

The Composite Leading Indicators, Recession of 2001, and the Monetary Policy

Mehdi Mostaghimi, Ph.D.

Department of Economics and Finance

School of Business

Southern Connecticut State University

New Haven, Connecticut 06515

Phone: (203) 392-5625

Email: mostaghimi@SouthernCT.edu

URL: <http://www.SouthernCT.edu/~mostaghi>

Seminar

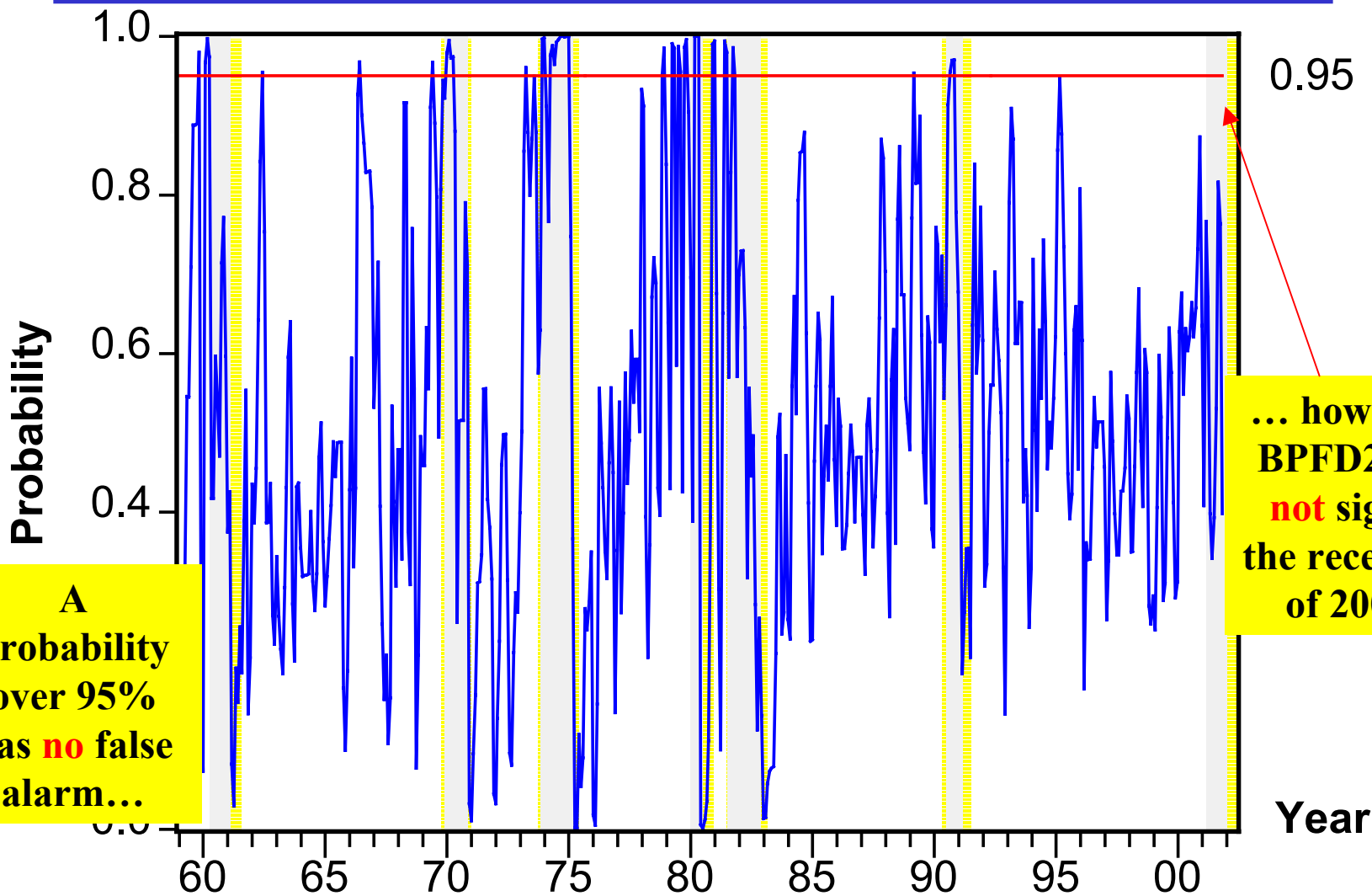
Department of Economics and Finance

January 25, 2002

Opening Statement

- In April 2001 departmental seminar:
 - Composite Leading Economic Indicators (CLI)
 - Major structural changes since 1996.
