PREDICTING HOW NATIONAL & STATE ECONOMIC CONDITIONS WILL AFFECT LOCAL BUDGETS

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Utah League of Cities and Towns Midyear Conference
RECESSION...OR NOT A RECESSION?

- "I don't think we're in a recession, and I don't think Utah is headed for one," Lt. Governor Gary Herbert interview with the Deseret Morning News. » April 3rd 2008

"It now appears likely that real gross domestic product will not grow much, if at all, over the first half of 2008 and could even contract slightly," Federal Reserve Chairman Ben Bernanke told the Joint Economic Committee.

Translation: The U.S. economy may be in recession. » April 3rd 2008
Deteriorating National Economic Conditions are Now Negatively Affecting Utah Budgets.
Many of Utah’s Economic Indicators are Slowing Down or in Decline

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Year-to-date % change</th>
<th>Last 3 Months % change</th>
<th>Latest Month % change</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utah Wages and Salaries (coincident)</td>
<td>9.8%</td>
<td>4.1%</td>
<td></td>
<td>Slowly Decreasing</td>
</tr>
<tr>
<td>Utah Employment (coincident)</td>
<td>4.0%</td>
<td>3.0%</td>
<td>2.8%</td>
<td></td>
</tr>
<tr>
<td>Utah Average Wage (coincident)</td>
<td>5.6%</td>
<td>4.9%</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Utah Unemployment Claims (leading)</td>
<td>10.9%</td>
<td>4.8%</td>
<td>15.8%</td>
<td>Decreasing</td>
</tr>
<tr>
<td>Construction employment (leading)</td>
<td>4.8%</td>
<td>2.1%</td>
<td>0.6%</td>
<td>Decreasing</td>
</tr>
<tr>
<td>Residential construction values (leading)</td>
<td>-63.2%</td>
<td>-64.3%</td>
<td>-66.1%</td>
<td>Decreasing</td>
</tr>
<tr>
<td>Nonresidential construction values (leading)</td>
<td>-2.7%</td>
<td>0.0%</td>
<td>-0.0%</td>
<td>Decreasing</td>
</tr>
<tr>
<td>Long/short term yield spread (leading)</td>
<td>0.16%</td>
<td>1.26%</td>
<td>1.05%</td>
<td>Increasing</td>
</tr>
<tr>
<td>Misery Index (leading)</td>
<td>8.8%</td>
<td>6.9%</td>
<td>6.8%</td>
<td>Decreasing</td>
</tr>
<tr>
<td>U.S. CPI (inflation) (coincident)</td>
<td>2.8%</td>
<td>3.9%</td>
<td>3.8%</td>
<td></td>
</tr>
<tr>
<td>Utah unemployment rate (coincident)</td>
<td>2.8%</td>
<td>3.0%</td>
<td>3.5%</td>
<td></td>
</tr>
<tr>
<td>Local 1% sales tax (January sales)</td>
<td>6.2%</td>
<td>2.0%</td>
<td>2.7%</td>
<td>Decreasing</td>
</tr>
</tbody>
</table>
Three months ago most indicators were green lights...”go”
Unemployment claims are heading up, but still lower than the 2001-3 recession
The gap between long-term (10-year) and short term (3-month) Treasury bills indicates how the supply of money will be doing in the next 6 months to a year.

Supply of money will increase over the next 6 to 12 months.
Both Utah’s and California’s job growth rates have turned down, but Utah is still in expansion mode, at least for the next few quarters.

Utah’s job growth rate still in expansion mode, but receding quickly, faster than California’s.
Utah’s construction employment heading down the roller coaster
So, how can we forecast sales taxes under these near recession conditions?
FORECASTING SALES TAX

1. How much did you slow down during the 2001-03 recession? How much did you grow in the last three distributions?

2. Build a multi-state econometric model

3. Try using our “simple sales tax estimator system”
The “simple” sales tax system mimics a complicated model in less than 10 calculations
LOCAL TAX 1% SYSTEM

• 50% Population based on each city’s share of population: grows with the Statewide wage growth, 1/10th of the change in residential construction and an individual city’s population change

• 50% Point-of-Sale: grows with county wages +/- change in county residential construction and +/- change in the misery index

• 4th Quarter Statewide wages rose 8.1%
• Utah residential construction down 30.7% in the second half of 2007
• 1/2 of difference between State’s population and city population (-0.8% to 3.6% for 7 cities)
• County wages grew 5.1% to 8.6% in the 4th quarter of 2007
• Off 29% July thru December 2007 for the 7 cities
• Misery Index up 1%, car sales flat
Layton, Utah
50% Population based on each city’s share of population: grows with the Statewide wage growth, residential construction change / 10, and a city’s population change.

- Wage growth of 8.1%
- -30.7% / 10 residential construction decline = -3.1%
- -0.5% (1/2 difference between State population growth and Layton’s)

\[ \text{Growth} = 4.5\% \times 50\% = 2.25\% \]

- Davis County wages grew 5.1% Davis County residential construction -44%/10 = -4.4%

\[ \text{Growth} = 0.7\% \times 50\% = 0.35\% \]

- 2.25% + 0.35% = 2.6% (actual 2.6%)

50% Point-of-sale: grows with county wages +/- change in county residential construction/10.
50% Population based on each city’s share of population: grows with the Statewide wage growth, residential construction change / 10, and a city’s population change

50% Point-of-sale: grows with county wages + change in county residential construction/10

- Utah wage growth of 8.1%
- -30.7% / 10 Utah residential construction decline = -3.1%
- -0.7% (1/2 difference between State population growth and Richfield’s)
  • = 4.3% x 50% = 2.15%

- Sevier County wages grew 7.5%
- Sevier County residential construction - 30%/10 = -3%
  • = 4.5% x 50% = 2.25%

- 2.15% + 2.25% = 4.4% (actual 3.6%)
West Jordan, Utah
50% Population based on each city’s share of population: grows with the Statewide wage growth, residential construction change / 10, and a city’s population change.

50% Point-of-sale: grows with county wages + change in county residential construction/10.

- Utah wage growth of 8.1%
- -30.7% / 10 Utah residential construction decline = -3.1%
- +0.3% (1/2 difference between State population growth and Richfield’s)
- = 5.3% x 50% = 2.65%

- Salt Lake County wages grew 8.2%
- Salt Lake County residential construction - 32.9%/10 = -3.3%
- = 4.9% x 50% = 2.45%

- 2.65% + 2.45% = 5.1% (actual 18.7%)
CONCLUSION

OK, the “simple” sales tax estimator system isn’t that simple.

But it does mimic a complicated econometric model in less than 10 calculations.