnant Small Business Employment

The number of small businesses declined following the 2008 financial crisis and did not fully recover by 2014. Similarly, small business employment in 2014 was down more than 3 percent from 2007 levels. In contrast, the numbers of large businesses and large business employees grew continuously between 1998 and 2014. While the average employment for a small business remained at 10 employees, the average employment for large businesses increased from 3,253 employees in 1998 to 3,324 employees per business in 2014.

High Worker Productivity for Large BusinessesDespite rising average employment at large businesses,

Figure 4. GDP per Payroll Dollar, 1998-2014



Source: Authors' analysis of data from the Burearu of Economic Analysis. *Small Business GDP*, 1998–2014, U.S. Small Business Administration, Office of Advocacy, 2018

the employee productivity gap grew substantially following both the 2001 and 2008 recessions. Figure 3 shows real GDP per employee for small and large businesses. In 1998, large businesses created \$6,100 more per employee than small businesses.³ By 2014, large business real GDP per employee was \$122,000 per employee, \$19,000 more than the small business level. The divergence may reflect large businesses' ability to harness low interest rates post-recession to invest in physical capital or small businesses' increased propensity to employ part-time workers.

Small Businesses Use Payroll More Efficiently

Real GDP per payroll dollar describes the return to payroll spending. Its inverse describes the percentage of income that businesses spend on payroll. For example, a business that spends \$1 on payroll to create \$4 in output spends 25 percent of its income on payroll. Between 1998 and 2014, real GDP per payroll dollar averaged between \$2 and \$2.50 across all industries. Thus, the typical business spent 40 to 50 percent of its income on payroll. Figure 4 shows that real GDP per payroll dollar was consistently greater for small businesses than for large businesses. While large businesses narrowed the productivity gap between 2001 and 2005, the difference grew following the 2008 recession. In 2014, GDP per payroll dollar was \$2.44 for small businesses and only \$2.20 for large businesses, a gap of

^{3.} The SGDP per employee and SGDP per payroll dollar calculations include SGDP attributable to nonemployers and thus exceed purely employer-only SGDP estimates. For context, nonemployer businesses generate about 3 percent of all business receipts. The Census Bureau's Nonemployer Statistics (NES) data provide detailed statistics on nonemployers.

Figure 5. Small Business Shares of GDP by Industry, 1998-2014

Industry	Small % o	of GDP 2014	- Industry	Small % 1998	o of GDP 2014
Real Estate and Rental and Leasing	82 -	82	Wholesale and Retail Trade	53	42
Other Services	84 ~~~	82	Educational Services	45	39
Construction	87	81	Administrative and Support Services	45 ~~~	37
Arts, Entertainment, and Recreation	80	69	Transportation and Warehousing	40 ~~	35
Professional and Scientific Services	68 ~~	54	Finance and Insurance	30 —	29
Accommodation and Food Services	58	53	Manufacturing and Mining	29 ~~~	27
Management of Businesses	30	47	Utilities	10	~~~ 14
Health Care and Social Assistance	52	47	Information	20	12

Source: Authors' analysis of data from the Burearu of Economic Analysis. Small Business 6DP, 1998-2014, U.S. Small Business Administration, Office of Advocacy, 2018

about 24 cents. Small businesses' more efficient use of payroll was observed in 12 of 16 industries analyzed.

Large Businesses Gain Share across Most Industries Figure 5 displays the evolution of the small business shares of GDP by industry since 1998. The small business share of GDP fell in all but two small industries. The industry with the largest decline in small business share of

GDP was Professional and Scientific Services, whose SGDP share fell from 68 percent in 1998 to 54 percent by 2014.

Real Estate, Wholesale and Retail Trade Lead SGDP Figure 6 provides a hierarchical map of SGDP across industries. The Real Estate, Rental & Leasing industry's \$850.3 billion of GDP makes it first in terms of SGDP. The detailed industrial profiles contained in the full report

Figure 6. Hierarchical Map of SGDP Across Industries, 2014

1. Real Estate and Rental and Leasing \$850.3B	3. Manufacturing and Mining \$691.9B	4. Professional and Scientific Services \$648	Social	5. Health Care and Social Assistance \$573.4B	
2. Wholesale and Retail Trade \$848.7B	6. Construction \$540.0B	8. Other Services \$296.8B	10. Administrative and Support Services \$195.2B	11. Transportation and Warehousing \$177.2B	
			12. Management of Businesses \$159.3B	14. Information \$96.9B	
	7. Finance and Insurance \$356.4B	9. Accommodation and Food Services \$259.1B	13. Arts, Entertainment,	15. Educational Services \$75.3B	
			and Recreation \$118.4B	16. Utilities \$39.6B	

Source: Authors' analysis of data from the Burearu of Economic Analysis. Small Business 6DP, 1998-2014, U.S. Small Business Administration, Office of Advocacy, 2018

reveal that, while only the 12th largest employer, the industry also leads in productivity per employee and productivity per payroll dollar. Wholesale & Retail Trade, the largest small business employer, was the second largest in terms of SGDP. Small businesses in Construction experienced sharp declines during the financial crisis. The small business share of Construction GDP fell from 87 percent to 81 percent, and the industry's rank fell from fifth to sixth in small business GDP between 1998 and 2014.

Discussion

The recession's impact only explains a small part of the almost 5 percent decline in the small business share of the economy between 1998 to 2014. The small business share fell more than 3.3 percent during the eight years preceding the recession and only 1.2 percent in the eight years during and after the recession. This difference points to structural changes, as opposed to cyclical responses, as causing the observed decline in the small business share of GDP. The full report explores several potential explanations for structural changes including:

- · Long run declines in business dynamism,
- The rise of big-box stores,
- The changing regulatory environment,
- The changing industry composition,
- Differential effects of recessions according to business age,
- The critical role of credit for small businesses, and
- The faster growth of large businesses.

For the researchers, policymakers, and other entities interested in the performance of U.S. small businesses, this report answers the question: What is the role of small business in the U.S. economy? The findings indicate that

small businesses did not fare as well as large businesses between 1998 and 2014. While small businesses continue to drive innovation and create nearly two-thirds of all net new jobs, recent trends bring their future role into question. Future research should therefore consider the potential for further declines in the small business share of the economy, as well as the consequences of further declines in terms of innovation, job creation, and competitiveness.

Scope and Methodology

The report's methodology provides a single SGDP series which is comparable across the full period of analysis. The methodology provides revised 1998–2007 estimates, new 2008-2012 estimates, and preliminary 2013–2014 estimates.

Data provided by the Bureau of Economic Analysis (BEA) form the foundation for calculating SGDP. In brief, SGDP is estimated by aggregating SGDP estimates for the sub-components of each industry. To make estimates at the industry level, GDP is separated into compensation and non-compensation components, and these are divided into their subcomponents. The small and large shares of each subcomponent are then estimated using a combination of data from the BEA, Bureau of Labor Statistics, Bureau of the Census, Internal Revenue Service, and U.S. Department of Health and Human Services. These small business shares are aggregated recursively to provide the overall estimates of SGDP.

This report was peer reviewed consistent with Advocacy's data quality guidelines. More information on this process can be obtained by contacting the director of economic research at advocacy@sba.gov or (202) 205-6533.

READ THE FULL REPORT ONLINE

This report is available on the Office of Advocacy's webpage at https://advocacy.sba.gov.

Visit Advocacy's website to receive email updates about future research, as well as news and regulatory communications. And follow us on Twitter, Facebook, and LinkedIn.