 - Significant changes in the probability distributions of the percentage change in CLI for the expansion periods and for the recession periods.
 - Bayesian Probability Forecast of a Downturn (BPDF).
 - Forecast of a downturn (recession) in today's economy.
- Today:
 - Evaluation of the BPDF forecasts of the Recession 2001.
 - Monetary Policy and its impacts on the CLI and the overall state of the economy.
 - Overall.
 - Recession of 2001.

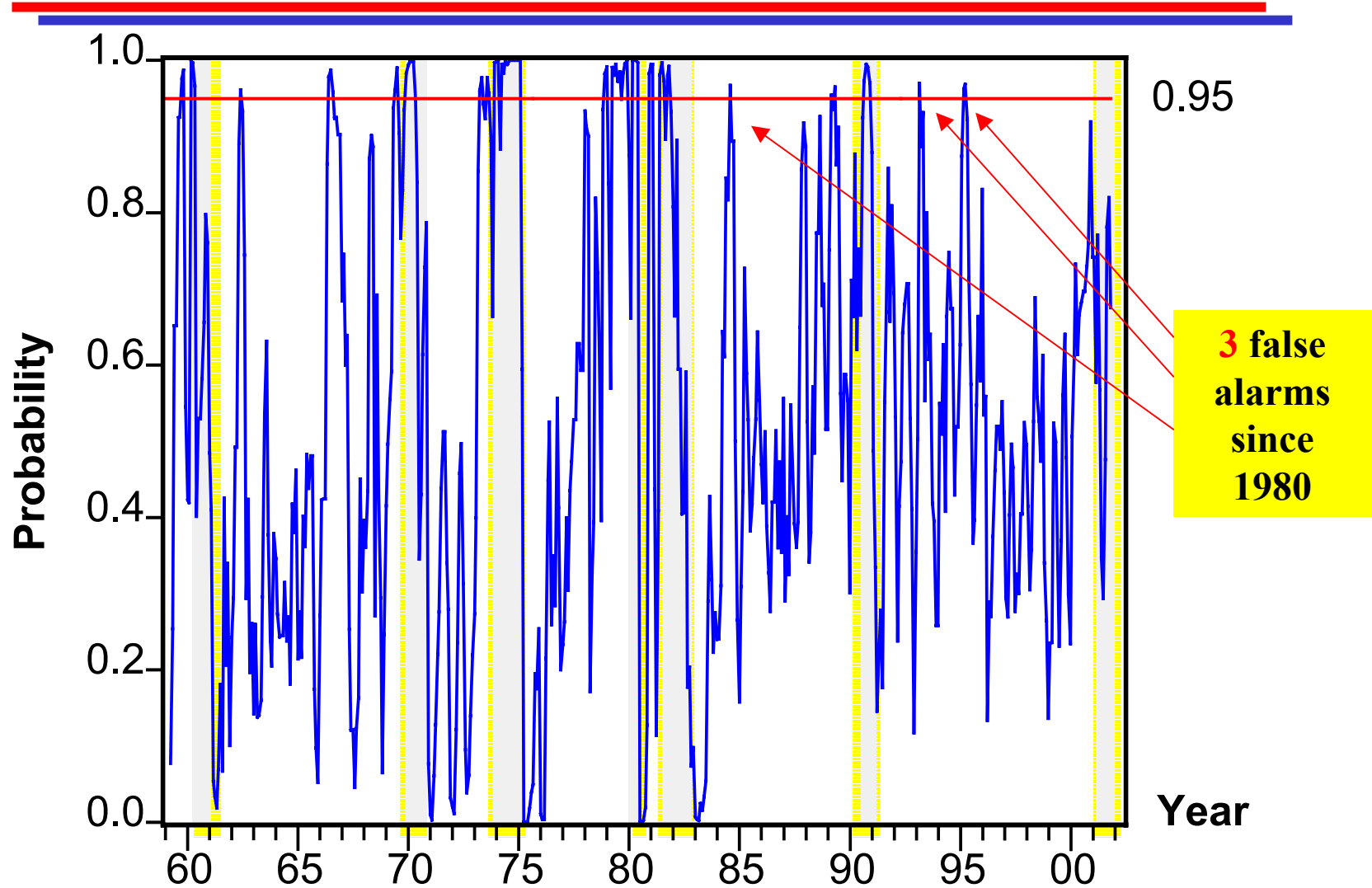
BPDF2_1996: Bayesian Probability Forecast of a Downturn Using 2 Consecutive CLI - CLI1996 = 100



