# Indiana as a Global Trading Partner with the EU and Other World Regions

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#### Overview

- 1. Introduction to Indiana's Economy
- 2. Export Analysis
- 3. FDI Analysis
- 4. Comparative Analysis
- 5. Conclusions

#### Key Themes

- Supply Chain Integration
- Logistics and Location
- Life Sciences Cluster
- FDI Attraction

#### Indiana's Economy: Clusters

Cluster	Commodity	
Life Sciences	<ul> <li>Pharmaceutical Products</li> <li>Organic Chemicals</li> <li>Optic, Medical, and Surgical Instruments</li> </ul>	Lil
Advanced Manufacturing	<ul> <li>Vehicles and Parts</li> <li>Industrial Machinery</li> <li>Electrical Machinery</li> <li>Aircraft, Spacecraft, and Parts</li> </ul>	COOK
Raw Materials	<ul> <li>Nickel and Articles Thereof</li> <li>Plastics and Articles Thereof</li> <li>Iron and Steel</li> <li>Miscellaneous Chemicals</li> </ul>	MEDICA P L A S T I C C O R P O R A

### Indiana's Economy: the Numbers

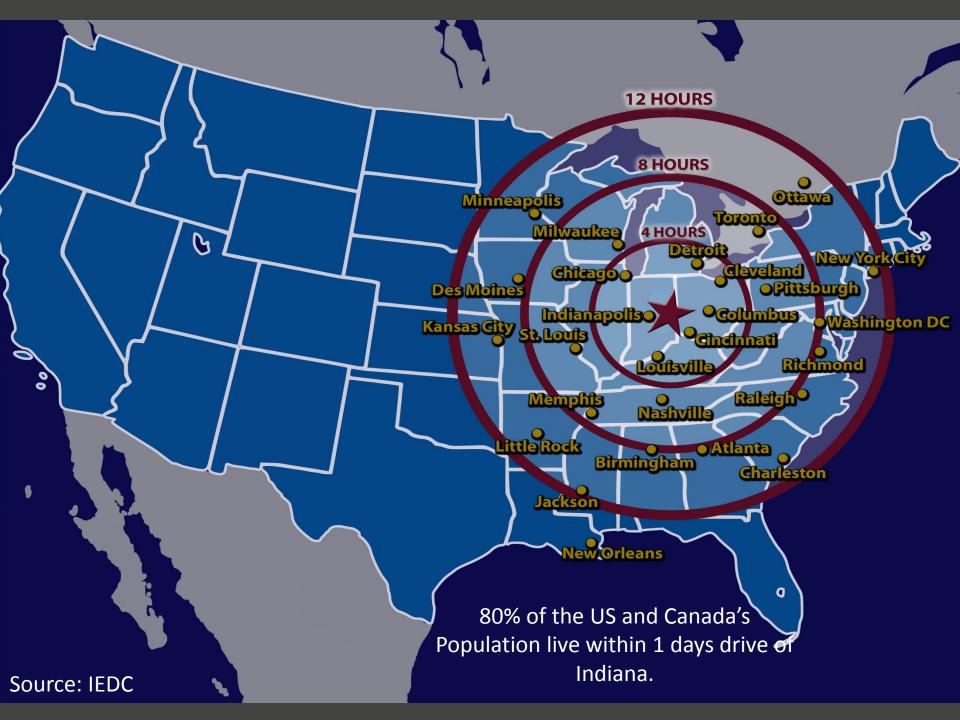
- \$32.2 Billion in exports in 2011
- 27.7% of Indiana workers depend on exports

Industry	Value (2011)
Transportation Equipment	\$9.5 Billion
Chemicals	\$7.9 Billion
Machinery	\$4.1 Billion
Primary Metals	\$1.9 Billion
Misc. Manufactured Products	\$1.8 Billion

