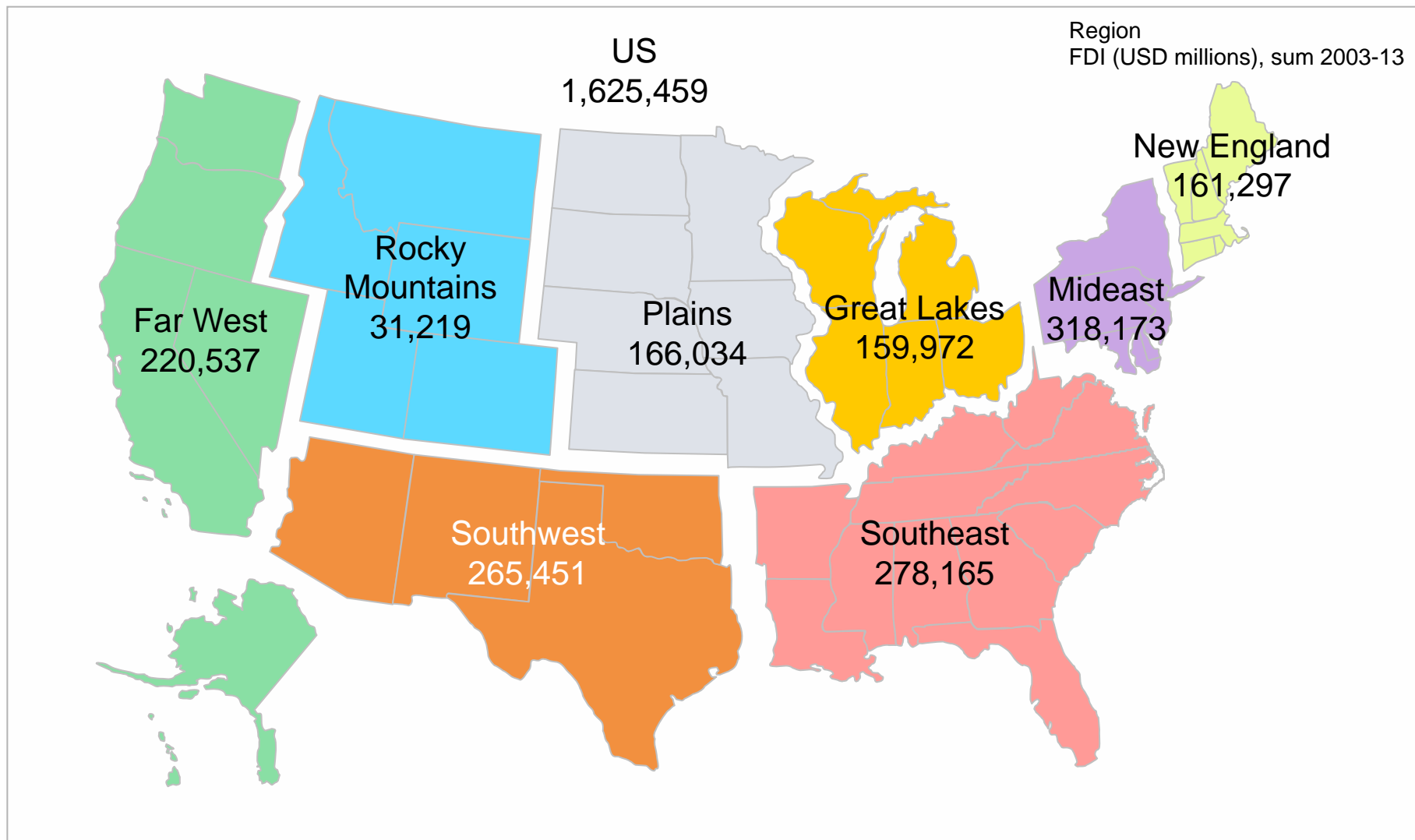


# FDI scorecard by region (BEA definitions)



NOTE: Excludes US territories. State-specific numbers do not capture deals for which location is not known at time of deal. These deals represent 13% of all deals in the US from 2003 to 2013, so the sum of all states may not add up to aggregate US number, as US number captures all deals.