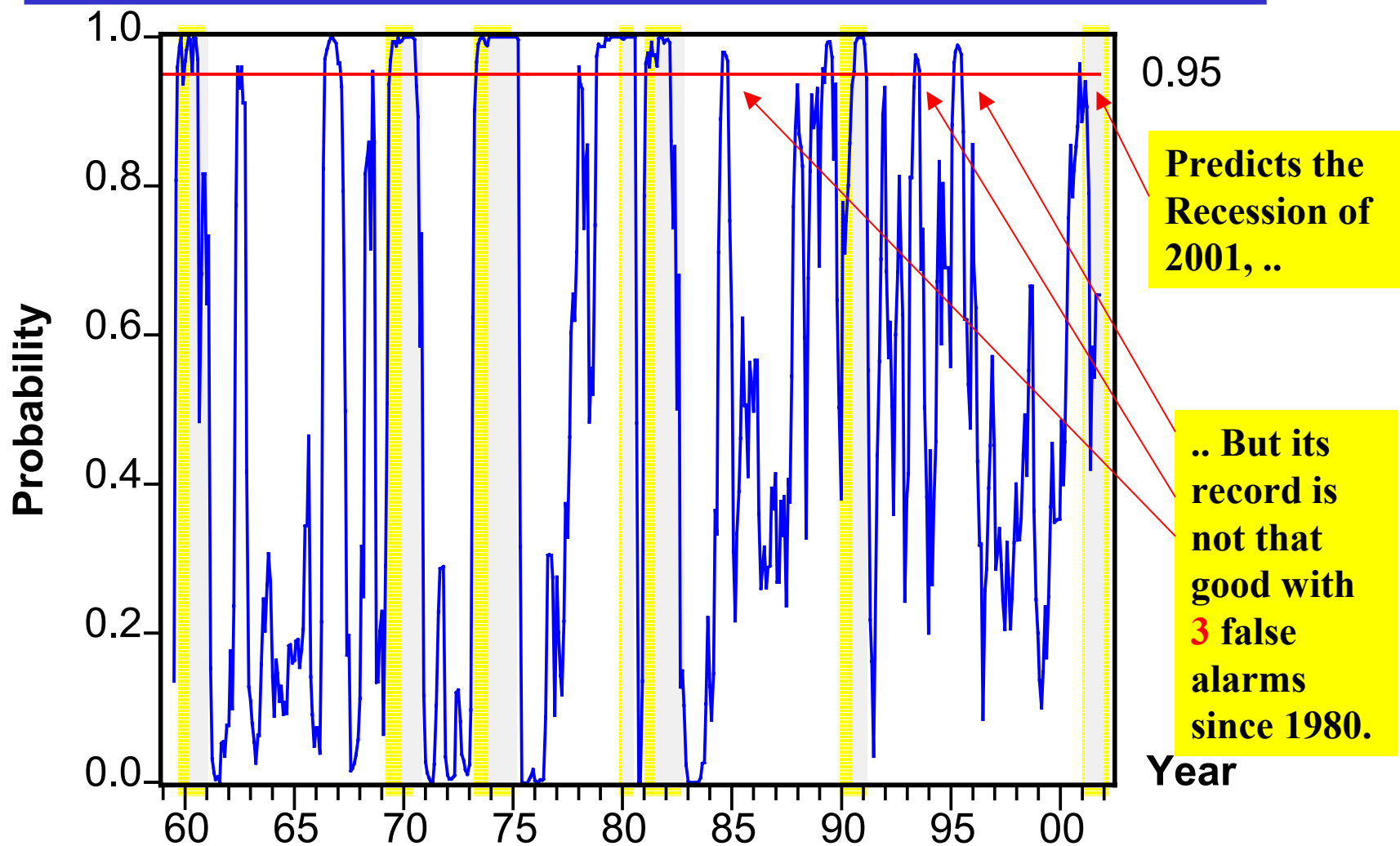
A probability over 95% has no false alarm...

