Component Contributions in the OR Index of Leading Indicators

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OR Index of Leading Indicators (OILI)

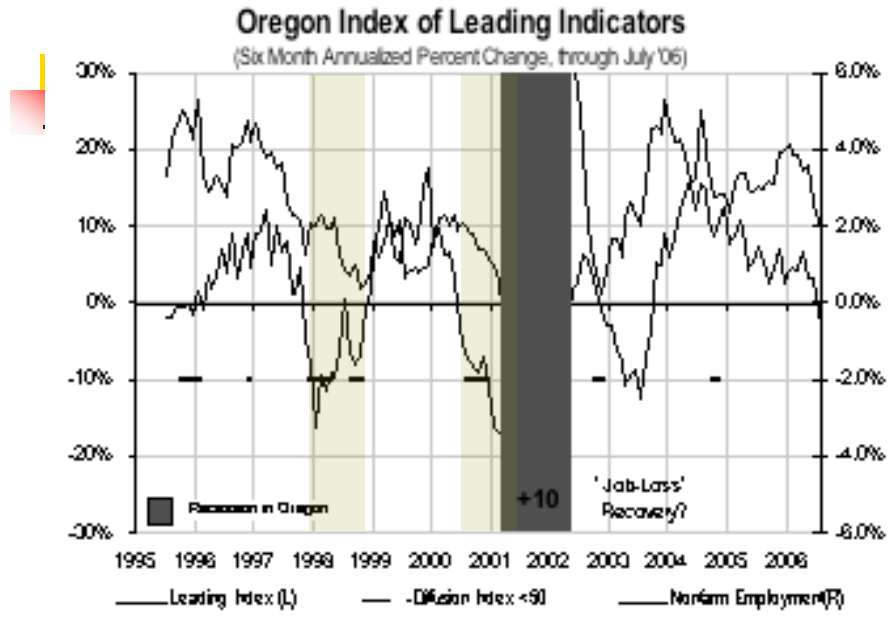
- Follows the Conference Board's Methodology
- 10 Components chosen for national and/or regional relevance
- Timeframe: January 1995 to July 2006

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

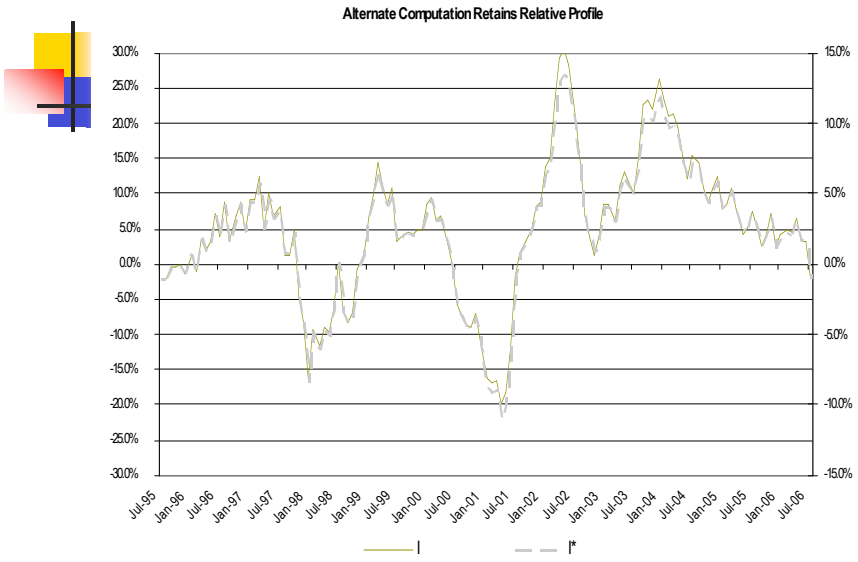
Computation of OILI

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



Computing contributions

- $I = F(\Sigma i_j)$
- $I_j = F(i_j)$
- $I^* = \Sigma I_j$
- $I \neq I^*$, but . . .

