

**Summary of the Economic Review of Resilient
Manufacturing and Non-Manufacturing Industries and
Businesses in the Toledo Metropolitan Statistical Area
(MSA) and Lucas County**

by

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During the last year, the Lucas County Improvement Corporation (LCIC) carried out an economic review of the *resilient* manufacturing and non-manufacturing industries and businesses in the Toledo Metropolitan Statistical Area (MSA) and Lucas County. The LCIC defined resilient industries and businesses as those firms and detailed industries which continued to grow or remained stable throughout the recession of 2007 through 2009,¹ in terms of the number of establishments, employment, and total payroll, as reported in the publicly available data from the Quarterly Census of Employment and Wages (QCEW) of the U.S. Bureau of Labor Statistics (BLS) for the Toledo MSA.

Under this definition of economic resilience, Toledo area industries and firms were reviewed and tested against a very high standard of economic growth and/or stability for all three criteria of the number of establishments and employment and total wages. In other words, the Toledo area resilient industries and their respective business firms continued to grow or remained stable throughout the recent recession by adding to, or maintaining, their numbers of establishments within the industry, their total number of workers, and their total wages.

In effect, the LCIC approached the 2007-09 recession as a unique economic “stress test” for this analytic exercise, one which identified unusually strong industries and specific companies in Lucas County especially worthy of continued support as likely, future economic growth centers. To identify these resilient, detailed industries and their representative, individual firms, the contributing economic staff to the LCIC reviewed all twenty-three, 2-digit sectors (defined by the North American Industrial Classification System, NAICS) and listed below:²

[Agriculture, Forestry, Fishing and Hunting](#) (NAICS 11)

[Mining, Quarrying, and Oil and Gas Extraction](#) (NAICS 21)

[Construction](#) (NAICS 23)

[Manufacturing](#) (NAICS 31-33)

[Wholesale Trade](#) (NAICS 42)

[Retail Trade](#) (NAICS 44-45)

[Transportation and Warehousing](#) (NAICS 48-49)

[Utilities](#) (NAICS 22)

[Information](#) (NAICS 51)

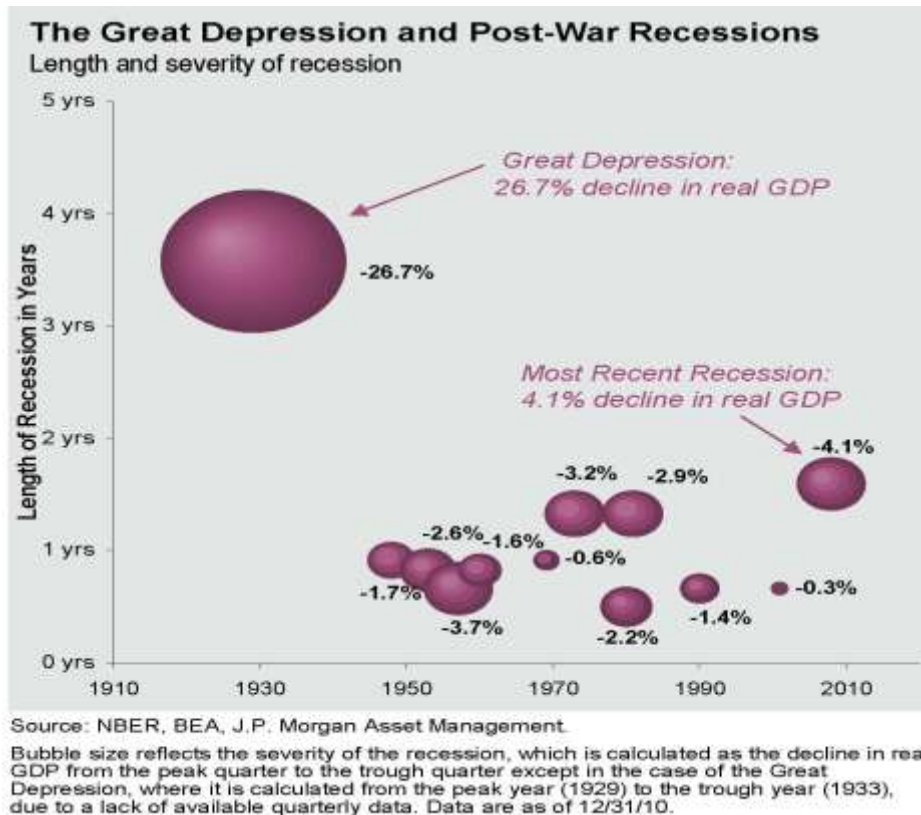
[Finance and Insurance](#) (NAICS 52)