... however, BPDF2 did not signal the recession of 2001.

BPF3_1996: Bayesian Probability Forecast of a Downturn Using 3 Consecutive CLI - CLI1996=100



BPF6_1996: Bayesian Probability Forecast of a Downturn Using 6 Consecutive CLI - CLI1996=100



BPDF10_1996: Bayesian Probability Forecast of a Downturn Using 10 Consecutive CLI - CLI1996=100

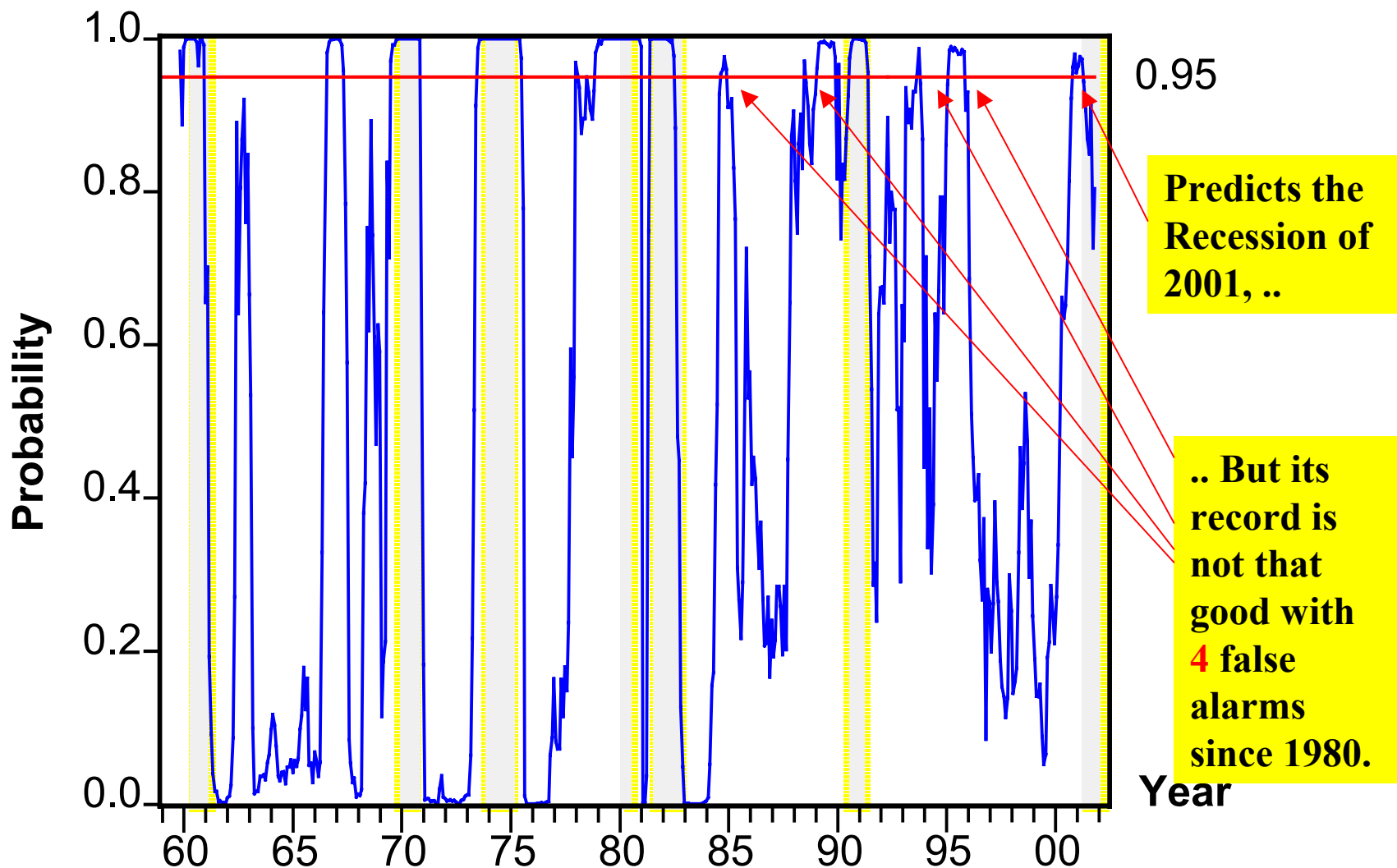


Table 2: Models' signals of a downturn in the U.S. Economy with probability of 95% or more - 1973/01 - 2001/12

CLI Peaks	NBER Peaks	BPF2_96			BPF3_96			BPF6_96			BPF10_96		
		Signal Dates	Lead (-) Lag(+)	NCDS	Signal Dates	Lead (-) Lag(+)	NCDS	Signal Dates	Lead (-) Lag(+)	NCDS	Signal Dates	Lead (-) Lag(+)	NCDS
73/03	73/11	73/12	+1	2	73/04	-7	2	73/05	-6	24	73/07	-4	25
		74/04	+5	10	73/08	-3	2						
					73/12	+1	3						
					74/04	+5	10						
79/03	80/01	78/11	-14	2	78/12	-13	2	78/11	-14	23	78/12	-13	27
		79/04	-10	2	79/04	-10	5						
		79/07	-6	2	79/10	-3	3						
		79/10	-3	2	80/03	+2	4						
		80/03	+2	3									
81/04	81/07	80/12	-7	2	80/12	-7	3	81/02	-5	14	81/07	0	12
		81/06	-1	2	81/06	-1	3						
		81/10	+3	1	81/10	+4	2						
					84/08	-	1	84/08	-	4	84/09	-	4
											88/07	-	1
90/08	90/07	89/03	-16	1	89/03	-16	1	89/03	-16	1	89/02	-17	11
		90/09	+2	3	89/05	-14	1	89/05	-14	4	90/02	-6	1
					90/09	+2	4	90/08	+1	7	90/08	+1	11
					93/03	-	1	93/06	-	3	93/09	-	2
					95/03	-	2	95/03	-	5	95/03	-	9
2000/01	2001/03							2000/12	-	1	2000/11	-	6