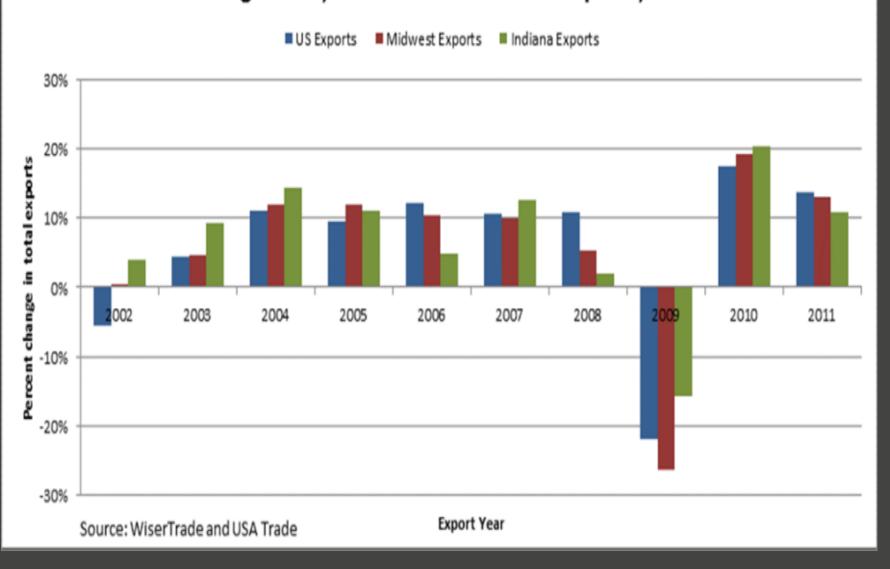
## Indiana's Exports: Commodity

Ranking	Industry	Ranking	Industry
1.	Vehicles and Parts	6.	Organic Chemicals
2.	Industrial Machinery	7.	Plastics and Articles Thereof
3.	Pharmaceutical Products	8.	Iron and Steel
4.	Optic, Medical, or Surgical Instruments	9.	Aircraft, Spacecraft, and Parts
5.	Electric Machinery	10.	Miscellaneous Chemicals

Overall to World, Year 2011



#### Annual Change in US, Midwest and Indiana Exports, 2002 - 2011



### Indiana's Exports: Destination

Ranking	Country	Share	Ranking	Country	Share
1.	Canada	36%	6.	China	4%
2.	Mexico	10%	7.	United Kingdom	3%
3.	Germany	6%	8.	Spain	2%
4.	Japan	4%	9.	Brazil	2%
5.	France	4%	10.	Afghanistan	2%

Source: WISERTrade and USATrade

#### Export Analysis

The EU		
1.Pharmaceutical Products	37%	\$3 billion
2. Organic Chemicals	13%	\$1 billion
3. Industrial Machinery	13%	\$1 billion
4. Optic, Medical, and Surgical Instruments	11%	\$ 900 million
5. Aircraft, Spacecraft, and Parts	4.5%	\$ 350 million

The Top 5 Non- EU Trading Partners				
1.Vehicles and Parts	24%	\$6.5 billion		
2. Industrial Machinery	16%	\$4 billion		
3. Pharmaceutical Products	15%	\$4 billion		
4. Optic, Medical, and Surgical Instruments	7%	\$ 1.8 billion		
5. Electric Machinery	6%	\$ 1.2 billion		

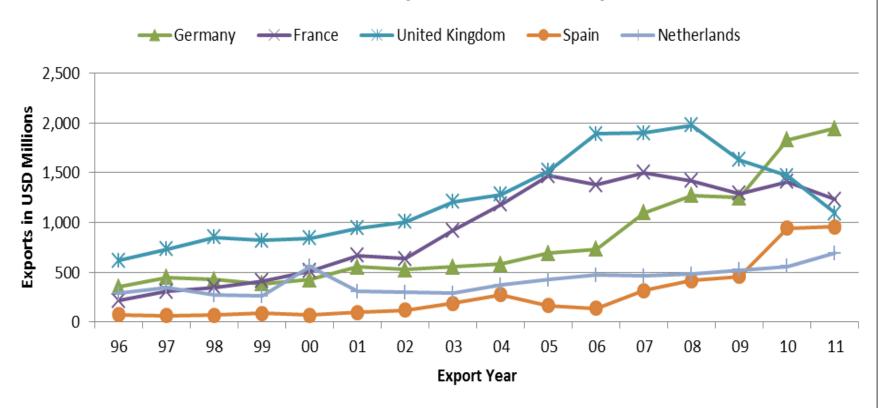
Source: WISERTrade and USATrade

#### Barriers to Trade: European Union

	Positives (Facilitators)	Negatives (Barriers)
European Union Overall	<ul> <li>English language</li> <li>Bilateral trade forums</li> </ul>	<ul> <li>CE Mark</li> <li>Specific regulations:         <ul> <li>Accreditation rules</li> <li>CLP</li> <li>REACH</li> <li>RoHS</li> </ul> </li> <li>Automotive industry standards</li> </ul>
Country Specific	Same as EU overall	<ul> <li>Health Technology Assessments (HTAs)</li> <li>Government procurement policies</li> </ul>

## Export Analysis: Top 5 EU Value

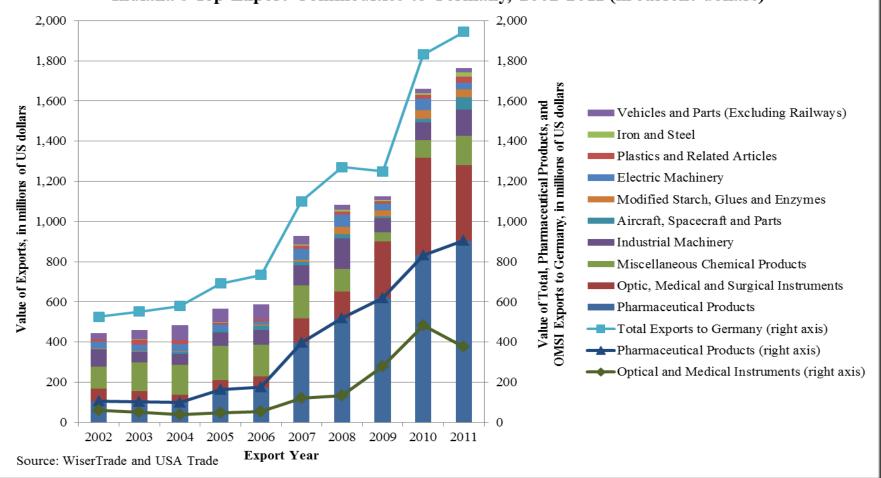
#### Indiana Exports to Top 5 European Union Countries 1996-2011 (Current Dollars)



