Overview

I. Economic Activity

• Economic activity has improved in New York State, New York City and Puerto Rico; activity in New Jersey has held steady

II. Employment Trends

• During the past few months, the number of private-sector jobs within the District has generally increased

III. Unemployment Rate

• Unemployment rates have generally fallen throughout the District, but remain at exceptionally high levels
Note: Colored boxes represent official turning points in economic activity.

Note: The Puerto Rico composite index uses a different methodology but can be compared for the purposes of measuring trends in economic activity.
Regional Economic Activity During the Recession

Index of Coincident Economic Indicators

Note: Colored boxes represent official turning points in economic activity.

Note: The Puerto Rico composite index uses a different methodology but can be compared for the purposes of measuring trends in economic activity.

Shading indicates NBER recessions

Source: Federal Reserve Bank of New York; Puerto Rico Government Development Bank
Private-Sector Job Growth

Year-over-Year Percent Change in Private Sector Employment

Source: Bureau of Labor Statistics and Moody’s Economy.com
Regional Private-Sector Job Growth

Seasonally Adjusted, Percent Change, March to June 2010

Source: Bureau of Labor Statistics and Moody's Economy.com
Private-Sector Job Growth by Sector (U.S. & New York)

Seasonally Adjusted, Percent Change, March to June 2010

- Professional & Business Services: 0.9% (U.S.), 0.2% (NYS)
- Manufacturing: 0.7% (U.S.), 0.2% (NYS)
- Leisure & Hospitality: 0.5% (U.S.), 0.1% (NYS)
- Educational & Health Services: 0.4% (U.S.), 0.1% (NYS)
- Wholesale Trade: -0.2% (U.S.), -0.0% (NYS)
- Retail Trade: -1.7% (U.S.), -0.3% (NYS)
- Financial Activities: 0.7% (U.S.), -0.3% (NYS)
- Information: -0.5% (U.S.), -0.2% (NYS)
- Construction: 0.6% (U.S.), -0.5% (NYS)

Source: Bureau of Labor Statistics and Moody’s Economy.com
Private-Sector Job Growth by Sector (U.S. & New Jersey)

Seasonally Adjusted, Percent Change, March to June 2010

- Professional & Business Services (NJ: 2.0, U.S.: 0.9)
- Manufacturing (NJ: 1.3, U.S.: 0.7)
- Leisure & Hospitality (NJ: -0.4, U.S.: 0.5)
- Educational & Health Services (NJ: 0.4, U.S.: 0.5)
- Wholesale Trade (NJ: 1.0, U.S.: 0.8)
- Retail Trade (NJ: 0.6, U.S.: 0.0)
- Financial Activities (NJ: -0.3, U.S.: 0.1)
- Information (NJ: -0.5, U.S.: -0.5)
- Construction (NJ: -1.8, U.S.: -0.5)

State and Local Government
- NJ: -0.5
- U.S.: -0.2

Source: Bureau of Labor Statistics and Moody's Economy.com
Private-Sector Job Growth by Sector (U.S. & Puerto Rico)

Seasonally Adjusted, Percent Change, March to June 2010

- Professional & Business Services: 0.9
- Construction & Mining: 7.4
- Manufacturing: 0.7
- Leisure & Hospitality: 0.5
- Educational & Health Services: 0.4
- Wholesale Trade: 1.0
- Retail Trade: 0.5
- Financial Activities: -0.3
- Information: -2.2
- State and Local Government:
  - PR: -1.2
  - U.S.: -0.2

Source: Bureau of Labor Statistics and Moody’s Economy.com
Unemployment

Seasonally Adjusted Rates

Puerto Rico 16.3%
New Jersey 9.6%
U.S. 9.5%
New York City 9.5%
New York 8.2%

Note: Shading indicates NBER recessions
Summary

- Economic activity in New York State, New York City, and Puerto Rico appears to be recovering; economic activity in New Jersey has remained essentially flat.

- The number of private-sector jobs within the District has generally increased during the past few months:
  - Gains have been concentrated largely in the professional & business services, manufacturing, and leisure & hospitality sectors.

