Electricity Demand and the Great Recession

Georgia State University
Economic Forecasting Conference
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Southern Company – Smart Grid, Smart Energy, Smart Choices

- Diverse regional economy
- 4.4 million retail customers and growing
- World-class operations
- Financial strength to support investment growth
Electricity and the Economy

Electricity is a fundamental commodity of modern civilization – Edward Kahn

Electricity is an integral part of life in the United States. It is indispensable to factories, commercial establishments, homes, and certain modes of transportation. Lack of electricity causes not only inconvenience, but also economic loss due to reduced commercial and industrial production.

Energy Information Administration

In market economies, aggregate economic activity and electric power consumption usually move in lockstep (with an electricity-GDP elasticity close to one). Unlike any other specific energy source, electric power pervades all aspects of modern economic activity.

World Bank

Electricity is an integral input to industrial production processes, with such diverse uses as powering industrial machinery and materials conversion processes to controlling lighting and climate.

Federal Reserve Bulletin Feb 1997
GDP and Electricity Demand are Strongly Related

<table>
<thead>
<tr>
<th>Period</th>
<th>GDP</th>
<th>Sales</th>
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<tbody>
<tr>
<td>1970-72</td>
<td>4.1%</td>
<td>3.0%</td>
</tr>
<tr>
<td>1972-74</td>
<td>3.6%</td>
<td>4.3%</td>
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<tr>
<td>1974-76</td>
<td>1.6%</td>
<td>2.4%</td>
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<tr>
<td>1976-78</td>
<td>-5.3%</td>
<td>-1.7%</td>
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Electricity Sales and the Great Recession

![Graph showing electricity sales and GDP during and after the Great Recession. The graph compares the Yr over Yr % Chg for GDP in the US, Southern Company, and Georgia Power.]
Residential Markets

New Connects may have crossed the bottom
Commercial Markets

The contraction continues but the rate of decline is slowing
Industrial Markets – 94% of Pre-recession levels
All sectors are above their Great Recession lows

12 Month Moving Average of Industrial Sales
Industrial Energy Use is Increasing, but Employment lags behind
Productivity – Industrial Electricity Usage per Employee
Growing strongly as manufacturers strive to be competitive.

Over the past decade productivity increased annually at 3.3%. Since the beginning of the recession productivity has increased annually at 5.2%.
Summary

• The Great Recession had the largest impact on energy usage of any recession.

• Industrial Markets are recovering driven initially by inventory restocking.
  • Current activity appears to be increasingly driven by international demand.
  • Productivity is growing and is strongly suppressing the need for labor.

• Residential activity remains subdued, but appears to have crossed the trough of the cycle.

• Commercial markets continue to contract, but the bottom is near.
SO – A Premium Long-Term Investment
Premier Utility Franchises with a Customer Focus

Constructive Regulation

Healthy Capital Spending

High Reliability
Low Prices
High Customer Satisfaction