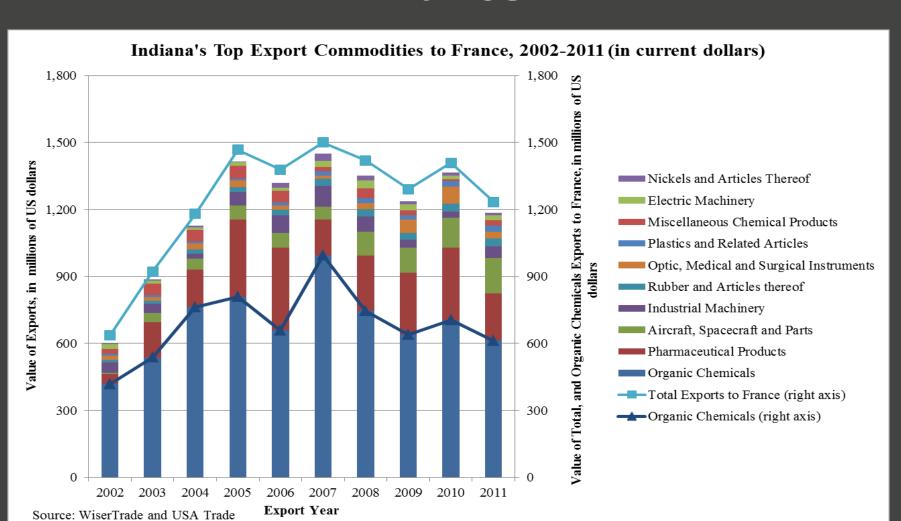
Source: WISERTrade and USATrade

#### Export Analysis: Germany

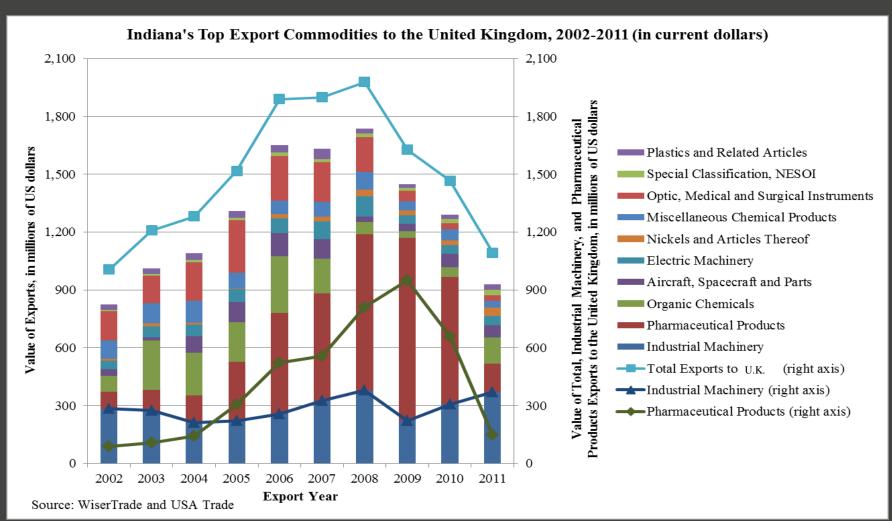




#### Export Analysis: France

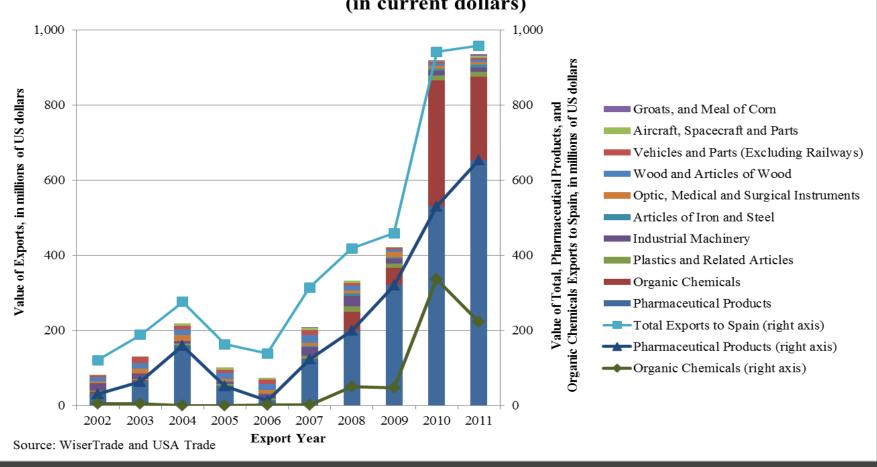


## Export Analysis: United Kingdom



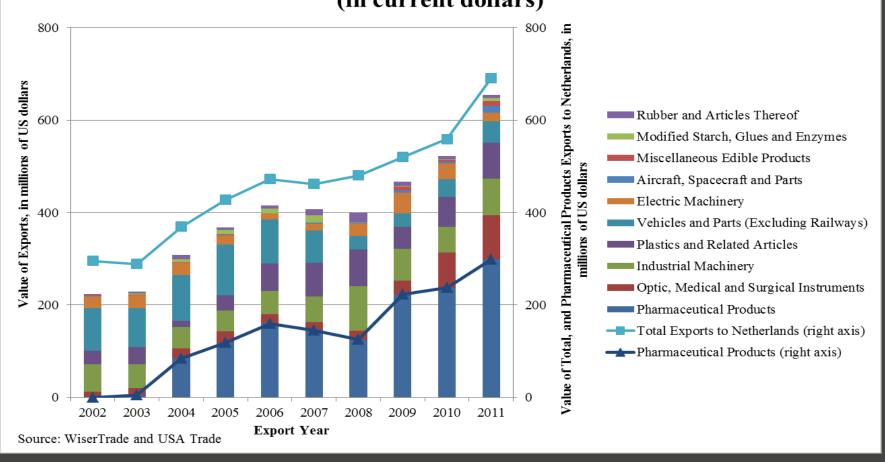
## Export Analysis: Spain

#### Indiana's Top Export Commodities to Spain, 2002-2011 (in current dollars)



#### Export Analysis: the Netherlands

#### Indiana's Top Export Commodities to Netherlands, 2002-2011 (in current dollars)



## Barriers to Trade: Top 5 Non-EU Trading Partners

Ease of Trade Ranking	Positives (Facilitators)	Negatives (Barriers)
1. Canada	<ul><li>NAFTA</li><li>Location</li></ul>	
2. Mexico	<ul><li>NAFTA</li><li>Location</li><li>Long-term growth</li></ul>	<ul><li>Violence</li><li>Testing Requirements</li><li>Inconsistencies</li></ul>
3. Japan	<ul><li>Relationship</li><li>Automotive Sector</li></ul>	Stagnation