- Unemployment rates have retreated somewhat in recent months, but remain at exceptionally high levels.
Manufacturing: An Important Industry for the Region

• A large and high-paying industry in many parts of New York, New Jersey, Connecticut & Puerto Rico

• Experiencing extensive structural changes, most notably long-term employment decline

• A cyclical upturn in manufacturing employment began in 2010, although jobs declined in June
Agenda

• Describe the region’s manufacturing industry and local specializations

• Characterize long-term structural changes and describe recent upturn

• Present analysis of recent results from New York Fed’s *Empire State Manufacturing Survey*
The Federal Reserve’s Second District

Largest Manufacturing Industries (2007 Share of Manufacturing Employment)

**United States**
- Transportation Equip 12%
- Fabricated Metals 12%
- Food 11%

**Buffalo**
- Transportation Equip 15%
- Fabricated Metals 12%
- Machinery 12%

**Rochester**
- Chemical 23%
- Fabricated Metals 13%
- Machinery 12%

**Utica**
- Fabricated Metals 18%
- Miscellaneous 13%
- Machinery 10%

**Albany**
- Chemical 13%
- Machinery 12%
- Printing 11%

**Lower Hudson**
- Computers & Electronics 34%
- Chemical 11%
- Fabricated Metals 7%

**Northern New Jersey**
- Chemical 21%
- Fabricated Metals 11%
- Computers & Electronics 9%

**Binghamton**
- Computers & Electronics 46%
- Machinery 12%
- Fabricated Metals 9%

**Ithaca**
- Transportation Equip 45%
- Machinery 19%
- Computers & Electronics 14%

**Fairfield**
- Transportation Equip 19%
- Computers & Electronics 15%
- Machinery 15%

**New York City**
- Apparel 21%
- Miscellaneous 15%
- Food 14%

**Puerto Rico**
- Chemical 28%
- Miscellaneous 16%
- Food 10%

Source: U.S. Census Bureau, 2007 County Business Patterns
Manufacturing Employment Levels Declining

Total Number of Manufacturing Jobs

Note: Manufacturing industry classification changed from SIC to NAICS; dotted line indicates break in series.

Source: U.S. Bureau of Economic Analysis and Moody's Economy.com
Manufacturing Employment Levels Declining

Total Number of Manufacturing Jobs

Note: Manufacturing industry classification changed from SIC to NAICS; dotted line indicates break in series.

Source: U.S. Bureau of Economic Analysis; U.S. Bureau of Labor Statistics; and Moody's Economy.com
# Employment Loss by Manufacturing Industry

**Change in Employment for Selected industries, 1990-2007**

<table>
<thead>
<tr>
<th>Manufacturing Industry</th>
<th>New York</th>
<th>New Jersey</th>
<th>U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apparel</td>
<td>-73%</td>
<td>-70%</td>
<td>-74%</td>
</tr>
<tr>
<td>Computers &amp; Electronics</td>
<td>-53%</td>
<td>-74%</td>
<td>-21%</td>
</tr>
<tr>
<td>Motor Vehicles &amp; Parts</td>
<td>-38%</td>
<td>-32%</td>
<td>-24%</td>
</tr>
<tr>
<td>Other Transportation Equipment</td>
<td>-47%</td>
<td>-50%</td>
<td>-32%</td>
</tr>
<tr>
<td>Chemicals</td>
<td>-38%</td>
<td>-50%</td>
<td>-33%</td>
</tr>
<tr>
<td>Machinery</td>
<td>-35%</td>
<td>-55%</td>
<td>-34%</td>
</tr>
<tr>
<td>Fabricated Metals</td>
<td>-23%</td>
<td>-34%</td>
<td>-3%</td>
</tr>
<tr>
<td><strong>Total Manufacturing</strong></td>
<td><strong>-42%</strong></td>
<td><strong>-42%</strong></td>
<td><strong>-22%</strong></td>
</tr>
</tbody>
</table>
Share of Jobs in the Manufacturing Sector

Manufacturing’s Share of Total Employment

- **1970**
  - U.S.: 20.8%
  - New York: 19.8%
  - New Jersey: 27.1%

- **1990**
  - U.S.: 13.5%
  - New York: 10.6%
  - New Jersey: 12.9%

- **2008**
  - U.S.: 7.8%
  - New York: 5.0%
  - New Jersey: 6.1%

Note: 1970 data estimated by using 1990 proportions of SIC to NAICS

Source: U.S. Bureau of Economic Analysis and Moody’s Economy.com
Share of Jobs in the Manufacturing Sector

Manufacturing’s Share of Total Employment

Percent

<table>
<thead>
<tr>
<th>Year</th>
<th>U.S.</th>
<th>New York</th>
<th>New Jersey</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>7.8%</td>
<td>5.0%</td>
<td>6.1%</td>
</tr>
<tr>
<td>2008</td>
<td>9.8%</td>
<td>6.0%</td>
<td>9.2%</td>
</tr>
</tbody>
</table>

Note: 1970 data estimated by using 1990 proportions of SIC to NAICS
Source: U.S. Bureau of Economic Analysis and Moody’s Economy.com
Manufacturing’s Current Share of Employment