¹ The recent economic recession ran from December, 2007, through June, 2009, as determined by the National Bureau of Economic Research. See National Bureau of Economic Research (NBER) at www.nber.org/cycles/cyclesmain.html.

² U.S. Bureau of Labor Statistics (BLS), Industries by Supersector and NAICS Code, at www.bls.gov/iag/tgs/iag_index_naics.htm.

- [Real Estate and Rental and Leasing](#) (NAICS 53)
- [Professional, Scientific, and Technical Services](#) (NAICS 54)
- [Management of Companies and Enterprises](#) (NAICS 55)
- [Administrative and Support and Waste Management and Remediation Services](#) (NAICS 56)
- [Educational Services](#) (NAICS 61)
- [Health Care and Social Assistance](#) (NAICS 62)
- [Arts, Entertainment, and Recreation](#) (NAICS 71)
- [Accommodation and Food Services](#) (NAICS 72)
- [Other Services \(except Public Administration\)](#) (NAICS 81)

This economic stress test utilized publicly available data from the Quarterly Census of Employment and Wages (QCEW)³ of the U.S. Bureau of Labor Statistics (BLS) to filter out all but the most robust industries in the Toledo MSA. This standard of economic growth or stability was so high, because the recession of 2007-2009 was so severe. In fact, this most recent recession was labeled the “Great Recession” for the reasons shown in the graph below.⁴



³ Ohio Bureau of Labor Market Information (LMI), Quarterly Census of Employment and Wages (QCEW), at www.ohiolmi.com/asp/edeps/EdepsNAICS.htm.

⁴ J.P. Morgan Asset Management, *Guide to the Markets*, 1st Qrt., 2011, p. 13, at www.jpmorganfunds.com/cm/Satellite?UserFriendlyURL=insidemarket_browsetheguide&pagename=jpmfVanityWapper.

As noted by the National Bureau of Economic Research (NBER), the length of this most recent “Great Recession” at 18 months, peak to trough, 12/2007 to 6/2009, lasted longer than all other post-war recessions, exceeded only by the Great Depression, 8/1929 through 3/1933, at 43 months, peak to trough.⁵ Locally, in the Toledo MSA, the Great Recession was equally severe, as demonstrated by the following QCEW table.

Summary Profile for: Toledo MSA Total Private Employment ^b				
Year / Quarter	Number of Establishments	All Employees	Total Wages (in thousands)	Average Quarterly Wage
Change from 2007/1 to 2009/3				
Absolute Change	-147	-21,551	\$-339,119	\$-552
Percent Change	-1.0%	-8.2%	-13.5%	-5.8%

The LCIC economic staff review of Toledo MSA detailed industries, 2007-2009, identified the following, ten detailed industries that passed the demanding “stress test” and kept growing or remained stable throughout the Great Recession in terms of employment, number of establishments, and total wages. (Please see the Toledo area sector reports, which included firm-specific, contact information for businesses in these ten robust and resilient industries noted below – sector reports which are available upon request from schaff.mark@yahoo.com).

Manufacturing Resilient Industries-

- (1) Bakeries and tortilla manufacturing (NAICS 3118);
- (2) Computer and electronic manufacturing (NAICS 334).

Non-Manufacturing Resilient Industries –

- (3) Corn farming (NAICS 111150);
- (4) Other post-harvest crop activity (NAICS 115114);
- (5) Utility system construction (NAICS 2371);
- (6) Power and communication system construction (NAICS 237130);
- (7) Medical equipment merchant wholesalers (NAICS 423450);
- (8) Other telecommunications (NAICS 51791);
- (9) Marketing research and public polling (NAICS 541910);
- (10) Home health care services (NAICS 621610).