4. China	<ul><li> Growth</li><li> Demand</li><li> Standardization</li></ul>	<ul><li>CCC Mark</li><li>Intellectual Property Rights</li></ul>
5. Brazil	Growth	<ul><li>Tariffs</li><li>Volatility</li></ul>

### Export Analysis: NAFTA

#### Canada

- High Ease of Trade
- Top consumer of Indiana's Vehicles and Parts and Industrial Machinery Exports
  - Over \$5billion and \$1.4billion respectively

#### Mexico

- Ease of trade diminished by violence and testing requirements
  - Organic Chemicals and Pharmaceutical Products
- Only consumer to show growth in Electric
   Machinery exports

### Export Analysis: Canada

#### Top Ten Indiana Export Industries to Canada, 2002-2011, in Millions of Current Dollars



■ Aircraft, Spacecraft, And Parts Thereof

Iron And Steel

Plastics And Articles Thereof

Organic Chemicals

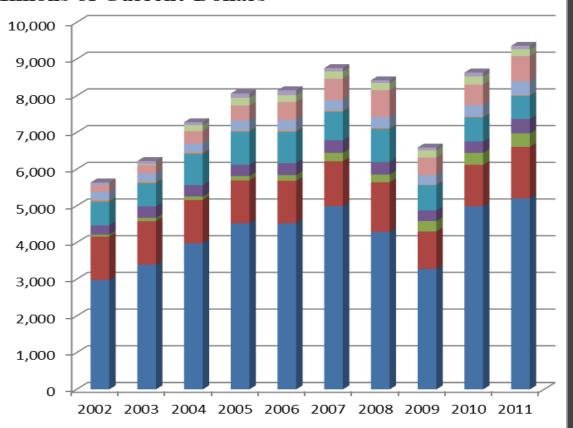
Electric Machinery

Optical and Medical instruments)

■ Pharmaceutical Products

■ Industrial machinery

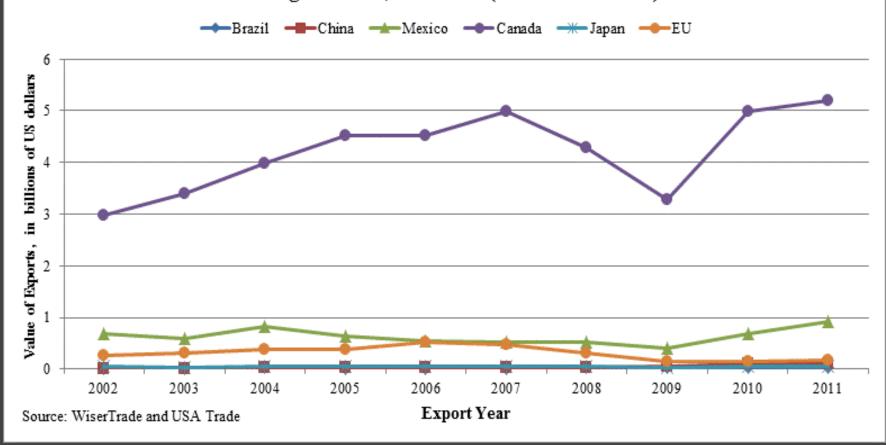
■ Vehicles and Parts (exlusive railway)



