ECONOMIC OUTLOOK

Weathering the Storm

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Overview

• U.S. economic trends
• Indiana economic trends
• Global outlook
• U.S. economic outlook
• Indiana’s outlook
• Q&A
Economy Contracting

U.S. GDP growth slowing for 5th straight year

-Economy hasn’t met its long-run potential since early 2006

-Q3 was essentially flat, but consumption of goods way down

-Dramatic drop in Q4 of 2008 and Q1 of 2009
Severe Economic Downturn

Indiana hit hard

2009 Q1, % Change from Peak

GDP

Jobs

Retail Sales

Manufacturing Output

Home Prices

US

Indiana

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Severe Economic Downturn

Downturn broadly based across industries

Percent of Industries Reducing Payrolls from Previous Quarter

Economic Activity Well Below Trend

Chiago Fed National Economic Activity Index

Above Trend

Below Trend

1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009
Deteriorating Labor Market: U.S.

- From job creation to job losses

Unemployment rising at an accelerating pace
Deteriorating Labor Market: Indiana

- It may be a long tunnel
Will the Automakers Survive?

• Auto sales continue to disappoint
• Auto sales may fall to under 10 million units a year
  o Longest slide in 17 years
• Even Honda lost money Jan-Mar 09 (¥186B)
• Bankruptcy for GM and Chrysler?
• If all the D3 closed, immediate job loss of about 13,000 in Indiana
• Job loss multiplier could be as high as 5
• Assumes that foreign automakers don’t fill the vacuum
How Low Will Stocks Go?

- In February, stocks had lost about 50% of their value since peaking in October 2008
- Reduced wealth affects consumption

S&P 500 Index:
- Last 5 years
- Volatility way up
How Low Will Stocks Go?

- Comparing S&P 500
- December 2007 versus July 1929
Consumers Are Skittish, Just Less So

- Consumer Confidence Index fell in early 2009 to an historical low
- Dramatic leap up in last two months

- The Index now stands at 54.9 (1985=100), up from 25.3 in February
- Consumer optimism about their short-term future increased
- Less negative about employment outlook
The Fed Prints Money

Federal Reserve's Balance Sheet, in billions of dollars

- Other
- Central Bank Liquidity Swaps
- Commercial Paper Funding Facility
- Term Auction Credit
- Securities Held Outright

May-08 | Jul-08 | Sep-08 | Nov-08 | Jan-09 | Mar-09 | May-09

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Business is Contracting

Institute of Supply Management survey indicates that business is contracting....
The Banking System Stabilizes

Difference Between Prime Rate and 3-Month Treasury Bill Yield (basis points)

- Bear hedge funds liquidate
- Bear Stearns collapses
- Lehman fails
Credit Conditions Ease...somewhat

Corporate Bond Premium Over 10-Year Treasuries

- BAA Rated Bonds

Years:

Premium Over Treasuries (basis points):
0, 100, 200, 300, 400, 500, 600

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Midwest Economy

Chicago Fed Indexes of Midwest Industrial Production
2002=100
Midwest Economy, continued

Chicago Fed Indexes of Midwest Industrial Production
2002 = 100

Midwest Mfg Index
US Mfg Industrial Production
Midwest Economy, continued

Since 2001, exports have increased by 8 percent at an average annual rate.
Indiana’s Economy

- Overall economic output has been almost **flat** for past 3 years
  - Near bottom of states in growth since 2000
- Manufacturing still the largest contributor to Indiana GDP—but shrinking
- Some sectors still growing—health care
- Housing price decline not as bad as U.S.
- Outlook for 2009: finding the bottom
Record Indiana Exports Last Year

• Hoosier exports up 14% to $26 billion in 2007
• Exports in 2008—small increase
Indiana Housing: Construction in Decline

Change in New Housing Permits Registration

Has Residential Construction Found the Bottom?

Percent Change

-15
-10
-5
0
5
10

Jan-00 Jan-01 Jan-02 Jan-03 Jan-04 Jan-05 Jan-06 Jan-07 Jan-08 Jan-09

Indiana
Fort Wayne
Evansville
Indianapolis-Carmel
Indiana Housing

House Price Indexes
2000=100

Price declines are not as severe as the nation

U.S.    Indiana
U.S. Housing: As prices fall... ...delinquencies rise
Indiana Manufacturing Jobs

Change in Mfg. Employment, in thousands

Total Mfg. Employment, in thousands

-20.0
-15.0
-10.0
-5.0
0.0
5.0
10.0
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009

Change in Mfg employment (left axis) Mfg employment (right axis)
Indiana Vulnerable to Demise of D-3

Employment, Motor Vehicle Parts Manufacturing, 2008 (Thousands)

- Michigan
- Ohio
- Indiana
- Tennessee
- Kentucky
- Illinois
- California
- Alabama
- Texas
- Missouri

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Indiana Vulnerable to Demise of D-3

Employment, Motor Vehicle Parts Manufacturing, 2008 (Thousands)