SOURCE: FDI markets; Dealogic

### Chinese FDI in US by state, 2003-13

<b>Top 10 states</b>	<b>Investment</b> USD millions	<b>Number of deals</b>	<b>Jobs created<sup>2</sup></b>
Virginia	8,751	7	378
New York	5,314	44	1,605
California	2,911	88	5,652
Missouri	2,735	4	875
Texas	2,270	24	2,192
Oklahoma	1,478	5	540
Massachusetts	1,082	13	157
Michigan	718	19	1,353
North Carolina	679	21	1,550
New Jersey	601	10	447
<b>Great Lakes states/ provinces</b>	<b>Investment</b> USD millions	<b>Number of deals</b>	<b>Jobs created<sup>2</sup></b>
Illinois	310	10	262
Indiana	139	6	352
Michigan	718	19	1,353
Minnesota	163	2	0
New York	5,314	44	1,605
Ohio	225	5	923
Pennsylvania	177	5	41
Wisconsin	4	1	0
Ontario <sup>1</sup>	724	18	n/a
Quebec <sup>1</sup>	877	6	n/a

### Chinese manufacturing FDI in US by state, 2003-13

<b>Top 10 states</b>	<b>Investment</b> USD millions	<b>Number of deals</b>	<b>Jobs created<sup>2</sup></b>
Virginia	7,173	6	342
New York	1,861	11	150
Texas	1,793	16	1,086
Massachusetts	1,038	11	72
California	684	41	118
North Carolina	563	15	724
South Carolina	410	7	625
Nevada	343	2	1,000
Alabama	286	2	300
New Jersey	284	5	0
<b>Great Lakes states/ provinces</b>	<b>Investment</b> USD millions	<b>Number of deals</b>	<b>Jobs created<sup>2</sup></b>
Illinois	174	6	68
Indiana	138	6	229
Michigan	283	17	274
Minnesota	0	0	0
New York	1,861	11	150
Ohio	225	5	800
Pennsylvania	103	4	0
Wisconsin	0	0	0
Ontario <sup>1</sup>	391	8	n/a
Quebec <sup>1</sup>	59	4	n/a

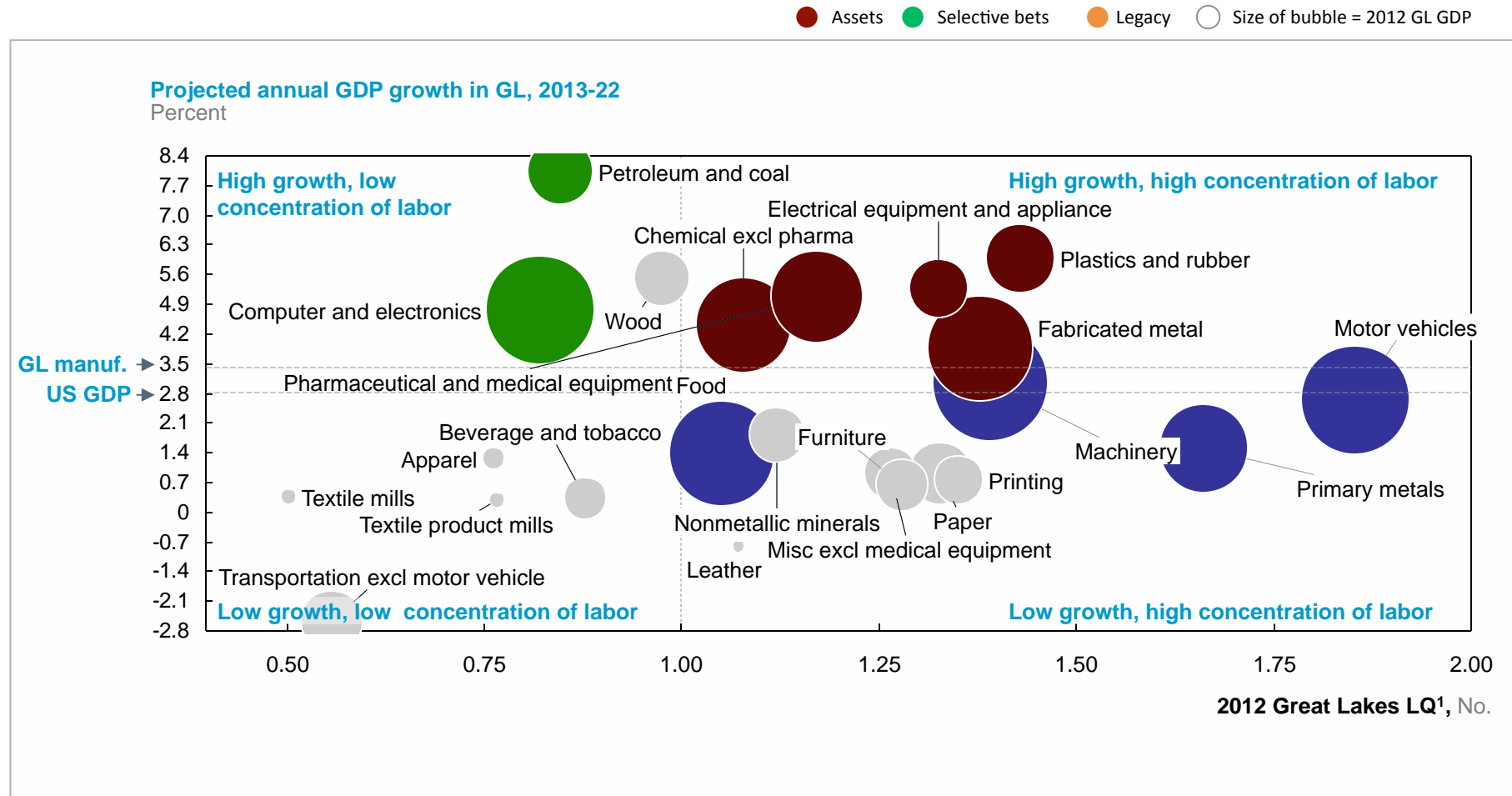
1 Only includes Greenfield investment data, as M&A deals in Canada only available at national level; 92 deals for USD38 billion across Canada

