Discussion of "Forecasting Recessions: The Puzzle of the Enduring Power of the Yield Curve"

S. Boraǧan Aruoba

University of Maryland

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Summary of the Paper

The result : Professional forecasters are **as good as** a forecast using information from the yield curve for forecasting a one-quarter drop in real GDP for the current quarter but the latter becomes **superior** for forecasting falls in GDP in later quarters.

Yield Curve Term Premium (1/1/2006 to Present)

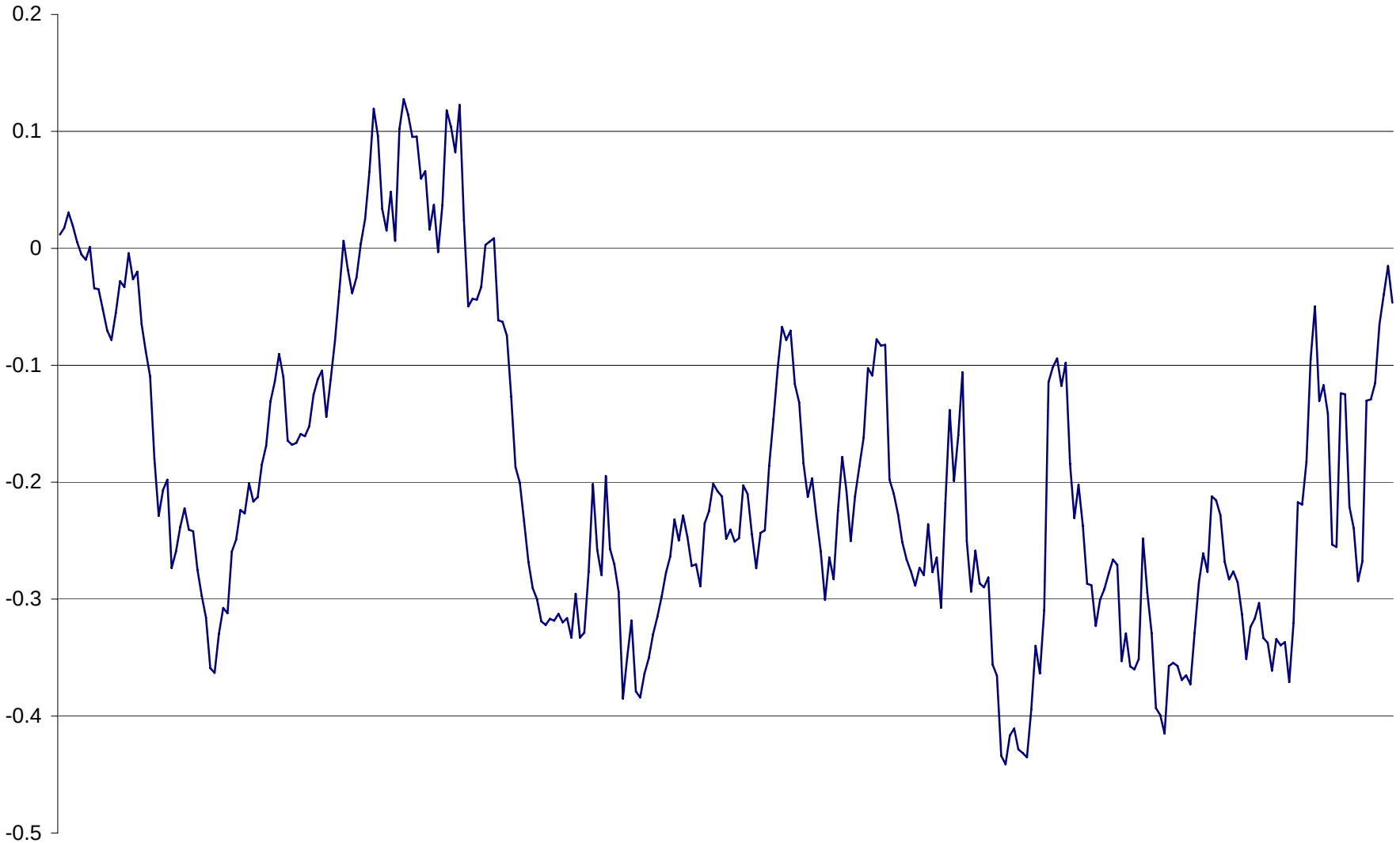


TABLE FOUR
ESTIMATED PROBABILITY OF DECLINE IN REAL GDP

ESTIMATED PROBABILITY (CHANGES IN 100)	Q4 2006 TO Q1 2007	Q1 2007 TO Q2 2007	Q2 2007 TO Q3 2007	Q3 2007 TO Q4 2007	Q4 2007 TO Q1 2008
NUMBER OF FORECASTERS					
10 OR LESS	40	29	23	20	20
11 TO 20	3	11	16	17	14
21 TO 30	0	4	5	7	8
31 TO 40	2	1	1	1	1
41 TO 50	0	0	1	1	1
51 TO 60	0	0	0	0	0
61 TO 70	1	1	0	0	0
71 TO 80	0	0	0	0	0
81 TO 90	0	0	0	0	0
91 AND OVER	0	0	0	0	0
NOT REPORTING	3	3	3	3	5
MEAN AND MEDIAN					
MEDIAN PROBABILITY	5.00	10.00	11.25	15.00	13.50
MEAN PROBABILITY	8.28	13.14	13.82	14.93	15.00

Questions / Issues

1. What is the right "truth"? Are we being fair to the SPF forecasters? More, next...

2. Do the forecasters understand the same thing as we do when we say a "recession"? Is R1 or R2 a recession for them or do they think about co-movements? How about market participants?