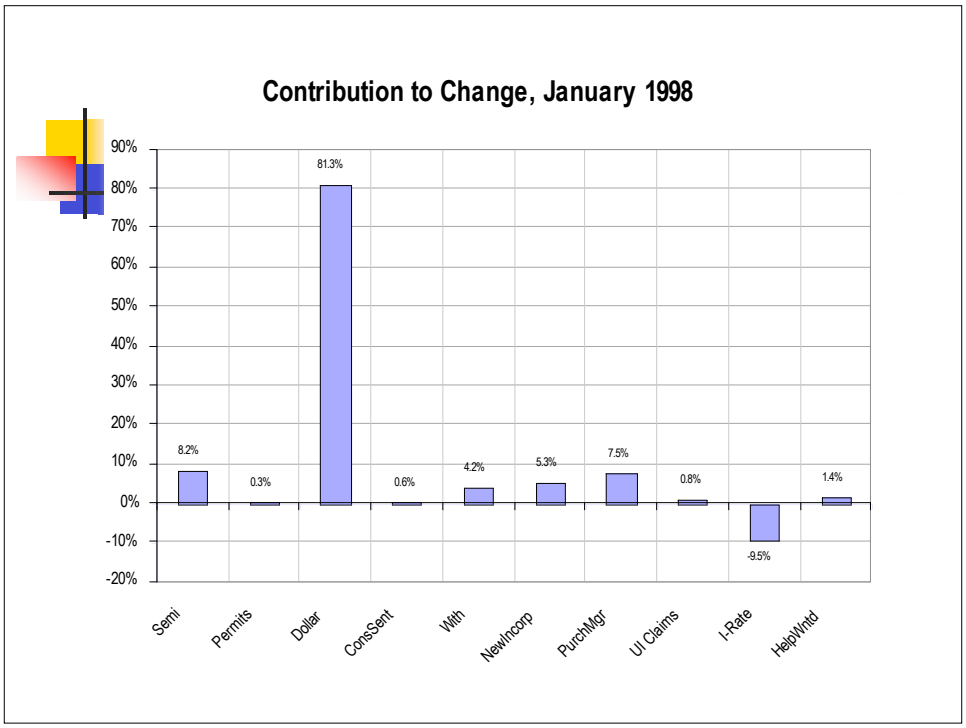


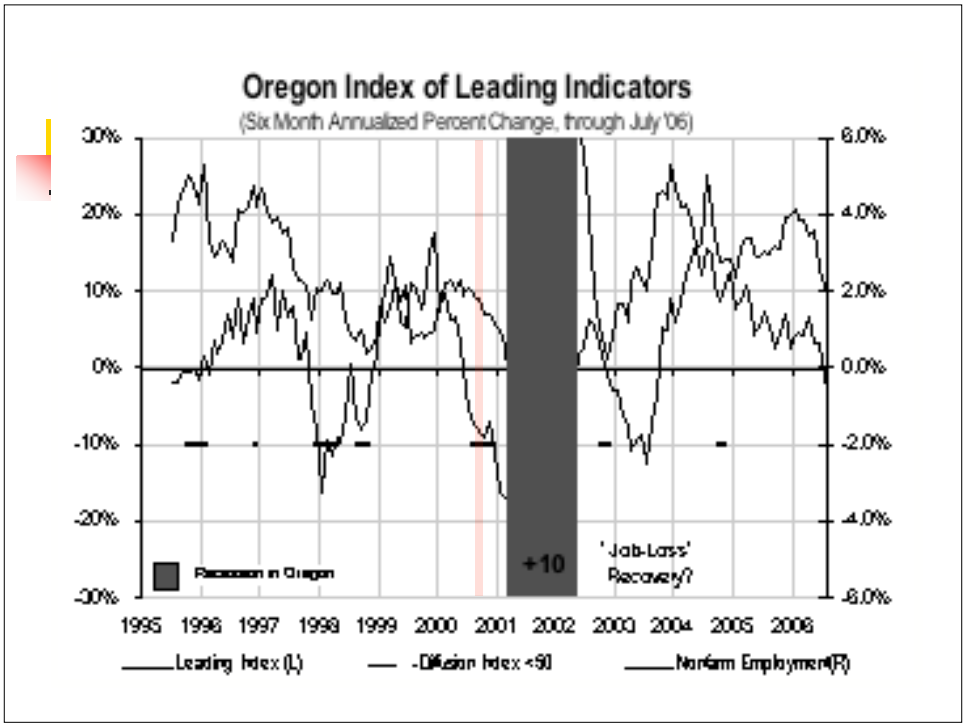
Computing contributions

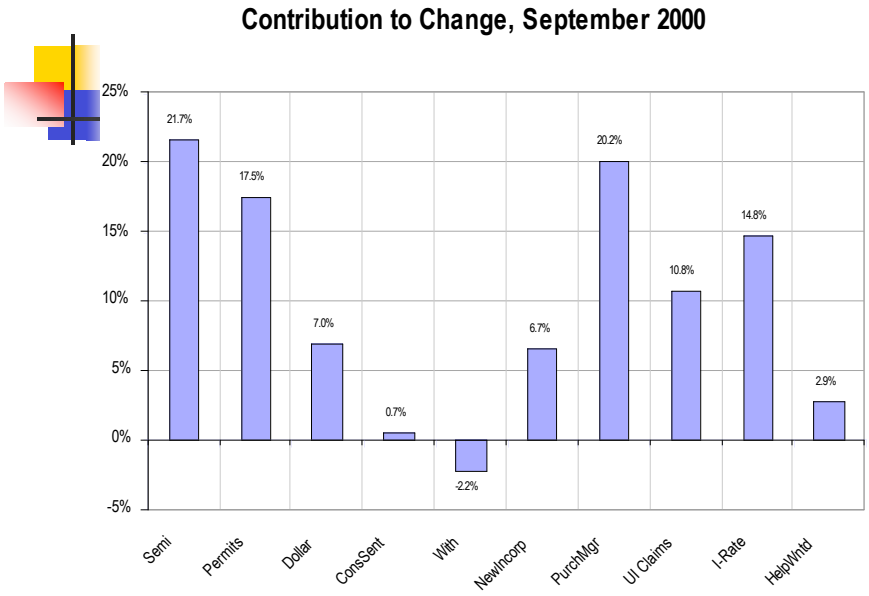
- $c_j^* = I_j / I^*$
- $c_j \sim c_j^*$

Uses of contribution stats

- Characterize point-in-time signals