2 Only includes jobs created by Greenfield investments

NOTE: State-specific numbers do not capture deals for which location is not known at time of deal. These deals represent 13% of all deals into the US from 2003 to 2013

SOURCE: FDI markets; Dealogic

# Manufacturing in region spans broad spectrum



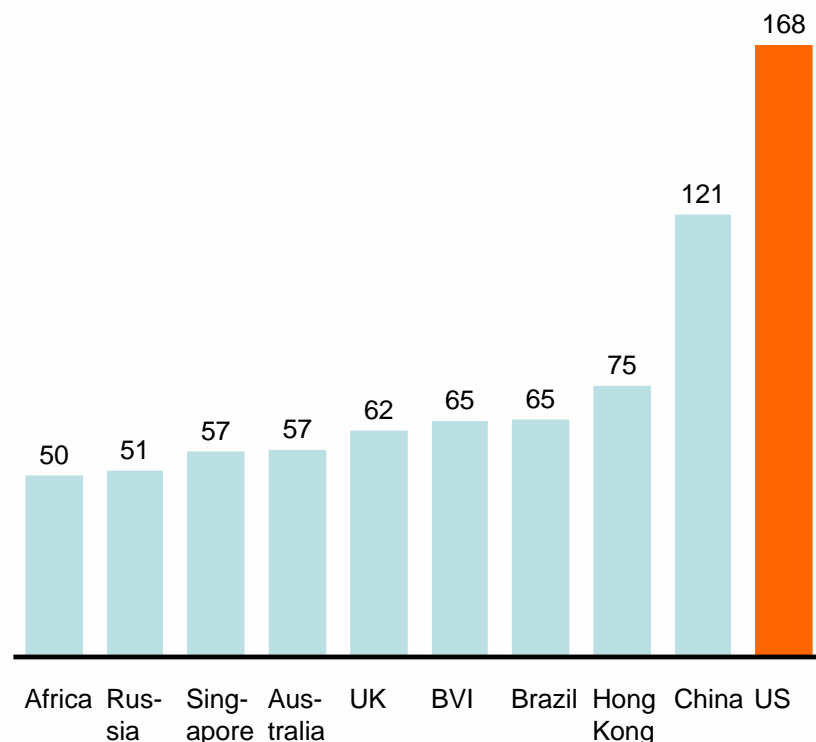
1 The location quotient (LQ) describes the specialization of the labor force in the region. It is the percent of workers in an industry in the Great Lakes versus the percent of workers in the industry nationally. A region with an LQ greater than 1 is more specialized than average in that industry.

