Component Contributions in the OR Index of Leading Indicators

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OR Index of Leading Indicators (OILI)

- Follows the Conference Board’s Methodology
- 10 Components chosen for national and/or regional relevance
- Timeframe: January 1995 to July 2006
OILI Components

- Yield Curve
- Purchasing Managers’ Index
- Semiconductor Book-to-Bill Ratio
- Dollar Index (Pacific excl. Japan)
- Michigan Consumer Sentiment Index
- OR Initial Unemployment Claims
- OR Withholding
- OR Business Incorporations
- Oregonian Help-wanted ads
- OR Building Permits

Computation of OILI

1. Compute month-to-month change in each component (symmetric or arithmetic)
2. Adjust for volatility
3. Sum values
4. Compute index using inverse symmetric change (and rebase to 1996=100)
5. Take six-month annualized change.
Computing contributions

- \( l = F(\Sigma i_j) \)
- \( l_j = F(i_j) \)
- \( l^* = \Sigma l_j \)
- \( l \neq l^*, \) but . . .
Computing contributions

- $c_j^* = l_j/l^*$
- $c_j \sim c_j^*$
Uses of contribution stats

- Characterize point-in-time signals
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- Characterize point-in-time signals
- Analyze time-series patterns for specific indicators
Conclusion

- Component contributions to change are valuable in evaluating individual signals in the leading index, as well as assessing the merits of individual components in the leading index.