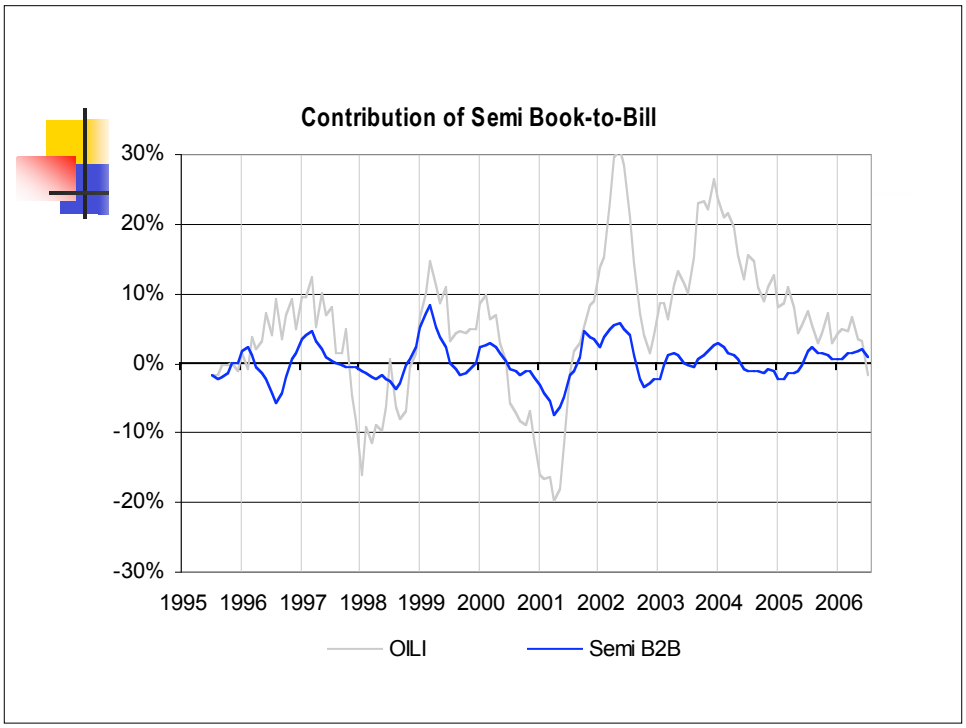

Contribution to Change, January 1998
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
-10%
-20%
8.2%
0.3%
81.3%
0.6%
4.2%
5.3%
7.5%
0.8%
-9.5%
1.4%
Semi
Permits
Dollar
ConsSent
Wth
NewIncorp
PurchMgr
UI Claims
I-Rate
HelpWntd