SOURCE: Moody's Analytics; US Bureau of Labor Statistics

# 45% of FDI in US goes to manufacturing

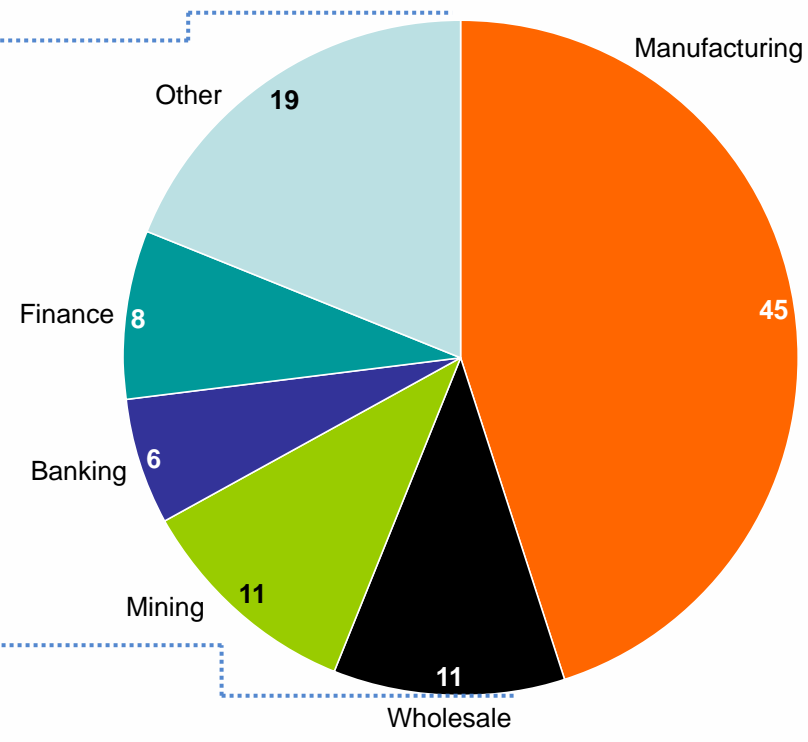
Top 10 recipients of FDI by region, 2012

