

# MICHIGAN

## EMPLOYMENT GROWTH RANK

Best=1 Worst=54

2008-2010

**40**  
4th quintile

2008-2013

**41**  
4th quintile

## RISK-ADJUSTED RETURN, '08-13

**0.35%**

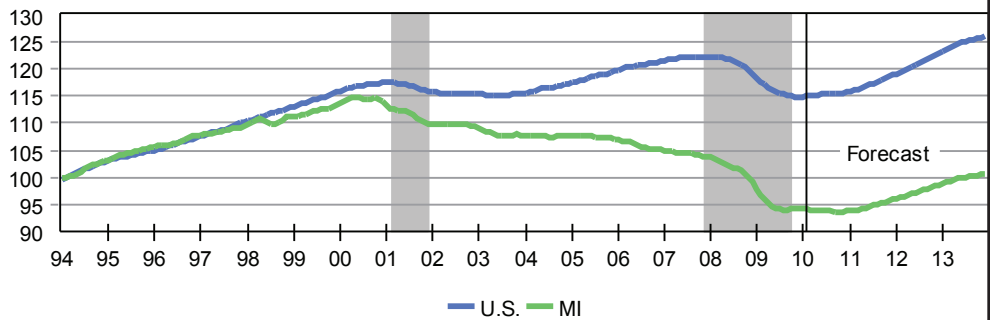
## COST OF DOING BUSINESS

U.S.=100% **102%**

## VITALITY

U.S.=100% **84%**

## RELATIVE EMPLOYMENT PERFORMANCE (1994=100)



2002	2003	2004	2005	2006	2007	2008	INDICATORS	2009	2010	2011	2012	2013
336.9	341.1	337.9	339.9	334.8	331.0	326.1	<b>Gross state product (C\$B)</b>	310.2	317.4	328.5	345.3	355.7
4,487	4,416	4,399	4,390	4,327	4,269	4,161	<b>Total employment (000)</b>	3,881	3,835	3,871	3,977	4,080
-1.7	-1.6	-0.4	-0.2	-1.4	-1.4	-2.5	<b>% change</b>	-6.7	-1.2	0.9	2.7	2.6
6.2	7.1	7.1	6.8	6.9	7.1	8.4	<b>Unemployment rate</b>	14.0	15.2	14.4	11.3	9.4
1.0	3.7	1.6	2.0	2.8	2.6	1.8	<b>Personal income growth</b>	-2.5	1.5	1.0	2.9	4.2
10,039	10,066	10,089	10,091	10,082	10,051	10,002	<b>Population (000)</b>	9,970	9,924	9,904	9,912	9,927
-13.2	-14.2	-22.3	-39.0	-55.5	-79.2	-92.7	<b>Net migration (000)</b>	-77.9	-90.1	-65.0	-36.7	-28.4
41,656	44,726	45,881	38,875	24,782	15,195	8,984	<b>Single-family permits</b>	6,225	10,626	19,184	29,483	30,379
8,312	9,187	8,840	6,453	4,409	2,572	1,927	<b>Multifamily permits</b>	699	1,462	4,779	7,538	8,098
285.3	295.1	307.0	317.9	314.8	304.9	288.8	<b>House price index (1980Q1=100)</b>	272.1	252.5	245.5	249.5	261.5
109,199	150,410	81,175	73,135	57,966	48,239	46,025	<b>Mortgage originations (\$mil)</b>	58,810	55,265	45,002	40,540	44,466
799.8	781.4	711.7	660.0	695.1	647.5	567.7	<b>New vehicle registrations (000)</b>	414.7	469.5	554.4	625.8	645.5
54,805	62,070	63,531	88,402	32,746	44,996	53,656	<b>Personal bankruptcies</b>	74,450	97,448	111,367	104,864	89,468

## STRENGTHS & WEAKNESSES

### STRENGTHS

- Center for automotive headquarters and R&D, as well as skilled automotive workforce.
- Natural endowments support tourism, state's second largest industry.
- State programs support industries with growth potential.

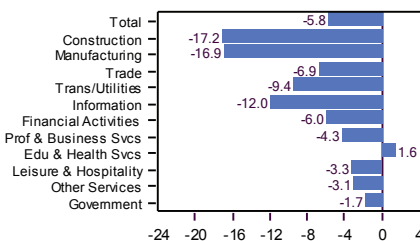
### WEAKNESSES

- High dependence on restructuring motor vehicle industry.
- Housing market suffering from high incidence of foreclosures and plummeting prices.