- Michigan
- Ohio
- Indiana
- Tennessee
- Kentucky
- Illinois
- California
- Alabama
- Texas
- Missouri

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Changing Gears in Manufacturing

• Output in chemical manufacturing—which includes pharmaceuticals—surpassed autos and auto parts

Indiana Chemical and Motor Vehicle Manufacturing
Current Dollar Output

GDP in Billions

Motor Vehicles and Parts
Chemicals
Global Economic Outlook

Source: IMF
Trouble in the Advanced Economies

- GDP in advanced economies will fall 4.3% (OECD)
- Global growth has collapsed
- Growth will slow to a crawl in emerging economies
- China’s growth will go from 12% in 2007 to around 6% in 2009 (IMF)
- China steel production fell 17% in October

<table>
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<th>Global Growth Projections</th>
<th>2009</th>
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<td>World</td>
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<td>Euro Area</td>
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<td>Japan</td>
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<td>Canada</td>
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</tbody>
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Table source: OECD, March 2000
Global Downturn and Commodity Prices

Global Commodity Price Indexes
1995 = 100

- All Commodities
- Non-Fuel
- Industrial Inputs
- Agricultural Raw Materials
- Metals
- Fuel & Energy

Source: International Monetary Fund, May 2009
Global Downturn and Commodity Prices

Moderating commodity prices will contain inflation

Commodity exporters will be the most affected

Lowers growth prospects for emerging economies

Source: International Monetary Fund, May 2009
The Midwest exported $47 billion to the Pacific Rim Countries in 2007.

Exports to China has increased at nearly 24% a year (a.a.r.) since 2001—now 23% of exports to region.

Exports to all Pacific Rim countries have increased about 10% a year since 2001.
Export Growth at Risk? European Union

- The Midwest exported $54 billion to the EU27 countries in 2007

Exports to the EU27 have grown at over 8% a year (a.a.r.) since 2001
Indiana Export Growth at Risk?

- Indiana exports to the EU27 totaled $6.8 billion in 2007, growing almost 12% a year since 2001
- Exports to the Pacific Rim increased 8.6% a year since 2001
- Exports to China have increased over 22% a year since 2001

![Graph showing Indiana Exports to the European Union and Pacific Rim](chart.png)
What is the Forecast for 2009 & 2010?

- **Fall of 2008**—Moderate recession scenario
  - Assumed credit markets thaw quickly—didn’t happen
  - Emerging economies maintained growth—they’re cooling
  - No drop off in exports—world exports expected to drop by double digits (IMF)
  - WARNING: exports often lead recoveries for demand-induced recessions—bad news for export economies

- **Severe recession** scenario
  - Liquidity trap—Fed can’t lower interest rates below zero
  - Where will consumers get their purchasing power?
    - Homes no longer ATMs
    - Negative wealth effect of low stock portfolios
    - Restoring order to the balance sheet—paying off debt
Recession Forecast: IMF—Long & Severe

Financial Recession

Plus

Global Recession

Means

Recovery is

⇒ Longer

⇒ Weaker

⇒ Growth won’t match potential until 2010-11

Source: IMF
Severe-Recession Forecast: U.S.

- Output falls even further through 2009
- Total GDP decline (peak-to-trough) $\approx 3\%$
- Recession not over until early 2010
- Unemployment hits almost 10% in early 2010
- Employment drops throughout 2009
Severe-Recession Forecast

Just how bad depends whom you talk to—and when
Severe-Recession Forecast

Moody's Economy.com versus CEMR Forecasts

Moody's GDP Growth
CEMR GDP Growth
Moody's Unemployment
CEMR Unemployment
Severe-Recession Forecast

U.S. Employment 2008-2011

[Graph showing employment changes and unemployment rates from 2008:Q1 to 2011:Q1]
Personal Finances Continue to Deteriorate

Personal Bankruptcies: Change from previous year

Source: Moodys.com
Early 2010: Employment Finds the Bottom

MSA Employment, Percent Change

- Indianapolis
- Evansville
- Fort Wayne
- Minneapolis
- Chicago
- United States
- Cincinnati
- Columbus
- Cleveland
- Detroit

Source: Moodys.com
Indiana Employment Forecast

• Next 4 quarters: down about 110K more jobs
• Total job loss peak-to-trough: about 250K jobs
• Manufacturing shrinks about 12.5% over the next 4 quarters—down 26K jobs
• Transportation Equip Mfg falls 15%—down 6K jobs
• Anemic growth through 2011
  o Assumes no industry specific disruptions or bankruptcies
  o Combined forecast—IMF, Economy.com, CEMR
Indiana Employment Outlook

Average Annual Growth Rate

- Indiana
- Rest of State
- Columbus
- Kokomo
- Muncie
- Anderson
- Terre Haute
- Bloomington
- Lafayette
- Elkhart-Goshen
- Louisville
- South Bend
- Evansville
- Fort Wayne
- Gary
- Indianapolis

2007-2011
2002-2006

Graph showing the average annual growth rate for various cities and regions in Indiana from 2007 to 2011 and from 2002 to 2006.