Macro-Industrial Working Group

Macro section

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Macroeconomic Analysis Team: Kay Smith, Team Leader, Elizabeth Sendich, Russ Tarver, and Vipin Aurora
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WORKING GROUP PRESENTATION FOR DISCUSSION PURPOSES
DO NOT QUOTE OR CITE AS RESULTS ARE SUBJECT TO CHANGE
Overview

• The overall macroeconomic outlook
• The detailed industrial production outlook
• Summary employment and commercial floor space outlook
• Concluding remarks
Macroeconomic Explanations for Industrial Output Growth

- Exports grow faster than imports so more of industrial output satisfied domestic demand

- Compared to AEO2012, imports grow more slowly than exports. In the AEO2012, imports grow by 4.3 percent (2012 to 2040), while exports grow by 5.7 percent. For the preliminary AEO2013, imports grow by 3.9 percent while exports grow by 5.5 percent. So compared to the AEO2012, this year more of the industrial output again satisfies domestic demand.

- More detailed inclusion of increased unconventional natural gas impacts on other industries, primarily concentrated in bulk chemicals, primary metals and metal based durables.
National Energy Modeling System (NEMS)  
Macroeconomic Activity Module (MAM)  

NEMS 

NEMS Macro Baseline Variables  
NEMS Energy Variables  
NEMS Modules  

MAM 

Macroeconomic Submodule runs the New Scenario using new Energy Inputs from NEMS  
Industry Submodule runs the New Scenario of values of shipments by industry sectors  
Employment Submodule runs the New Scenario of employment by sector  
Regional Submodule and Commercial Floorspace Submodule  
MAM applies the ratios of the New Scenario values over the Baseline values onto the Macro Baseline variables to obtain solution  

MAM variables for use as input to NEMS
Preliminary prices

Price Index (1982=1)

Average crude oil price ($ per barrel)

Source: ref2012/d020112c and ref2013/d090612a
U.S. GDP growth rates

Annual % change

Source: BEA and ref2013/d090612a
U.S. GDP comparison with other forecasts

Annual % change

Sources: ref2012/d020112c, ref2013/d090612a, CBO, IHS-GI, Blue Chip, OASDI, OMB, INFORUM
Macroeconomic indicators

Annual growth rate (per cent)

- Real GDP: 2.53% (AEO2013), 2.63% (AEO2012), 2.63% (AEO2011)
- Labor Force: 0.74% (AEO2013), 0.75% (AEO2012), 0.71% (AEO2011)
- Output per Hour in Nonfarm Business: 1.90% (AEO2013), 1.99% (AEO2012), 2.00% (AEO2011)

Source: ref2013/d090612a
Components of GDP

Growth rate within period (% per year)

- Real GDP
- Personal Consumption
- Investment
- Exports
- Imports
- Government

Source: ref2013/d090612a
Trade by category

Growth rate within period (% per year)

Source: ref2013/d090612a
Industrial detail
Services

Billion 2005$

Source: IHS-GI, ref2012/d020112c, and ref2013/d090612a
Industrial sector (non-service)

Source: IHS-GI, ref2012/d020112c, and ref2013/d090612a
Primary metals

Source: IHS-GI, ref2012/d020112c, and ref2013/d090612a
Bulk chemicals

Billion 2005$

Source: IHS-GI, ref2012/d020112c, and ref2013/d090612a
Billion 2005$

Source: IHS-GI, ref2012/d020112c, and ref2013/d090612a
Non-metallic minerals*

Source: IHS-GI, ref2012/d020112c, and ref2013/d090612a; * also known as stone, clay, and glass
Metal-based durables

Billion 2005$

Transportation Equipment
Computers and Electronics
Machinery
Fabricated Metals
Electrical Equipment and Appliances

Source: IHS-GI, ref2012/d020112c, and ref2013/d090612a
Employment and commercial floor space
Manufacturing employment

Millions of persons

Source: IHS-GI, ref2012/d020112c, and ref2013/d090612a
Total employment

Millions of persons

Source: IHS-GI, ref2012/d020112c, and ref2013/d090612a
Commercial floor space

Source: ref2012/d020112c and ref2013/d090612a
For more information

U.S. Energy Information Administration home page | [www.eia.gov](http://www.eia.gov)

Annual Energy Outlook | [www.eia.gov/aeo](http://www.eia.gov/aeo)

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**EIA Information Center**

InfoCtr@eia.gov

*Our average response time is within three business days.*

**Kay Smith**

kay.smith@eia.gov

(202) 586-1132

**Elizabeth Sendich**

elizabeth.sendich@eia.gov

(202) 586-7145

(202) 586-8800

24-hour automated information line about EIA and frequently asked questions.
Backup slides
Bulk chemicals details

Source: IHS-GI, ref2012/d020112c, and ref2013/d090612a
Bulk chemicals details (cont.)

Resins and Synthetic Fibers

Agricultural Chemicals

Source: IHS-GI, ref2012/d020112c, and ref2013/d090612a
Primary metals details

Iron and Steel

Aluminum

Source: IHS-GI, ref2012/d020112c, and ref2013/d090612a
Non-metallic minerals details

Glass

Cement

Source: IHS-GI, ref2012/d020112c, and ref2013/d090612a
Population and disposable income

Index (2012=1)

Population
Disposable Income
Per-Capita Disposable Income

Source: ref2013/d090612a
Housing starts

Millions of units

Source: ref2013/d090612a
Vehicle sales

Source: ref2013/d090612a
Transportation equipment sub-industries

Shipments (Billion $)

Source: Annual Survey of Manufacturing 2010, U.S. Census Bureau