3. What does an inverted yield curve predict? NBER Recessions or negative output growth?

4. Reliability of SPF. More, later...

5. We can also use the SPF to get the implied probability of a recession with R2. Might be interesting.

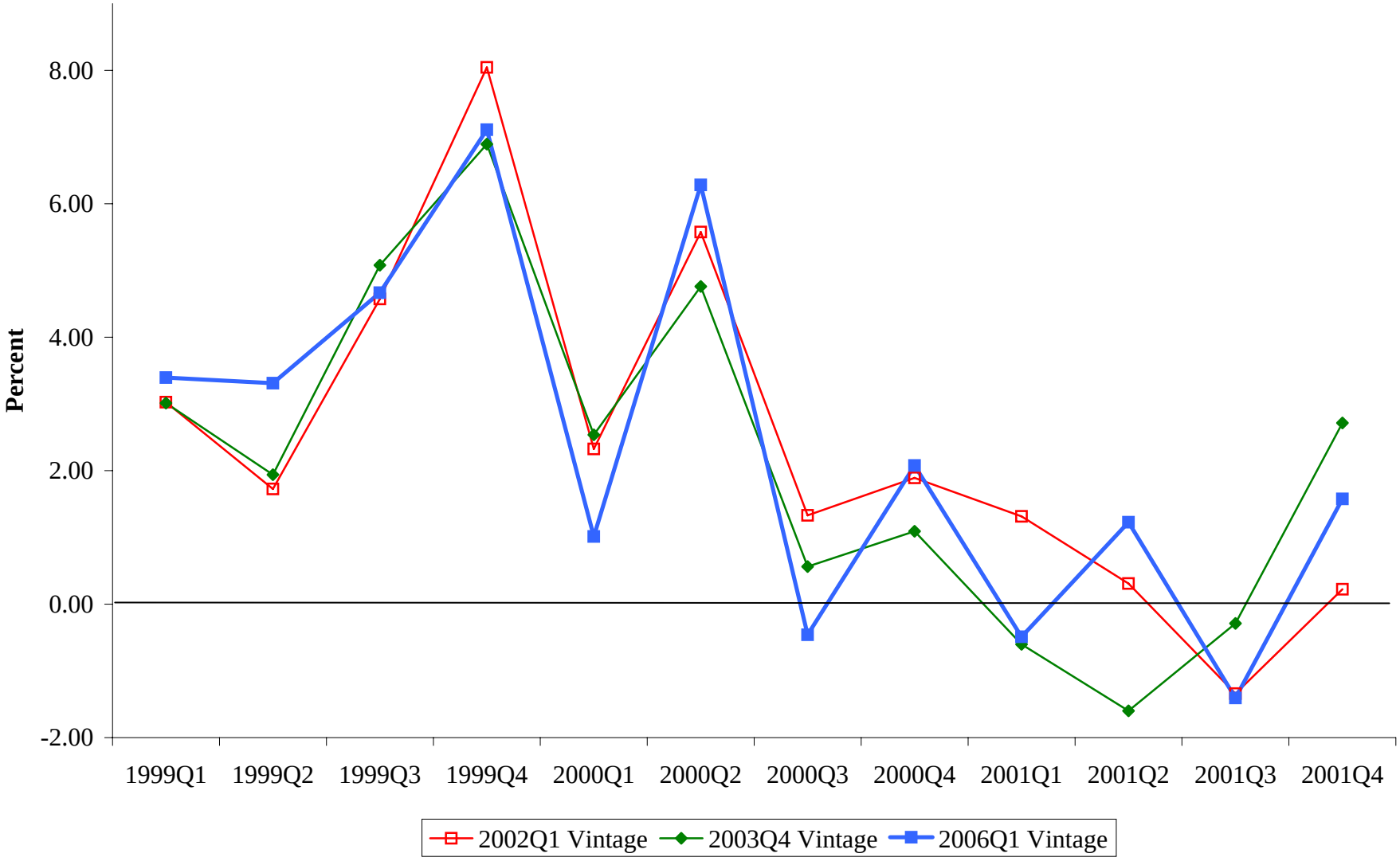
6. To judge the "quality" of R1 and R2 vs. NBER, it may make sense to use neither real-time nor final data.

What is the right "truth"?

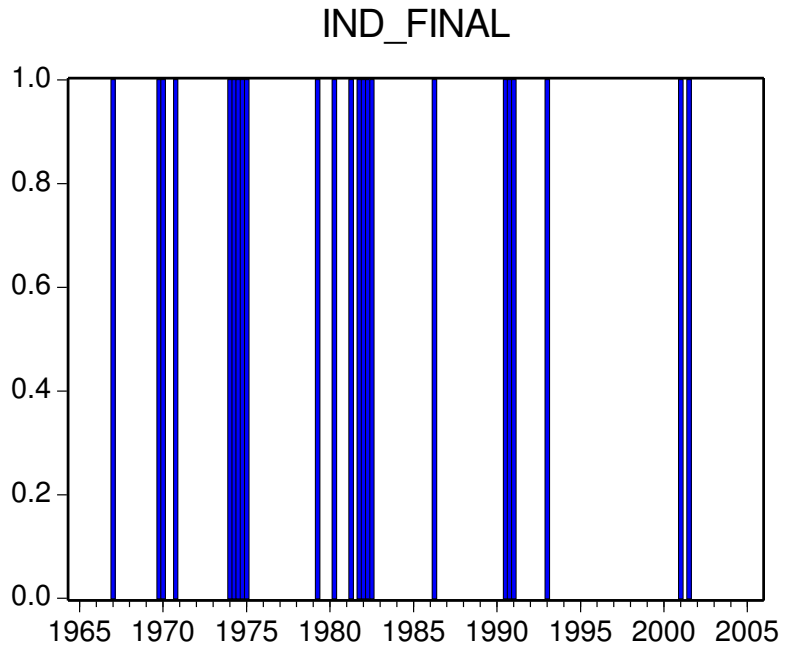
5 obvious choices :