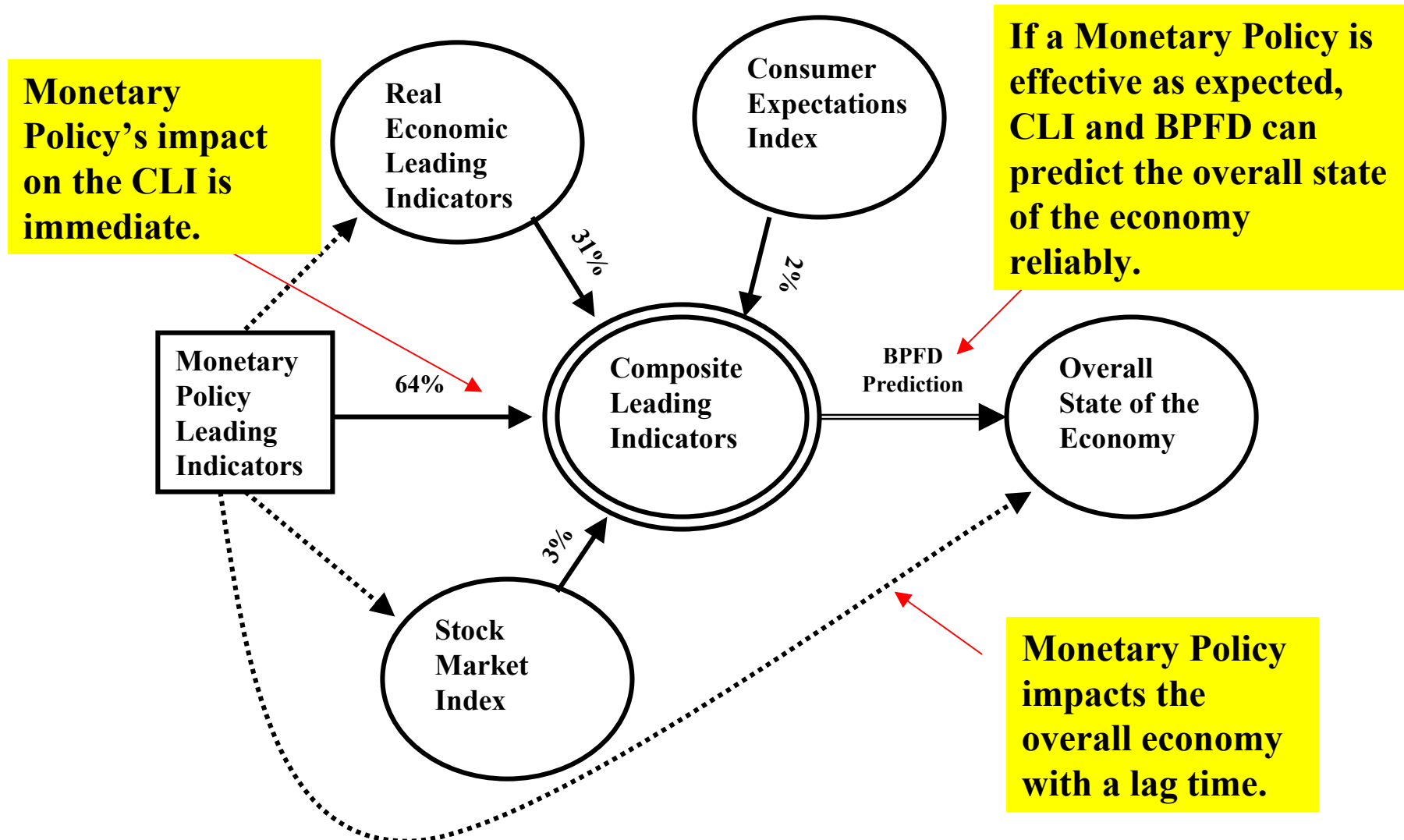
BPF2 has no false alarm in 1980s and 1990s.

Both BPF2 and BPF3 missed the recession of 2001.