Source: WISERTrade and USATrade

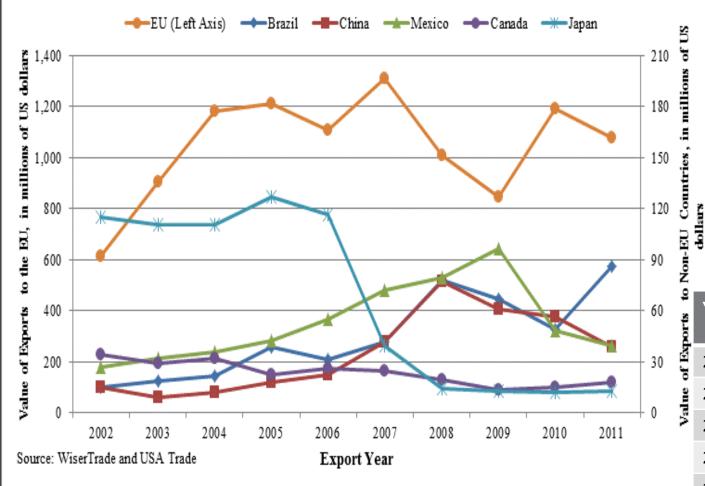
### Export Analysis: Canada

Vehicles and Parts Exports from Indiana to the EU and Top 5 Non-EU Trading Partners, 2002-2011 (in current dollars)



### Export Analysis: Mexico

#### Organic Chemicals Exports from Indiana to the EU and Top 5 Non-EU Trading Partners, 2002-2011 (in current dollars)



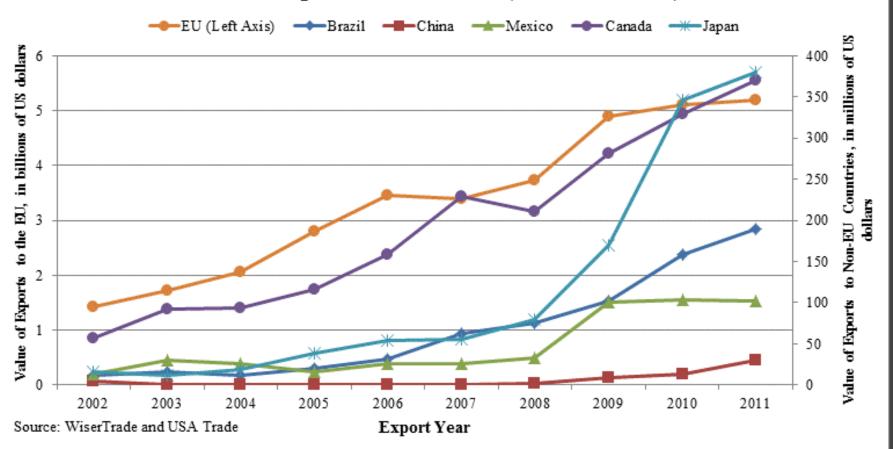
Year	Value (millions)	Growth Rate
2007	\$72	31%
2008	\$79	10%
2009	\$96	22%
2010	\$49	-49%
2011	\$40	-18%

## Export Analysis: Japan

- Historical Automotive Industry
- Impressive growth in the Life Sciences
   Cluster
  - Over 50% per year since 2007 in pharmaceuticals
- Aging Population

## Export Analysis: Japan

Pharmaceutical Products Exports from Indiana to the EU and Top 5 Non-EU Trading Partners, 2002-2011 (in current dollars)

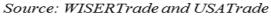


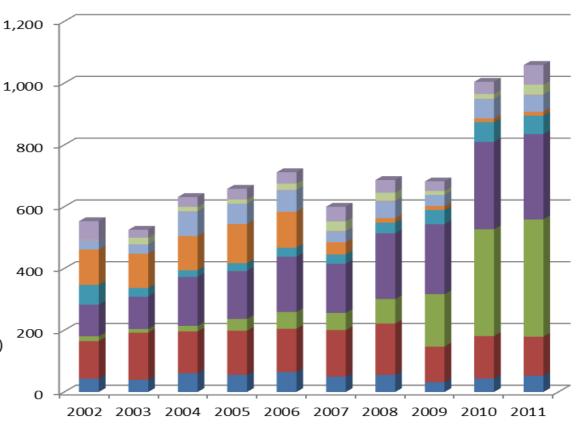
## Export Analysis: Japan

#### Top Ten Indiana Export Industries to Japan, 2002-2011, in Millions of Current Dollars



- Aircraft, Spacecraft, And Parts Thereof
- Iron And Steel
- Plastics And Articles Thereof
- Organic Chemicals
- Electric Machinery
- Optical and Medical instruments)
- Pharmaceutical Products
- Industrial machinery
- Vehicles and Parts (exlusive railway)