Manufacturing’s Share of Total Employment in 2008

Source: U.S. Bureau of Economic Analysis; U.S. Bureau of Labor Statistics; and Moody's Economy.com
Average Manufacturing Wage
Adjusted for Inflation, Measured in 2009 Dollars

Source: U.S. Bureau of Labor Statistics and Moody's Economy.com
Average Wages in Manufacturing and Overall

Average Manufacturing Wage and Average All-Sector Wage, 2009

<table>
<thead>
<tr>
<th>Area</th>
<th>All Sectors</th>
<th>Manufacturing</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.</td>
<td>$45,551</td>
<td>$54,854</td>
</tr>
<tr>
<td>Puerto Rico</td>
<td>$26,362</td>
<td>$35,126</td>
</tr>
<tr>
<td>New Jersey</td>
<td>$55,146</td>
<td>$71,070</td>
</tr>
<tr>
<td>New York</td>
<td>$57,678</td>
<td>$73,881</td>
</tr>
<tr>
<td>New York City</td>
<td>$51,498</td>
<td></td>
</tr>
<tr>
<td>Upstate</td>
<td>$40,862</td>
<td>$56,542</td>
</tr>
</tbody>
</table>

Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages; New York State Department of Labor; and Moody's Economy.com
Change in Manufacturing Employment versus Output

Source: U.S. Bureau of Economic Analysis; Puerto Rico Planning Board; U.S. Bureau of Labor Statistics; and Moody’s Economy.com
# Change in Manufacturing Employment in Recent Months

Manufacturing Job Gains and Losses by Region

<table>
<thead>
<tr>
<th></th>
<th>U.S.</th>
<th>New York</th>
<th>New Jersey</th>
<th>Puerto Rico</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Monthly Change in 2008 and 2009</td>
<td>-80,000</td>
<td>-3,100</td>
<td>-1,600</td>
<td>-1,300</td>
</tr>
<tr>
<td>January 2010</td>
<td>+22,000</td>
<td>+600</td>
<td>-1,300</td>
<td>+2,170</td>
</tr>
<tr>
<td>February 2010</td>
<td>+16,000</td>
<td>-200</td>
<td>-500</td>
<td>-170</td>
</tr>
<tr>
<td>March 2010</td>
<td>+19,000</td>
<td>-1,800</td>
<td>-3,100</td>
<td>-540</td>
</tr>
<tr>
<td>April 2010</td>
<td>+38,000</td>
<td>+1,500</td>
<td>+2,000</td>
<td>+420</td>
</tr>
<tr>
<td>May 2010</td>
<td>+32,000</td>
<td>+1,900</td>
<td>+2,500</td>
<td>+160</td>
</tr>
<tr>
<td>June 2010</td>
<td>+9,000</td>
<td>-2,600</td>
<td>-1,800</td>
<td>-570</td>
</tr>
<tr>
<td><strong>Monthly Change 2010</strong></td>
<td>+22,667</td>
<td>-100</td>
<td>-367</td>
<td>+245</td>
</tr>
</tbody>
</table>

(Year-to-Date)

Summary

• Manufacturing employment has been in long-term decline, but the industry remains important for much of the region.

• Recent cyclical job gains have paused in New York, New Jersey and Puerto Rico.

• Looking ahead, the nature and course of the employment recovery in the region is unclear.
Empire State Manufacturing Survey

• What is it?
  ▪ Monthly survey of manufacturing firms in NY State
  ▪ Asks about current & expected trends in business indicators
  ▪ Mostly conducted on-line; in the field first 10-12 days of month

• Why do we do it?
  ▪ Early read on current trends in regional economy
  ▪ Opportunity to ask topical (rotating) questions each month
  ▪ Complements other Federal Reserve Banks’ surveys

• Whom do we survey?
  ▪ Manufacturing establishments from a diverse set of industries from throughout NY State
Empire State Manufacturing Survey

Response Form

General Business Conditions:

What is your evaluation of the level of general business activity?

- Decrease
- No Change
- Increase

How to Derive Our Headline Diffusion Index

- In the July survey (after seasonal adjustment):
  - 27% say Increase
  - 52% say No Change
  - 22% say Decrease

- Diffusion Index = Increase – Decrease

- The Diffusion Index equals +5, because positive responses outnumber negative responses by 5 percentage points (27 – 22 = 5)

- The Diffusion Index measures breadth (not magnitude) of change
Empire State Manufacturing Survey

Response Form

General Business Conditions:

What is your evaluation of the level of general business activity?

