Recent Developments in Investment

Midwest Manufacturing Workshop
September 30, 2003

Spencer Krane
Vice President and Economic Advisor
Federal Reserve Bank of Chicago
Growth in Real Business Fixed Investment

**Equipment and Software**
(4-qtr percent change)

**Structures**
(4-qtr percent change)

2003:Q2  4.0%

2003:Q2  -8.0%
Contribution to Real GDP Growth of Business Fixed Investment

Real GDP growth
(4-qtr change)

Contributions to growth
(percentage points)

GDP shares:
- E&S: 8-10%
- Struc.: 2-3%

Rest of economy
Equipment and software
Structures
Overall Capital Spending Has Not Returned to Recent Peaks

**Real and nominal equipment and software investment**
(billions $)

**Real and nominal structures investment**
(billions $)

**Real and nominal information processing equipment investment**
(billions $)

**Spending relative to recent peaks (percent):**

<table>
<thead>
<tr>
<th></th>
<th>Real</th>
<th>Current $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equip. and soft.</td>
<td>-6.4</td>
<td>-10.5</td>
</tr>
<tr>
<td>Structures</td>
<td>-24.6</td>
<td>-22.9</td>
</tr>
<tr>
<td>Memo: Info. Proc.</td>
<td>4.4</td>
<td>-5.8</td>
</tr>
</tbody>
</table>
Capital Stock Growth Well Below Recent Peaks

Growth in net real capital stock and investment: Total equipment and software (annual percent change)

Note: 2002 and 2003 are estimates

Relative price for computers (4-qtr percent change)

Note: Ratio of chain-price index for final sales of computers to chain price index for GDP less final sales of computers.

1990’s investment boom raised equipment capital stock growth rates to near post-war peaks.

Early 2000’s investment retrenchment lowered capital stock growth to low rates of early 1990’s.

Recent investment recovery has stabilized equipment capital growth.

Technological change should continue to boost demand for new capital.
Investment by Manufacturers Relative to Total Business

**Equipment and software**
(annual percent change)

1961 '66 '71 '76 '81 '86 '91 '96 '01

-20 -10 0 10 20 30

Manufacturers
Total business *

*Note: 2002 and 2003 are estimates

**Structures**
(annual percent change)

1961 '66 '71 '76 '81 '86 '91 '96 '01

-20 -10 0 10 20 30

Manufacturers
Total business *

*Note: 2002 and 2003 are estimates

**Manufacturing share of total business investment**
(ratio)

0.32

Equipment and software

0.17

Structures

**Share of capital goods in shipments of finished manufactured goods**
(ratio)

0.4

0.35

1992 '94 '96 '98 '00 '02

0.3