## Export Analysis: Emerging Economies

#### China

- High growth potential
  - Averaged 99% growth per year in Pharmaceuticals
  - Steady growth in Optic,
     Medical, and Surgical
     Instruments
  - Showed very few signs of slow down during the recession
- Diverse export distribution

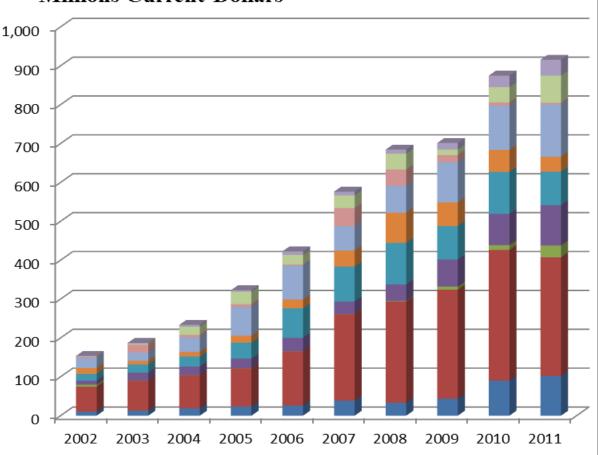
#### **Brazil**

- Protectionist-causing a different export distribution
- Indiana's advantage industries, Vehicles and Parts and Industrial Machinery hold an 18-35% tariff
- Top export destination for Aircraft, Spacecraft, and Parts
  - 13% of overall exports with over \$100million in 2011

### Export Analysis: China

#### Top Ten Indiana Export Industries to China, 2002-2011, in Millions Current Dollars

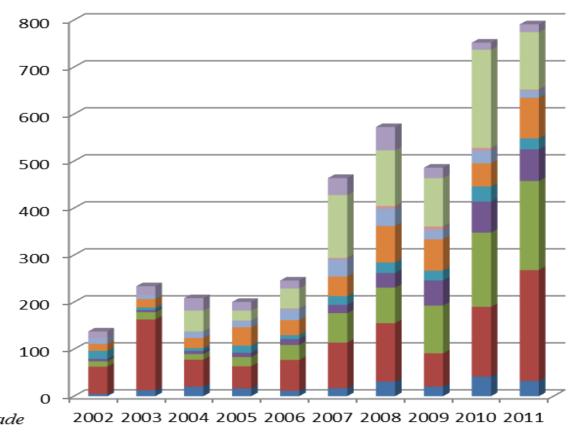




### Export Analysis: Brazil

#### Top Ten Indiana Export Industries to Brazil, 2002-2011, in Millions of Current Dollars

- Miscellaneous Chemical Products
- Aircraft, Spacecraft, And Parts Thereof
- Iron And Steel
- Plastics And Articles Thereof
- Organic Chemicals
- Electric Machinery
- Optical and Medical instruments)
- Pharmaceutical Products
- Industrial machinery
- Vehicles and Parts (exlusive railway)



Source: WISERTrade and USATrade

## Tariff Schedule: Brazil

Item	CET rate
Textiles	Usually 35%
Automobiles and parts	Usually 35%
Motorcycles and parts	Usually 20%
Motors	Usually 14-18%
Construction equipment and vehicles	Usually 0%
Aircraft and parts	Usually 0%
Cereals in grain	Often 10%
Swine products	From 2 – 10%
Pharmaceuticals	From 0 – 14%
Arms and defense equipment	Usually 20%
Metals	Usually between 10-16%
Agricultural Machines	Usually 14-18%
General Machines	Usually 14%
Tools	Usually 16-18%
Chemicals	From 2-10%
Plastics	Usually 14%, sometimes 2%

#### Foreign Direct Investment: Overview

- Crossroads of America
- Central Infrastructure
- Fiscally Responsible
  - Balanced budget
  - AAA credit rating
- Incentives for business and investment
- Community College Network

#### Foreign Direct Investment: Tax Incentives

Job Creation & Improving the Standards of Living for Indiana Residents	Capital Investment	Research & Development
Economic Development for a     Growing Economy	• Industrial Recovery	Research and     Development
Hoosier Business Investment	<ul> <li>Headquarters Relocation</li> <li>Venture Capital Investment</li> </ul>	Patent Income     Exemption