⁵ National Bureau of Economic Research (NBER), *op.cit.*, at www.nber.org/cycles/cyclesmain.html.

⁶ Ohio Bureau of Labor Market Information (LMI), Quarterly Census of Employment and Wages (QCEW), at www.ohiolmi.com/asp/edeps/EdepsNaics.htm

These ten resilient industries, which grew or remained stable (based on QCEW data) during the recent recession, also fit well within the Ohio Department of Development (ODOD) “targeted industries” descriptions.⁷

ODOD “Targeted Industries” Description and QCEW Toledo MSA Resilient Industries:

- A. *ODOD Targeted Industry* = Agriculture and food processing.
 - a. *Related Toledo MSA Resilient Industries* = Bakeries and tortilla manufacturing (NAICS 3118); Corn farming (NAICS 111150); and Other post-harvest crop activity (NAICS 115114).
- B. *ODOD Targeted Industry* = Bioscience and bioproducts.
 - b. *Related Toledo MSA Resilient Industries* = Computer and electronic manufacturing (NAICS 334); Medical equipment merchant wholesalers (NAICS 423450); and Home health care services (NAICS 621610). (Note: the bioproducts will support and improve the productivity of the home health care services industry, NAICS 621610.)
- C. *ODOD Targeted Industry* = Instruments, controls, and electronics.
 - c. *Related Toledo MSA Resilient Industries* = Computer and electronic manufacturing (NAICS 334); and Other telecommunications (NAICS 51791).
- D. *ODOD Targeted Industry* = Advanced energy and environmental technologies.
 - d. *Related Toledo MSA Resilient Industries* = Utility system construction (NAICS 2371); and Power and communication system construction (NAICS 237130) – both of which are needed for the production of energy.
- E. *ODOD Targeted Industry* = Distribution and logistics.
 - e. *Related Toledo MSA Resilient Industries* = Medical equipment merchant wholesalers (NAICS 423450), which are largely concerned with the distribution and movement of goods.
- F. *ODOD Targeted Industry* = Corporate and professional services.
 - f. *Related Toledo MSA Resilient Industries* = Marketing research and public polling (NAICS 541910).

The designation of a “resilient” Toledo area industry was based on the census data from the Quarterly Census of Employment and Wages (QCEW), which were especially well suited for the economic “stress test” analysis that used the Great Recession as an economic filter. As a census, as opposed to a survey, the QCEW provided empirical data at the local level, which took into account the Schumpeter view of the “creative destruction” of market economies with many

⁷ Ohio Department of Development (ODOD) Targeted Industries Descriptions and Spreadsheet, received as an attachment to e-mail from LCIC to Schaff on 6/16/10.

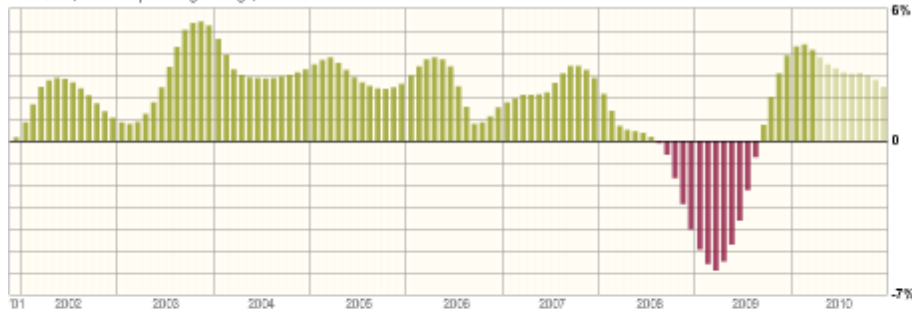
births and deaths of firms and constant, dynamic change,⁸ as well as the effects of the business cycle upon the Toledo MSA economy.