## CURRENT EMPLOYMENT TRENDS

### DECEMBER 2009

% change yr ago, 3-mo MA



## FORECAST RISKS

### SHORT TERM

### LONG TERM

#### UPSIDE

- Battery, nonauto-related IT, alternative fuels and life sciences succeed as new drivers.
- Thanks to incentives, film industry takes root in the state.

#### DOWNSIDE

- Deteriorating fiscal conditions necessitate more cost-cutting measures.
- Slow recovery period spurs more out-migration, more auto-related restructuring, and the demise of Chrysler.

## ANALYSIS

**Recent Performance.** The Michigan economy is beginning to stabilize; output, exports, jobless claims, the manufacturing workweek, temp hiring, and residential permitting are all improving. Two recent surveys also point toward stronger business and consumer confidence in the state's economy. Employment trended flat during the second half of 2009, but this follows a loss of some 600,000 jobs since 2005 when the auto industry began its massive restructuring in the state. The unemployment rate remains very high, near 15%, and the sharp contraction in the labor force means that labor market slack is considerably greater.

**Auto industry.** MI's auto industry is undergoing a tenuous turnaround. Production has been ramping up since last summer and new investments are being made, but there is little new hiring and more consolidation will occur among automakers and suppliers. Even once national vehicle sales rebound strongly, MI will derive less benefit than it had in the past because the industry's size in the state has fallen; projected unit production in the state for 2010 will be 40% of its 2000 level. GM is adding a third shift at its Lansing facility and investing in a Detroit small car plant. These expansions will help preserve and restore more than 2,000 jobs this year and next. However, the automaker will shutter plants in Detroit, Ann Arbor and Flint this year. Ford will hire 1,000 workers in Detroit next year, but that will only offset the jobs lost when it cuts a shift at its AutoAlliance plant in July. MI did avert another hit with Chrysler's purchase of its Sterling Heights plant, which was to close this year.

**Alternative drivers.** Several industries hold promise for the state longer term, although not nearly enough to fill the huge hole left by autos. The most promising are in alternative energy technologies, life sciences, film production, IT, and tourism. Auto suppliers are diversifying into renewable energy, defense robotics, and recently General Electric announced plans to contract with

50 state suppliers for home appliance parts production. MI is attracting the lion's share of federal green funds, and ample state and private funding and tax credits for battery, solar cell and wind turbine production; Detroit, Grand Rapids, Holland and Saginaw will gain thousands of jobs.

Generous state incentives are also promoting film production. A handful of studios are opening in southeastern and western Michigan, which are also expected to create thousands of jobs. During 2009, 52 films were shot in the state, according to the Michigan Film Office, up from 35 in 2008.

**Housing.** Home sales are being boosted by higher affordability and the federal homeowners' tax credit, but foreclosures will continue to mount this year. Home sales increased by 8% in 2009 and inventory fell, but many foreclosures, which would have occurred last year, will be shifted into this year. As a result, existing-house prices are not expected to bottom until early 2011.

Residential permitting inched up in 2009, to about one-sixth of the precrisis level. Weak employment and population growth do not justify even such modest new building. More promising is a large federal grant that will pay for the demolition of buildings in cities throughout the state with some of the most blighted residential areas. This opens the way for neighborhood revitalization.

**The recession is close to ending in Michigan. Employment will bottom in the fourth quarter. Output, employment and income growth will lag well behind the national average throughout the forecast horizon. New growth drivers will be insufficient to absorb its unemployed workers, and risks to greater consolidation in the supply chain and the possible failure of Chrysler remain. MI will not regain the jobs it lost during the 2000s.**

*Sophia Koropeckyj  
February 2010*

## EMPLOYMENT & INDUSTRY

### TOP EMPLOYERS

General Motors Corporation	108,155
Ford Motor Company	62,131
University of Michigan	27,074
Trinity Health Systems	22,410
Chrysler LLC	21,150
Meijer Companies, Ltd.	20,411
Henry Ford Health	18,422
William Beaumont Hospitals	15,275
St. John Health	13,003
Spectrum Health	12,324
Detroit Medical Center	11,586
DTE Energy Company	10,955
Michigan State University	10,500
Blue Cross Blue Shield of Michigan	8,231
Johnson Controls, Inc.	8,125
Oakwood Healthcare, Inc.	7,518
Delphi Corporation	7,395
EDS Coporation	7,200
Whirlpool	6,300
Comerica Bank	6,103

