

# MICHIGAN – 2008 ECONOMIC IMPACT OF THE CONSTRUCTION EQUIPMENT INDUSTRY



## THE CONSTRUCTION EQUIPMENT INDUSTRY

The construction equipment industry in Michigan can be divided into three categories – manufacturing, wholesale, and repair. The total size of the Michigan construction equipment market was estimated to be \$2.6 billion in 2008.

## THE ECONOMIC IMPACT

The economic impact of an industry in a particular region is defined as the contribution of that industry to the overall economic activity. It is possible to assess the effect the Michigan construction equipment industry has on the total employment, output, value added and tax.

The total economic impact of the construction equipment industry on the Michigan economy includes direct, indirect and induced effects (see definitions section). The table below presents a summary of the Michigan construction equipment industry's economic impact for 2008.

<b>ECONOMIC IMPACT SUMMARY*</b> Revenue: \$2,648 million (2008)	
<b>EMPLOYMENT</b>	<b>58,534</b>
<b>INDUSTRY OUTPUT (MILLION US\$)</b>	<b>\$10,207</b>
<b>VALUE ADDED (MILLION US\$)</b>	<b>\$5,022</b>
<b>Labor Income</b>	<b>\$3,057</b>
<b>Business Income</b>	<b>\$1,516</b>
<b>Indirect Business Tax</b>	<b>\$449</b>
<b>TOTAL TAX IMPACT (MILLION US\$)</b>	<b>\$1,057</b>

Source: IHS Global Insight and U.S. Census Bureau

To summarize, in 2008 the construction equipment industry in Michigan:

- Supported 58,534 jobs for the economy, including both full-time and part-time employees, as well as the self-employed;
- Contributed \$10.2 billion to the economy's total production (output);
- Resulted in \$3.1 billion in labor income – wages and salaries, benefits (such as health insurance) and payment to the self-employed;
- Created \$1.5 billion worth of business income in form of rents, royalties, dividends and profits earned by corporations;
- Generated \$1.1 billion in total taxes, \$449 million of which went to indirect business tax and the rest to corporate profits tax, personal tax, dividends, and social insurance tax.

\* Estimated based on data available as of August 2009.

## **DEFINITIONS**

### **Construction Equipment Segments**

#### **Construction Equipment Manufacturing (NAICS 333120)**

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment (drilling and underground mining machinery and equipment, aerial work platforms, rail layers, etc).

#### **Construction Equipment Wholesale (NAICS 423810)**

Industry comprises establishments primarily engaged in the merchant wholesale distribution of specialized machinery, equipment, and related parts generally used in construction, mining (except oil well) and logging activities.

#### **Construction Equipment Repair (NAICS 811310)**

Industry covers establishments primarily engaged in the repair and maintenance of commercial and industrial machinery and equipment. Establishments in this industry either sharpen/install commercial and industrial machinery blades and saws or provide welding (e.g., automotive, general) repair services; or repair agricultural and other heavy and industrial machinery and equipment (e.g., forklifts and other materials handling equipment, machine tools, commercial refrigeration equipment, construction equipment, and mining machinery).

### **Economic Impacts**

#### **Direct Effect**

Direct effect refers to the response of the economy to the change in the final demand of the construction equipment industry. For example, if a firm in the construction equipment segment sells an excavator to a building construction company and pays indirect taxes on its profit, then these indirect taxes are considered to be part of the direct economic effect of the construction equipment industry.

#### **Indirect Effect**

Indirect effect refers to the response of the economy to the change in the final demand of the industries that are dependent on the construction equipment industry for their input. In the example presented for direct effect, the building construction company uses the excavator it bought and makes profit on such activities. Any indirect taxes paid by the building construction firm are regarded as the indirect effects of the construction equipment industry.

#### **Induced Effect**

Induced effect refers to the response of the economy to changes in household expenditure as a result of income generated by the direct and indirect effects of the construction equipment industry. In the example presented, the employees in both firms receive wages in return for their services. They spend their wages on various items such as groceries, which contributes to the profit of grocery retailers. The indirect taxes paid by grocery retailers as a result of the profit made are an example of an induced effect.

### **Value Added**

Value added is payment to labor and capital used in the production of an industry. It is defined as the sum of labor income, indirect business taxes and business income.

### **Indirect Business Tax**

Indirect Business Taxes include excise taxes, property taxes, fees, licenses and sales taxes paid by businesses but do not include taxes on profit or income.