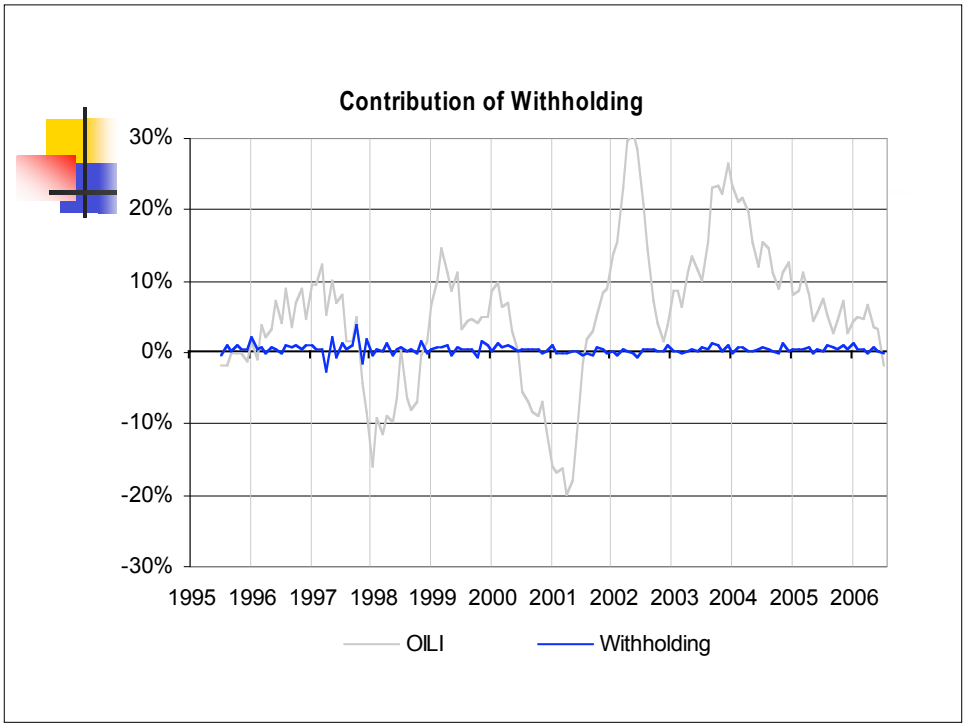

Oregon Index of Leading Indicators
(Six Month Annualized Percent Change, through July '06)
30%
20%
10%
0%
-10%
-20%
-30%
6.0%
4.0%
2.0%
0.0%
-2.0%
-4.0%
-6.0%
Recession in Oregon
+10
'Job-Loss' Recovery?
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
Leading Index (L)
Diffusion Index <50
Nonfarm Employment(R)