Sources: Combined Lists, Moody's Economy.com, 2009

### PUBLIC

Federal	53,450
State	171,042
Local	423,408

2008

### INDUSTRY EMPLOYMENT

Sector	MI	U.S.
Construction	3.7%	5.3%
Manufacturing	13.8%	9.8%
Durable	75.8%	63.1%
Nondurable	24.2%	36.9%
Transportation/Utilities	3.0%	3.7%
Wholesale Trade	4.0%	4.4%
Retail Trade	11.5%	11.2%
Information	1.5%	2.2%
Financial Activities	4.9%	5.9%
Prof. and Bus. Services	13.4%	13.0%
Educ. and Health Services	14.6%	13.8%
Leisure and Hosp. Services	9.6%	9.8%
Other Services	4.2%	4.0%
Government	15.6%	16.4%

Percent of total employment, 2008

### LOCATION QUOTIENTS

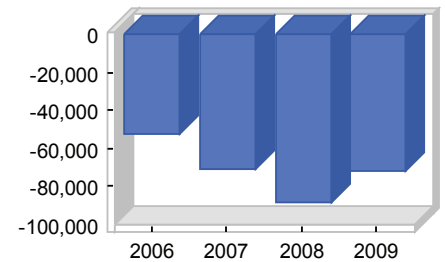
NAICS Industry	Location Quotient
336 Transportation Equip. Manufacturing	3.59
333 Machinery Manufacturing	1.92
331 Primary Metal Manuf.	1.77
326 Plastics and Rubber Products Manuf.	1.69
332 Fabricated Metal Product Manuf.	1.69

Source: Moody's Economy.com, 2008

## MIGRATION FLOWS

INTO MICHIGAN	NUMBER OF MIGRANTS
Florida	10,375
Ohio	8,904
Illinois	7,823
Indiana	7,423
California	6,030
Texas	5,272
Wisconsin	3,736
New York	3,339
Georgia	3,161
Virginia	3,144
<b>Total In-migration</b>	<b>107,522</b>
FROM MICHIGAN	
Florida	18,661
Texas	12,748
Ohio	11,227
Illinois	11,177
California	10,248
Indiana	9,764
Arizona	8,158
North Carolina	7,805
Georgia	7,475
Tennessee	7,198
<b>Total Out-migration</b>	<b>179,649</b>
<b>Net Migration</b>	<b>-72,127</b>

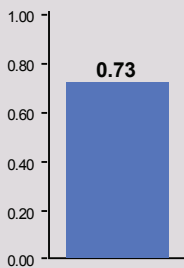
### Net Migration, MI



Sources: IRS (top), 2008; Census Bureau, 2009

### INDUSTRIAL DIVERSITY

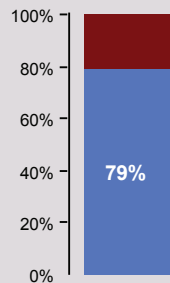
Most Diverse (U.S.)



Least Diverse

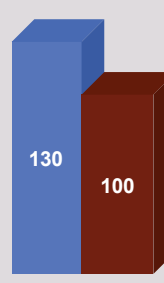
### EMPLOYMENT VOLATILITY

Due to U.S. fluctuations



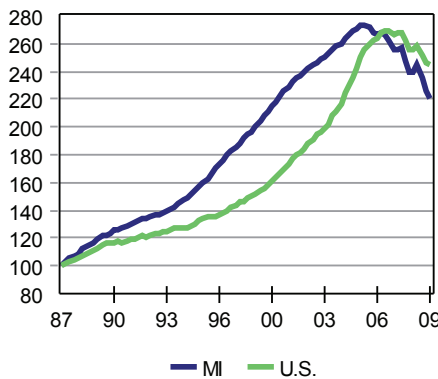
■ Not due to U.S. ■ Due to U.S.

Relative to U.S.



■ MI ■ U.S.

