

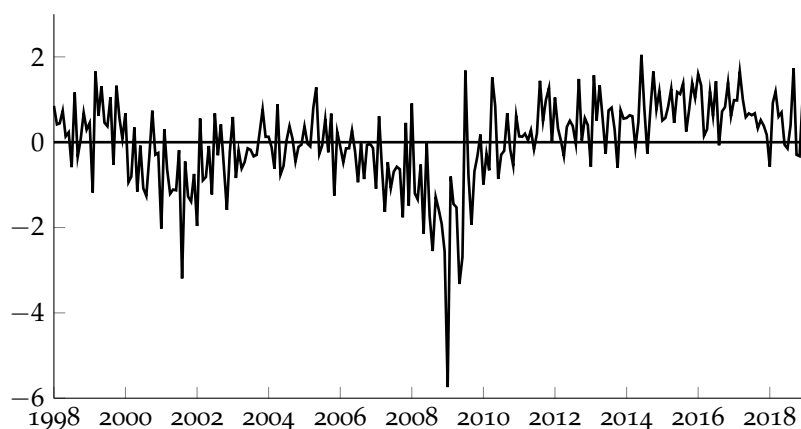
Detroit Economic Activity Index

December 2018

THE DETROIT ECONOMIC ACTIVITY INDEX measures growth in economic activity for the city of Detroit. The index is constructed using a mixed-frequency dynamic factor model of 23 Detroit-specific data series capturing income, employment, residential and commercial real estate activity, electric customer counts, tax revenues, and port activity. It is calibrated so that Detroit's historical growth trend (average) equals zero, meaning that an index value greater than zero points to the city's economic activity growing faster than trend and, conversely, a value less than zero points to its activity growing slower than trend. The index is then measured in standard deviation units from trend growth.

Detroit Economic Activity Index

(standard deviations from trend)



The Detroit Economic Activity Index was **+0.99** in December 2018, which points to growth above trend. Over the past year, the index has averaged **+0.43**, which is above its long-run average.

Current	Previous	Averages	
		3-month	12-month
+0.99	-0.33	+0.12	+0.43

Current data (December 2018)

	Series	Contribution	Historical range
Income	City income tax	+0.01	■ ■ ■ ● ■ ■
	Consumer expenditures	0.00	■ ■ ■ ● ■ ■
	DTE C&I customer count	0.00	■ ■ ■ ● ■ ■
	DTE residential customer count	+0.18	■ ■ ■ ● ■ ■
	Per capita income	0.00	■ ■ ■ ● ■ ■
Labor	Employment	+0.84	■ ■ ■ ● ■ ■
	Labor force participation rate	0.00	■ ■ ■ ● ■ ■
	Unemployment	-0.14	■ ■ ■ ● ■ ■
	Weekly hours worked	0.00	■ ■ ■ ● ■ ■
Real estate	Building permits	0.00	■ ■ ■ ● ■ ■
	City property tax	0.00	■ ■ ■ ● ■ ■
	Commercial construction	+0.01	■ ■ ■ ● ■ ■
	Commercial leasing	0.00	■ ■ ■ ● ■ ■
	Condo sales	+0.01	■ ■ ■ ● ■ ■
	Home sales	+0.03	■ ■ ■ ● ■ ■
	Median condo price	-0.01	■ ■ ■ ● ■ ■
	Median home price	+0.09	■ ■ ■ ● ■ ■
	Net absorption CRE	-0.01	■ ■ ■ ● ■ ■
	Nonoffice rents	0.00	■ ■ ■ ● ■ ■
	Office rents	+0.01	■ ■ ■ ● ■ ■
Vacancy rate CRE	0.00	■ ■ ■ ● ■ ■	
Trade	Exports	-0.02	■ ■ ■ ● ■ ■
	Imports	-0.01	■ ■ ■ ● ■ ■

The index can be decomposed into the contributions from each component data series such that the sum of the contributions results in the current value of the index. The contributions combine what a given series indicates for the Detroit economy and how related that series is to other measures of economic activity. Series that are more closely related to other components receive a larger weight in the index and will have larger contributions to the current index value.

The historical range points to how strong the current contribution of a series is relative to its history. A contribution to the far right of its range indicates the strongest reading from a series since 1998, while a contribution to the far left indicates the weakest reading.

FEDERAL RESERVE BANK OF CHICAGO

The Detroit Economic Activity Index is a research project of the Federal Reserve Bank of Chicago. For more information, contact Paul Traub at paul.traub@chi.frb.org.