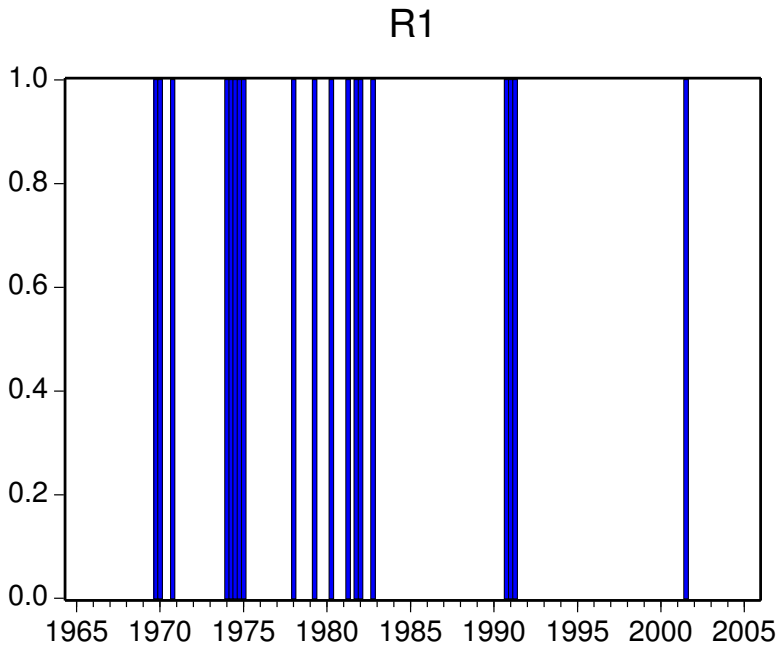
1. Initial announcement
2. "Final" Data (BEA) (Realtime Data)
3. "Final" Data (Aruoba, 2006)
4. Final-Revised Data (Current Vintage)
5. NBER Recession Dates

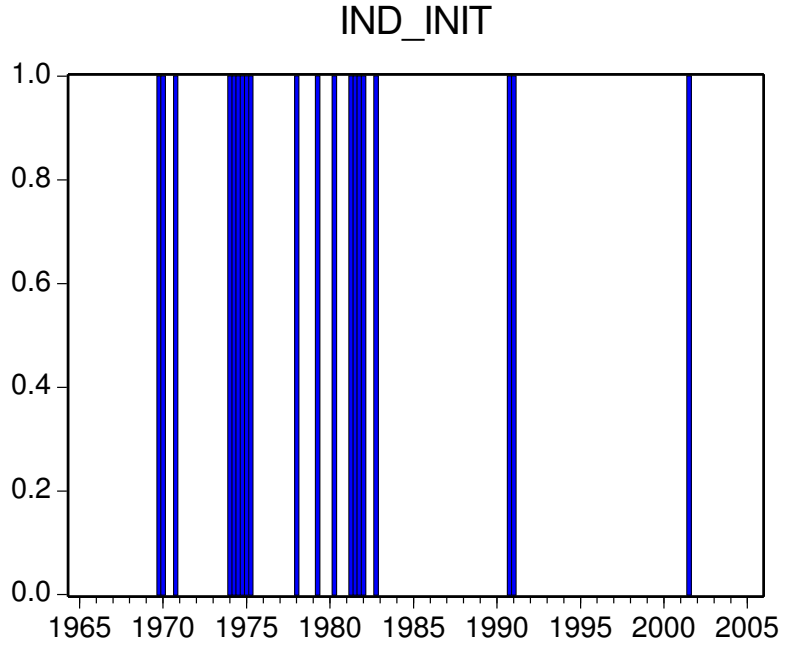
Quarterly Real GDP Growth (Different Vintages / Annualized)