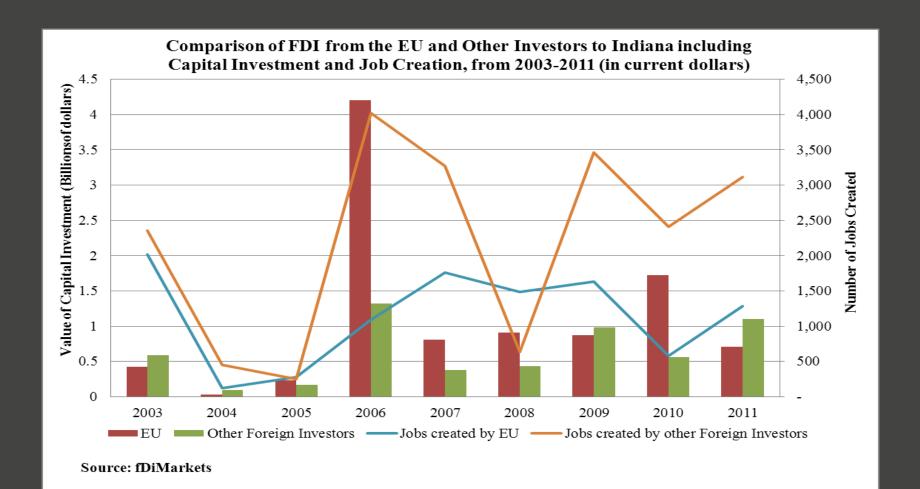
### Foreign Direct Investment: Values

Top 10 Sources for FDI to Indiana, from 2003-2011			
Country	<b>Total Investment (in millions)</b>	<b>Total Jobs</b>	
UK	\$6,336.67	2745	
Japan	\$3,413.96	11708	
Germany	\$1,329.85	4363	
Switzerland	\$1,019.00	2429	
Canada	\$867.88	3137	
Portugal	\$616.00	39	
France	\$567.00	475	
Luxembourg	\$348.00	269	
Spain	\$157.90	217	
Italy	\$149.48	873	
Source: fDiMarkets			

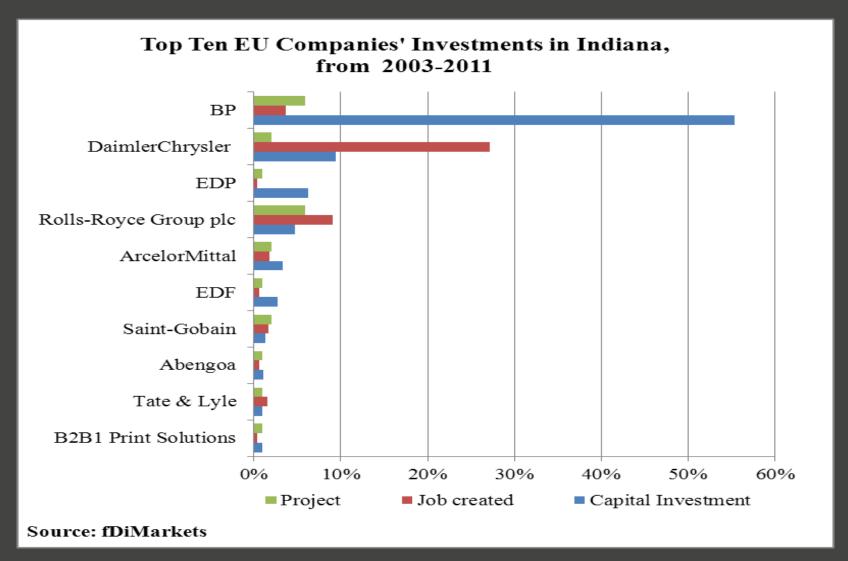
### Foreign Direct Investment: European Union

- Largest Foreign Investor
  - **-64**%
- High Capital
  - Energy
- High Jobs
  - Manufacturing
- Few Firms, large single investments
- Germany and the UK Prominent Investors

## Foreign Direct Investment: EU Capital and Job Creation



## Foreign Direct Investment: EU's Top Companies



## Foreign Direct Investment: Top 5 Non-EU Trading Partners

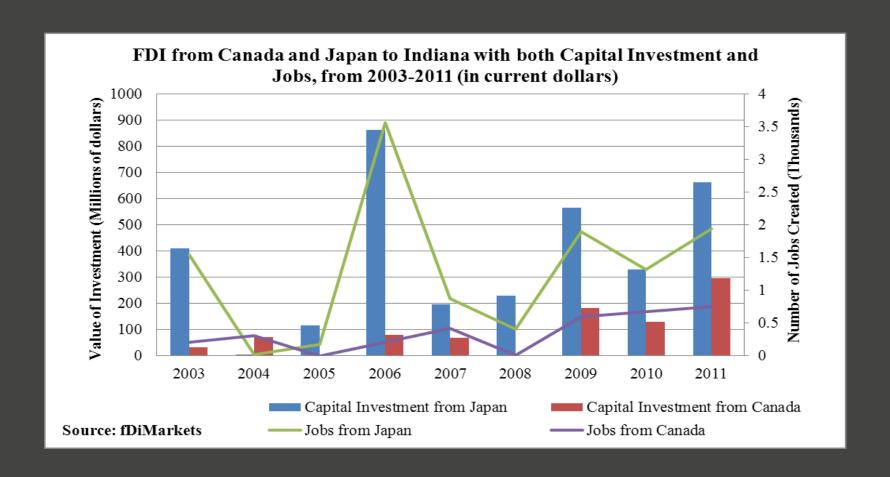
#### Canada

- Diversified Investments
- Under-investment in Indiana
  - #1 US investor overall
  - #5 Indiana investor overall
- Leading industries
  - Transportation Equipment
  - Consumer Goods
  - Food, Beverages and Tobacco