### HOUSE PRICES



Source: FHFA, 1987Q1=100, NSA

### MERCHANDISE TRADE

#### EXPORTS BY DESTINATION

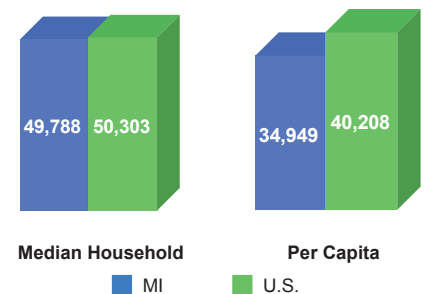
Country	Exports (\$ mil)	Share Total Exports %
<b>World</b>	<b>45,135.5</b>	<b>100.0</b>
Canada	24,073.0	53.3
Mexico	6,414.6	14.2
Germany	1,562.1	3.5
Japan	1,437.7	3.2
China	1,287.6	2.9

#### EXPORTS BY COMMODITY

Commodity	Exports (\$ mil)	Share Total Exports %
<b>World</b>	<b>45,135.5</b>	<b>100.0</b>
Transportation equip.	21,065.7	46.7
Machinery ex elect.	4,244.7	9.4
Chemicals	4,017.5	8.9
Oil and gas	3,148.9	7.0
Primary Metal Manuf.	2,398.5	5.3

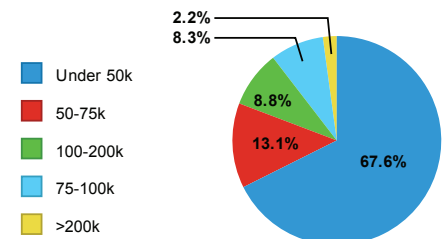
Source: BOC - Foreign Trade Division, 2008

## INCOME



Sources: Census, 2008 (household); BEA, 2008 (per capita)