USD billions



FDI inflows to the US by industry, 2010-12

Percent

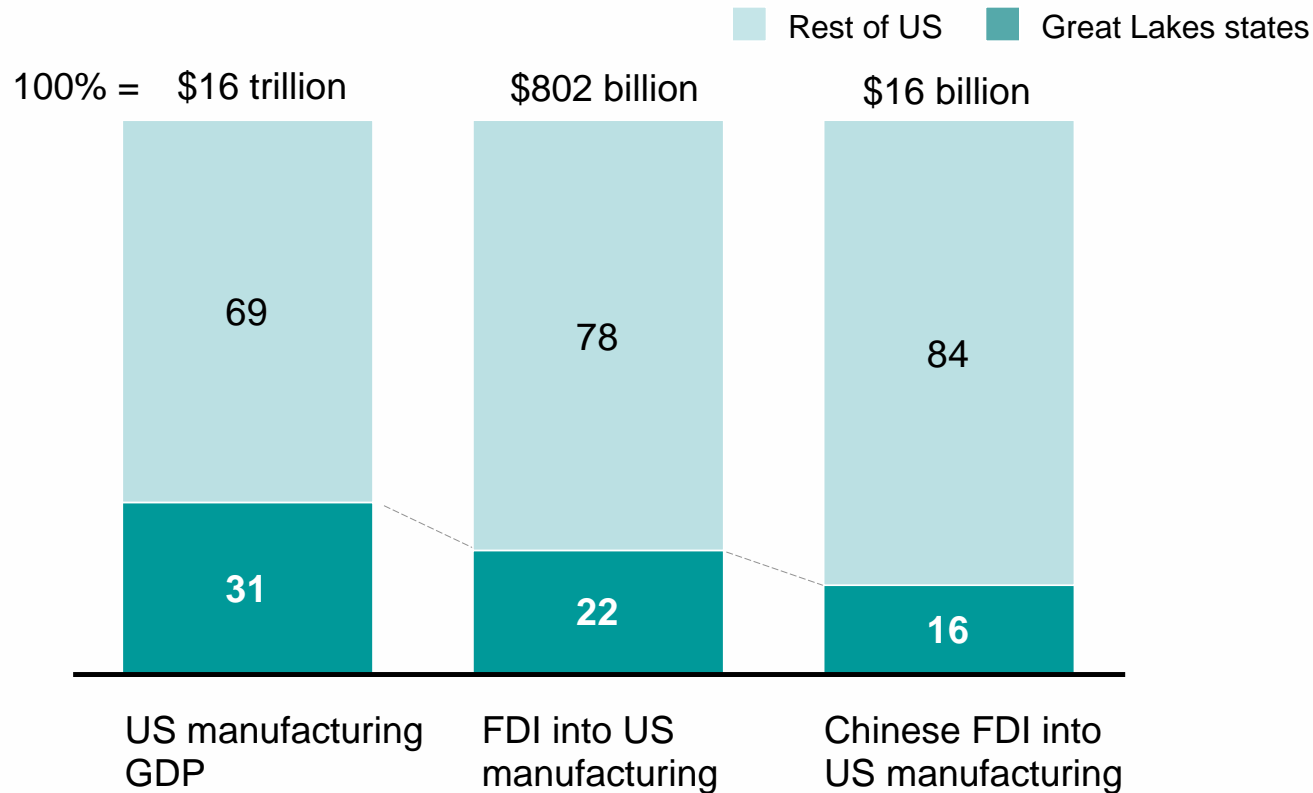


SOURCE: United Nations Conference on Trade and Development; Bureau of Economic Analysis