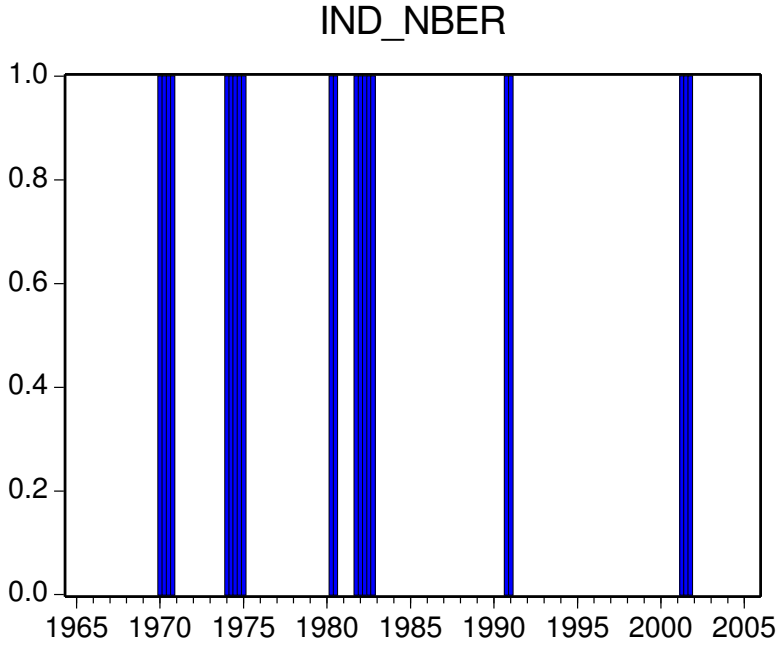


What is the right "truth"?









What is the right "truth"?

Correlations

	Final	R1	Initial	NBER
R1	0.748			
Initial	0.724	0.912		
NBER	0.647	0.655	0.633	

- None of the measures are highly correlated with NBER.
- R1 and Final are marginally closer to NBER than Initial.
- Final is still somewhat different from initial and R1.

Issue:What are the forecasters trying to forecast when they forecast GDP? Initial, R1, Final?

Evidence from my own work : Initial. (Table)

TABLE 1.6.1 - Results from the Survey of Professional Forecasters

	Nominal Output	Real Output	Real Consumption	Price Index
Pre-1990				
Median Equals Initial	88.5%	86.5%	92.6%	92.0%
Within One Point	77.0%	67.9%	76.2%	97.4%
Correct Sign	20.7%	23.7%	22.1%	38.9%
Mean Revision (SPF)	0.03%	0.00%	0.08%	0.07%
Mean Revision (RTDS)	0.60%	0.46%	0.47%	0.14%
Post-1990				
Median Equals Initial	97.8%	95.4%	95.5%	91.1%
Within One Point	92.0%	94.0%	94.4%	100.0%
Correct Sign	26.1%	35.2%	34.8%	43.3%
Mean Revision (SPF)	0.00%	0.00%	0.00%	0.04%
Mean Revision (RTDS)	0.60%	0.51%	0.40%	0.08%

Note: See the text for the definitions of each row.

What is the right "truth"?

To (maybe) reconcile the result:

- The SPF forecasters are trying to forecast the initial announcement of the BEA.

- Yield curve term premium has information about recessions, not necessarily about a fall in real GDP since market participants use other information (in addition to their GDP forecasts) to price treasury bonds.

- For the current period SPF forecasters have a relatively good idea about GDP which will be announced in about 2.5 months.

- For longer horizons SPF forecasters still try to forecast the announcements of the BEA while yield curve is more closely linked to fundamentals.

Bottom Line: Is it fair to judge their forecasts with R1? or NBER?

Also report results for Initial and Final.

Reliability of SPF

Since the Philadelphia Fed took over the survey in 1990:

- The timing of the survey was kept on a very strict schedule such that the deadline of returning the survey was almost perfectly aligned with that of the RTDS.

- The number of respondents increased significantly. (especially low in 1980s.)

Provide results for post-1990 sample as well.

Problem: Only 2 recessions in that sample with a long expansion period.