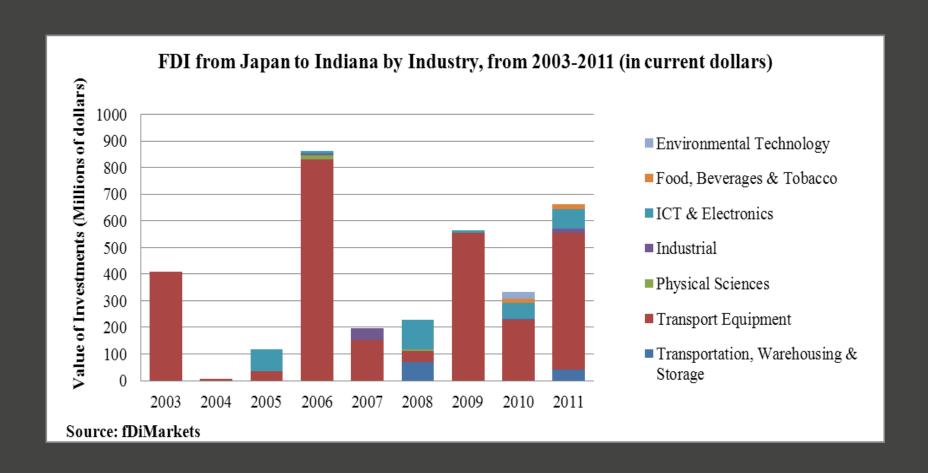
#### Japan

- Historical Relationship
  - 1980s Gov. Robert Orr
- Leading industries
  - Transportation Equipment
  - 82% of Japan's FDI to IN
     2003-2011
- Consistent investment
  - Honda and Toyota

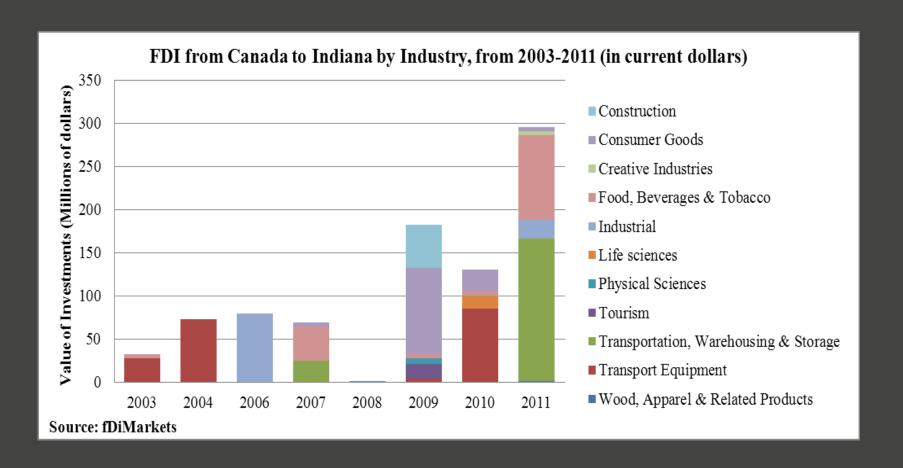
## Foreign Direct Investment: Canada and Japan



## Foreign Direct Investment: Japan



### Foreign Direct Investment: Canada



#### Comparative Analysis: Life Sciences

- Pharmaceutical Products:
  - Growth to Japan and EU
    - High growth rates explained by consumer demand, but also due to supply chains
  - Moderate growth to other Top 5 Non-EU Trading
     Partners
    - Differentiated product demand
  - Sector vulnerable to regulatory barriers
    - Heath Technology Assessments (HTAs)
    - Unification of HTAs across EU has potential to encourage or suppress trade

## Comparative Analysis: Advanced Manufacturing

- Vehicles and Parts
  - Dominated by Canada
  - Low exports to EU
  - Trend likely to continue
  - Component parts to Top 5 Non-EU Trading
     Partners
- Brazil's protectionism
  - Low exports of Vehicles and Parts
  - High exports of Aircraft, Spacecraft, and Parts

## Comparative Analysis: Foreign Direct Investment

- Good time for investment into IN:
  - Dollar weaker than Euro (1EUR =1.33 USD)
  - Credit rating (AAA)
  - Corporate tax rate  $(8.5\% \rightarrow 6.5\%)$
- Relationship building
  - Example of Gov. Robert Orr and Japan

#### **Summary Points**

- Indiana has successfully integrated into the North America manufacturing supply chains
- Developed a thriving Life Sciences Cluster that has allowed Indiana to become globally competitive
- Indiana should continue to build relationships to attract further FDI
- Indiana and the EU have a strong trade relationship that shows trends for growth particularly in the Life Sciences Cluster

# ON BEHALF OF THE V600 CLASS THANK YOU FOR LISTENING

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