# Region punches below its weight in Chinese FDI

## Great Lakes share of manufacturing, sum 2003-12

Percent



SOURCE: Bureau of Economic Analysis; Dealogic; FDI Markets

# SMEs play important role in regional manufacturing

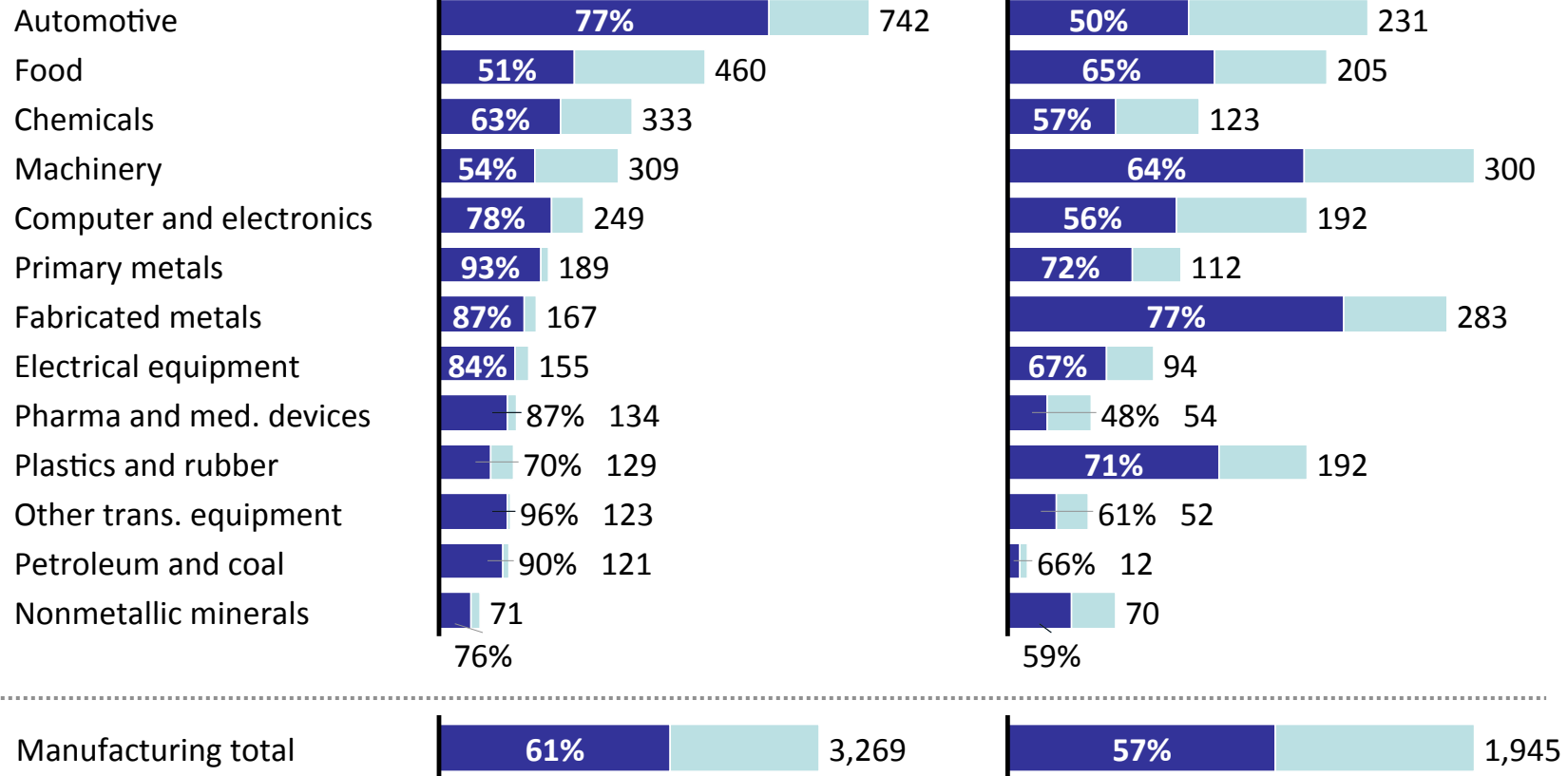
■ SMEs    ■ Large enterprises

## SMEs in the Great Lakes manufacturing ecosystem

### Sector

### Sales, USD billions

### Jobs, Thousands

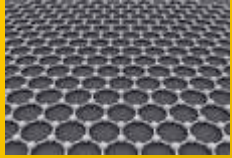


1 SMEs are enterprises with 500 or fewer employees; the region hosts a total of 9,052.

SOURCE: Market Insights database

# Manufacturing disrupted

New technologies that will change manufacturing value chains and processes



## Advanced materials

- Nanotech
- Biologics
- Lightweight materials



## Product design

- Internet of things
- Embedded sensors
- Customization



## Production processes

- Advanced robotics
- Additive manufacturing
- Green manufacturing



## Digital manufacturing

- Modeling and simulation
- Advanced analytics
- Track and trace



## Business models

- Frugal innovation
- Circular economy
- New service models

To capture the benefits of these changes, companies will invest in three broad areas

## Basic R&D

- They will conduct basic R&D to develop new technologies and new machines and processes as support

## Deployment testing

- They will create and test new machines and production processes to support new modes of production and ways of doing business

## New plants

- They will construct new facilities and retool old ones to produce new products or support new processes



# Factors propelling Chinese outbound investment



Increasing input prices at home	<ul style="list-style-type: none"><li>▪ Wages are rising to give greater share of national income to households</li><li>▪ Property costs are rising, causing a potential property bubble</li><li>▪ Regulatory compliance costs have increased</li><li>▪ Capital costs are rising as interest rates increase</li></ul>
Domestic factors encouraging FDI	<ul style="list-style-type: none"><li>▪ “Going out” campaign: Since 2000, local and central officials have encouraged growth of transnational corporations</li><li>▪ The 12th FYP uses policy and financial incentives to encourage OFDI, aiming to gain know-how abroad to build domestic capabilities</li><li>▪ Continued appreciation of RMB has raised purchasing power abroad</li><li>▪ With nearly \$4 trillion in foreign exchange reserves, OFDI will help balance the current account</li></ul>
Stability abroad and uncertainty at home	<ul style="list-style-type: none"><li>▪ Overinvestment has made high-quality, high-return investments scarcer</li><li>▪ Higher inflation has increased economic uncertainty</li><li>▪ Recent purges and the political transformation led by Xi Jinping has increased political uncertainty</li><li>▪ Some investors want to live in US with their families to attend American universities and obtain visas.</li><li>▪ Concerns about food safety, air quality, etc., encourage some investors to leave China, at least temporarily</li></ul>

SOURCE: Rhodium Group



# 12th FYP identifies new strategic emerging industries

Moving up the value chain	New materials	<ul style="list-style-type: none"><li>▪ Catch up with global leaders in R&amp;D, production, and utilization of sophisticated, high-quality, non-substitutable industrial materials</li></ul>
	Next generation IT	<ul style="list-style-type: none"><li>▪ Catch up with global leaders in technology</li><li>▪ Build capacity and networks for all major new generation IT</li></ul>
	Biotech	<ul style="list-style-type: none"><li>▪ Build industrial clusters in biological engineering</li><li>▪ Develop platforms for research and early application; support biotech labs</li></ul>
	Advanced equipment manufacturing	<ul style="list-style-type: none"><li>▪ Continue to advance technology in aircraft and aerospace</li><li>▪ Upgrade technological capacity to produce high-quality equipment for machinery making, high-speed rail, and urban transportation</li></ul>
Sustainability	Energy-efficient & environmental tech.	<ul style="list-style-type: none"><li>▪ Establish pilot projects to test and improve economically feasible of energy-efficient technologies</li></ul>
	New energy	<ul style="list-style-type: none"><li>▪ Increase capacity to produce equipment for nuclear energy, solar and wind power, and other new energy</li></ul>
	New energy vehicles	<ul style="list-style-type: none"><li>▪ Continue to produce and use hybrid and pure battery powered vehicles</li></ul>

SOURCE: National Development and Reform Commission report (March 5, 2011); KPMG

# “Made in China 2025” and Goose Island