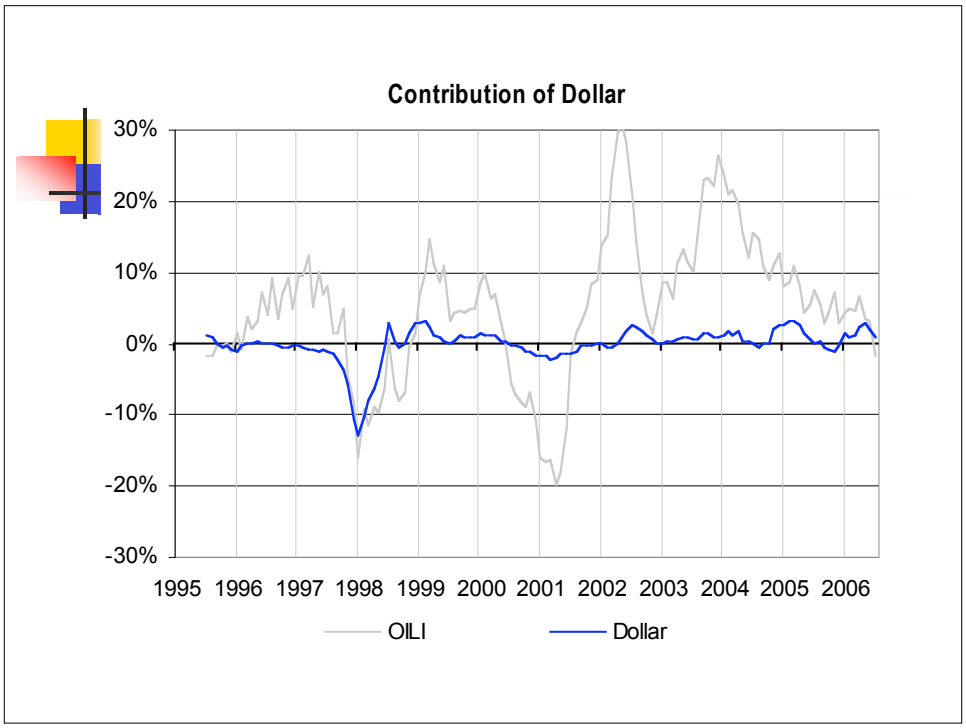


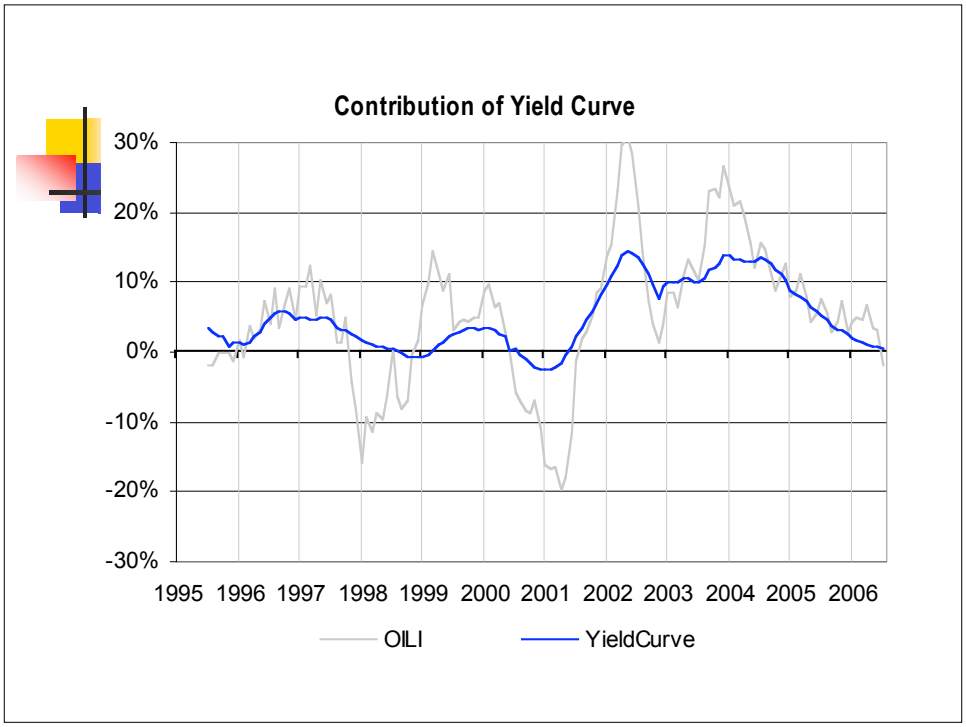
Uses of contribution stats

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


Contribution of Semi Book-to-Bill
30%
20%
10%
0%
-10%
-20%
-30%
1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006
OILI
Semi B2B


Contribution of Withholding
30%
20%
10%
0%
-10%
-20%
-30%
1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006
OILI
Withholding


Contribution of Dollar
30%
20%
10%
0%
-10%
-20%
-30%
1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006
OILI
Dollar


Contribution of Yield Curve
30%
20%
10%
0%
-10%
-20%
-30%
1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006
OILI
YieldCurve

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.