⁸*Joseph A. Schumpeter, "Creative Destruction" From Capitalism, Socialism and Democracy* (New York: Harper, 1975) [orig. pub. 1942], pp. 82-85: "This process of **Creative Destruction** is the essential fact about capitalism. It is what capitalism consists in and what every capitalist concern has got to live in. . . . Every piece of business strategy acquires its true significance only against the background of that process and within the situation created by it. It must be seen in its role in the **perennial gale of creative destruction**; it cannot be understood irrespective of it or, in fact, on the hypothesis that there is a perennial lull. . . . The first thing to go is the traditional conception of the *modus operandi* of competition. Economists are at long last emerging from the stage in which price competition was all they saw. As soon as quality competition and sales effort are admitted into the sacred precincts of theory, the price variable is ousted from its dominant position. However, it is still competition within a rigid pattern of invariant conditions, methods of production and forms of industrial organization in particular, that practically monopolizes attention. **But in capitalist reality as distinguished from its textbook picture, it is not that kind of competition which counts but the competition from the new commodity, the new technology, the new source of supply, the new type of organization (the largest-scale unit of control for instance)—competition which commands a decisive cost or quality advantage and which strikes not at the margins of the profits and the outputs of the existing firms but at their foundations and their very lives.** This kind of competition is as much more effective than the other as a bombardment is in comparison with forcing a door, and so much more important that it becomes a matter of comparative indifference whether competition in the ordinary sense functions more or less promptly; the powerful lever that in the long run expands output and brings down prices is in any case made of other stuff. It is hardly necessary to point out that competition of the kind we now have in mind acts not only when in being but also when it is merely an ever-present threat. It disciplines before it attacks. The businessman feels himself to be in a competitive situation even if he is alone in his field or if, though not alone, he holds a position such that investigating government experts fail to see any effective competition between him and any other firms in the same or a neighboring field and in consequence conclude that his talk, under examination, about his competitive sorrows is all make-believe. In many cases, though not in all, this will in the long run enforce behavior very similar to the perfectly competitive pattern." (Note: emboldening above by Schaff, not Schumpeter.)

The Economic “Stress Test” of the Toledo Area Economy: The “Great Recession” of 2007-2009 as an Economic Filter⁹

The USA TODAY / IHS Global Insight Economic Outlook Index...

Real GDP, six-month percentage change, annual rate



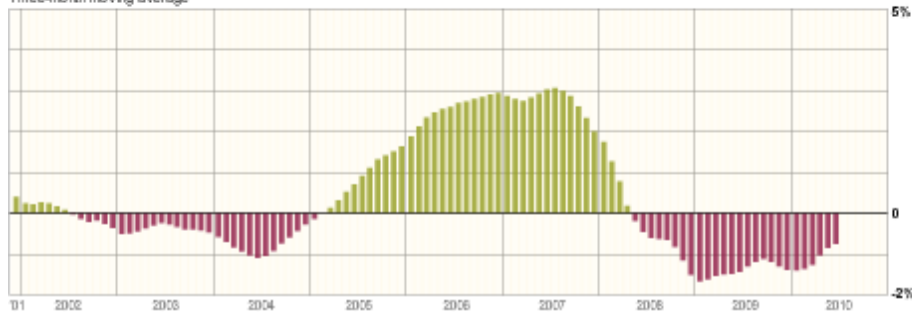
USA TODAY / IHS Global Insight Economic Outlook Index:
A composite of 11 indicators designed to predict future real gross domestic product (GDP) growth. Values through September 2008 are actual real GDP, which is GDP adjusted for inflation.

What it means: Real GDP growth is a key indicator of economic activity. It provides useful insight in assessing recession risk and recovery potential. Toward the end of a recession, a healthy GDP growth rate is around 3%.