July vs. June

<table>
<thead>
<tr>
<th>Decrease</th>
<th>No Change</th>
<th>Increase</th>
</tr>
</thead>
</table>

Six Months From Now vs. July

<table>
<thead>
<tr>
<th>Decrease</th>
<th>No Change</th>
<th>Increase</th>
</tr>
</thead>
</table>

Company Business Indicators relating to your facilities in New York State:

New Orders
Shipments
Unfilled Orders
Delivery Time
Inventories
Prices Paid
Prices Received
Number of Employees
Average Employee Workweek
Capital Expenditures
Technology Spending
"Texas factory activity declined slightly in June"

"Growth in 10th District manufacturing activity eased slightly in June"

"Manufacturing activity advanced at a steady pace in June"

"the pace of growth in business activity slowed substantially"

"Regional manufacturing activity . . . has slowed over the past two months"

Growth Has Slowed Recently
ISM Manufacturing Survey
"the rate of growth as indicated by the PMI slowed"
Empire State Manufacturing Survey Comparison

General Business Conditions Compared to ISM Headline Composite Index

ISM Manufacturing Index

ESMS Headline Index
(General Business Conditions)
(right scale)

ESMS Headline Index

ISM Manufacturing Index
(left scale)

Source: Federal Reserve Bank of New York; Institute for Supply Management
Empire State Manufacturing Survey Comparison

General Business Conditions Compared to Index of Coincident Economic Indicators

Growth in NYS CEI

ESMS Headline Index

ESMS Headline Index (General Business Conditions)

Growth in NYS CEI

Source: Federal Reserve Bank of New York
Empire State Manufacturing Survey Comparison

Employment Diffusion Index Compared to NYS Manufacturing Employment

Recent Supplemental Surveys

- July 2010 - Outlook for second half of 2010 and export markets
- June 2010 - Capital spending
- May 2010 - Past and expected changes in prices
- April 2010 - Most significant problems
- March 2010 - Borrowing needs and credit standards
- February 2010 - Recent & expected changes in workforce
- January 2010 - Factors driving capital spending plans
- December 2009 - Prices paid for major budget categories
- November 2009 - Debt, cash, financing and credit
Empire State Manufacturing Survey
Supplemental Surveys – Prices Paid

Past and Expected Changes in Prices Paid, Median Percentage Change (May 2010)

By what percentage have the prices you pay changed over the past 12 months, and by what percentage do you expect the prices you pay to change over the next 12 months?
Empire State Manufacturing Survey
Supplemental Surveys – Sales and Employment

Median Estimated Percent Change from Prior Year to Current Year (July 2010)

Please estimate the percent change in your firm’s sales and employment levels from (last year) to (this year)?

-15%
-10%
0%
5%
6%

Source: Federal Reserve Bank of New York
Empire State Manufacturing Survey
Supplemental Surveys – Production Plans

Percentage of Respondents (July 2010)

In the past several months, to what extent have you modified your production plans for the second half of the year?

- Reduced Substantially
- Reduced Moderately
- Increased Substantially
- Increased Moderately

July 2010:
- Reduced Substantially: 1.6%
- Reduced Moderately: 31.3%
- Increased Substantially: 3.2%
- Increased Moderately: 33.3%

July 2009:
- Reduced Substantially: -62.5%
- Reduced Moderately: -31.3%
- Increased Substantially: 1.0%
- Increased Moderately: 20.8%

July 2008:
- Reduced Substantially: -34.8%
- Reduced Moderately: -8.7%
- Increased Substantially: 5.4%
- Increased Moderately: 27.2%
Empire State Manufacturing Survey
Supplemental Surveys – Resources Spent Marketing Abroad

Average Response (July 2010)

Of all the resources you expend selling/marketing abroad, roughly what proportions would you estimate is targeted toward . . . ?

- **Europe**: 20.3%
- **Canada**: 35.6%
- **Asia**: 14.9%
- **Rest of the World**: 12.9%
- **Latin America**: 8.4%
Looking ahead, do you plan on devoting more or fewer resources to selling/marketing in each of these areas of the world in 2011 than in 2010?

- **Canada**
  - Much More: 3.6%
  - More: 25.0%

- **Asia**
  - Much More: 7.5%
  - More: 39.6%

- **Europe**
  - Much More: 0.0%
  - More: 34.0%

- **Latin America**
  - Much More: 1.9%
  - More: 29.6%

- **Rest of the World**
  - Much More: 1.9%
  - More: 35.8%
Summary

• The Empire State Manufacturing Survey gives a timely read on developing economic conditions in our region.

• The regional Fed surveys, taken together, are helpful in monitoring the US economy in real time.

• Manufacturing activity grew briskly in the first half of 2010 but now appears to be decelerating.

• Supplemental surveys help us better understand various aspects of the business and economic landscape and how they are changing.