## INCOME TAX DISTRIBUTION



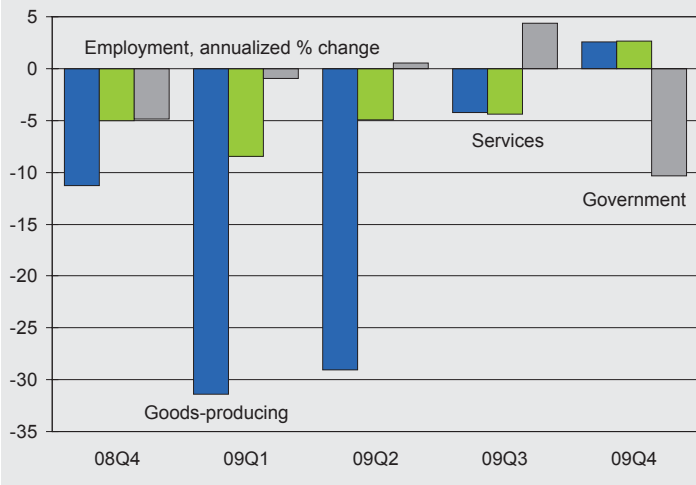
Source: Internal Revenue Service, 2007

### CREDIT QUALITY

MOODY'S RATING

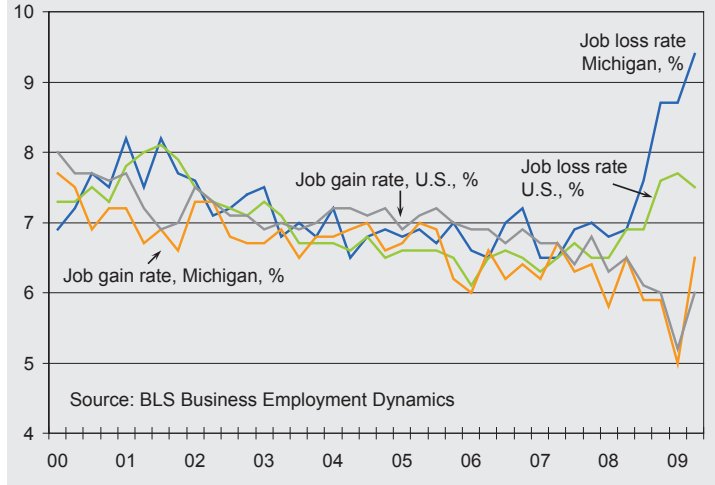
**Aa3**

## Private Sector Finally Stabilizes, Government Is Now the Drag



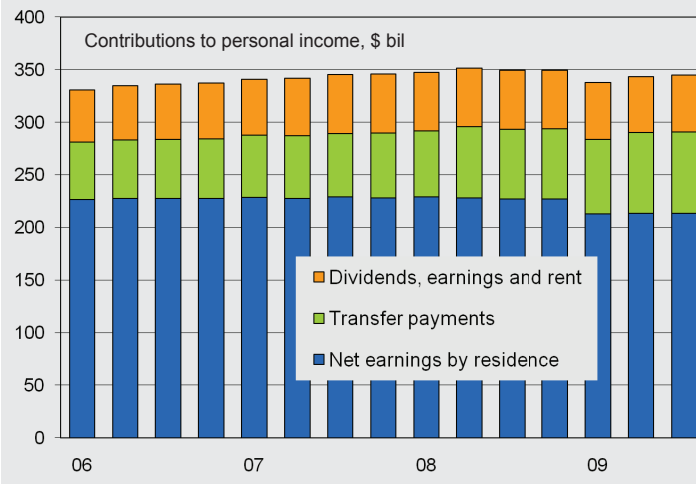
Over the past decade, MI's employment base has contracted by 18%, slightly more than the decline suffered in the early 1980s. It seems that job losses are finally beginning to abate, but the labor market will not turn around until next year. More auto industry consolidation is still in store this year. Also, consumer service industries still face challenges because of poor household finances and declining local tax revenues. Revenue sharing with municipalities is forcing many local governments to cut back. Local government employment is at its lowest since the early 1990s.

## Massive Job Losses Set Michigan Apart From the U.S.



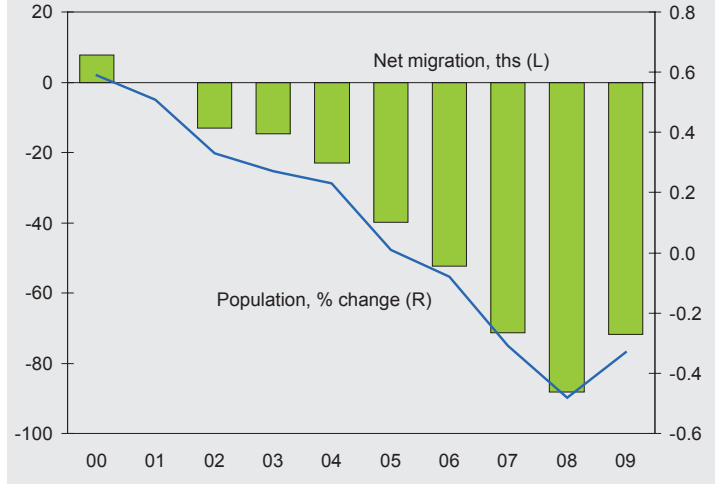
Since the start of the recession, job losses have escalated, while hiring has plummeted throughout the nation. What distinguishes MI from the nation is the extent of job losses, as least through mid-2009, according to recently released Business Employment Dynamics data. More recent data indicate that job losses have fallen by half since then, and net employment is close to bottoming out. The state will struggle to absorb its many displaced workers. Including underemployed and discouraged workers, labor market slack averaged 21.5% last year, higher than any other state.

## Transfer Payments Provide Safety Net for Michigan



Transfer payments have been providing an important safety net for MI's unemployed. Transfer payments' proportion of income has increased from 13% at the beginning of the last decade to 23% in 2009. Unemployment insurance benefits have been available for up to 99 weeks for those unemployed, but even these are running out, and a record number of residents have been forced to seek help from homeless shelters and food banks. Hiring will be slow to return, and the unemployment rate will remain above 10% until 2013.

## Michigan's Long-Term Prospects Will Be Stunted



Although the decline in MI's population slowed slightly in 2009, this is hardly a cause for celebration. MI has lost on net 375,000 residents since 2001. Among adults older than 25, the state has experienced the greatest loss of less-educated workers, those most affected by the declines in manufacturing and construction. The state has managed to retain some residents with college and graduate degrees. These residents will help develop its knowledge-based industries. MI still lags behind the nation in its share of college graduates, and this deficit has grown steadily over the past decade.

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