...and its 11 component indicators

Real federal funds rate

Three-month moving average



Choose an indicator below to see the trend and a definition:

Real federal funds rate
Interest rate yield curve
Corporate bond spread
Hours worked
Building permits
Non-defense capital goods orders
Money supply
Stock prices
ISM export orders index
Crude oil prices
Light vehicle sales

(Source: USA Today/IHS Global Insight Economic Outlook Index at <http://www.ihsglobalinsight.com>)

Within the select group of the aforementioned, ten robust and resilient industries, after the LCIC used the Great Recession to filter out non-resilient Toledo area industries, the criteria of (a) 2008 industry average annual wages; (b) projected industry employment growth, percent change, 2008-2018; and (c) location quotients (LQ's) for the export industries within the group of ten Toledo MSA resilient industries, allowed the ranking of these robust industries for priority of LCIC attention and service. As shown in the following table, the Toledo MSA resilient industries of utility system construction (NAICS 2371) and marketing research and public opinion polling (NAICS 541910) scored well on all three criteria of industry average annual wages during the depths of the Great Recession in 2008; and projected, national employment

⁹ USA Today newspaper/HIS Global Insight Economic Outlook Index at www.ihsglobalinsight.com.

percent change, 2008-2018;¹⁰ and location quotients greater than 1.2, which signified the probability of an export industry which drew outside capital into Lucas County.

Toledo Metropolitan Statistical Area (MSA) Resilient Industries:					2008 Industry	Industry Employment	Location Quotients
					Av. Annual Wages	Growth, % Change,	(LO's) Lucas Ctv.
					(QCEW)	2008-2018, (U.S.)	Export Industries
Manufacturing Resilient Industries-							
(1)	Bakeries and tortilla manufacturing (NAICS 3118)			\$ 38,189.00	-1.96	0.79	Local
(2)	Computer and electronic manufacturing (NAICS 334)*			\$440,879.00	-19.33	0.10	Local
Non-Manufacturing Resilient Industries –							
(3)	Corn farming (NAICS 111150)			\$ 28,322.00	NA		NA
(4)	Other post-harvest crop activity (NAICS 115114)			\$ 33,775.00	NA		NA
(5)	Utility system construction (NAICS 2371)			\$ 64,750.00	10.9	1.27	Export
(6)	Power and communication system construction (NAICS 237130)			\$ 71,044.00	0.76		NA
(7)	Medical equipment merchant wholesalers (NAICS 423450)			\$ 61,472.00	NA	0.73	Local
(8)	Other telecommunications (NAICS 51791)			\$ 39,393.00	NA	0.96	Local
(9)	Marketing research and public polling (NAICS 541910)			\$ 29,878.00	21.9 ***	4.63	Export
(10)	Home health care services (NAICS 621610)**			\$ 24,082.00	46.08	0.77	Local
*The high, QCEW 2008 industry average annual wages for NAICS 334 in the Toledo MSA are accurate and result from bonuses.							
*For 2007, the QCEW reported NAICS 334 industry average annual wages of \$211,545.00; in 2009, Toledo MSA QCEW wages for NAICS 334 were \$113,593.00.							
*In 2006, the QCEW average annual wages reported for NAICS 334 in the Toledo MSA were \$46,300.00.							
**The estimated 2008 industry average annual wages for NAICS 621610 were interpolated from the QCEW reported average annual wages in 2007 and 2009.							
**Because of confidentiality rules, the QCEW did not report the 2008 NAICS 621610 industry average annual wages for the Toledo MSA.							
**In 2007, the QCEW reported NAICS 621610 industry average annual wages of \$19,665.00 in the Toledo MSA.							
**In 2009, for the same industry NAICS 621610 in the same Toledo MSA, the QCEW reported the industry average annual wages of \$28,499.00.							
***The national percent change in employment, 2008-2018, shown here of 21.9% refers to the summary category of NAICS 541900.							
***NAICS 541900 refers to the summary industry category of other professional, scientific, and technical services.							
QCEW = Quarterly Census of Employment and Wages at http://ohiolmi.com/asp/edeps/EdepsDisplay.asp .							
% Change, 2008-18, Industry Employment Projections, by U.S. Bureau of Labor Statistics (BLS) at www.bls.gov/emp/#tables .							
Export Industries = LQ > 1.2. Location Quotients by U.S. BLS at www.data.bls.gov/location_quotient/ControllerServlet							

¹⁰ This criterion of projected, percent change, is based on national projections from the U.S. Bureau of Labor Statistics (BLS at www.bls.gov/emp/#tables), in order to provide sufficient industry detail.