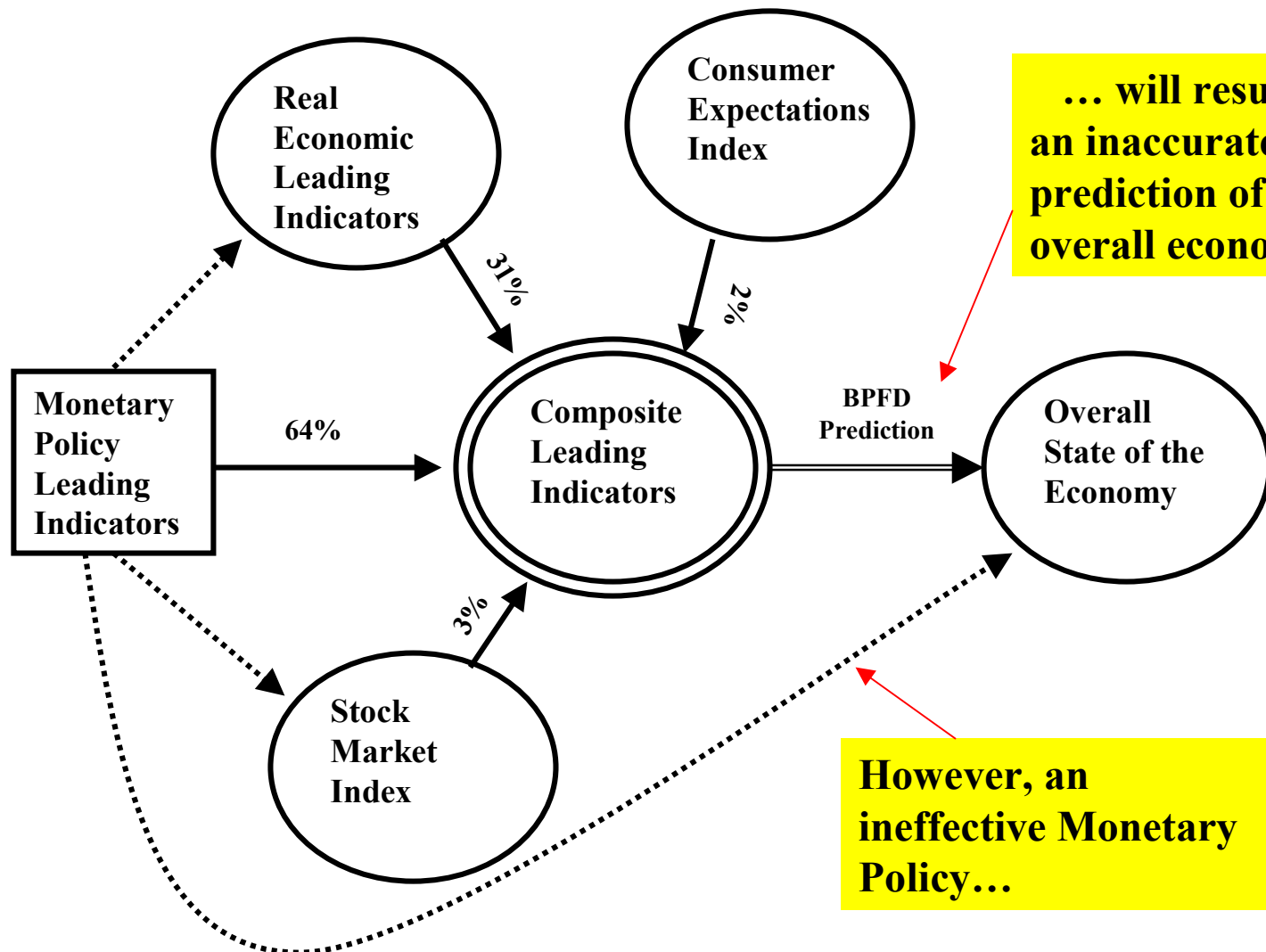
What Did Go Wrong?

- The influence of the monetary policy on CLI, direct impact, versus its impact on the overall economy, delayed impact.
 - Limitations of a monetary policy.
- Recession of 2001:
 - Monetary policy and its impact on CLI and on predicting a downturn point.

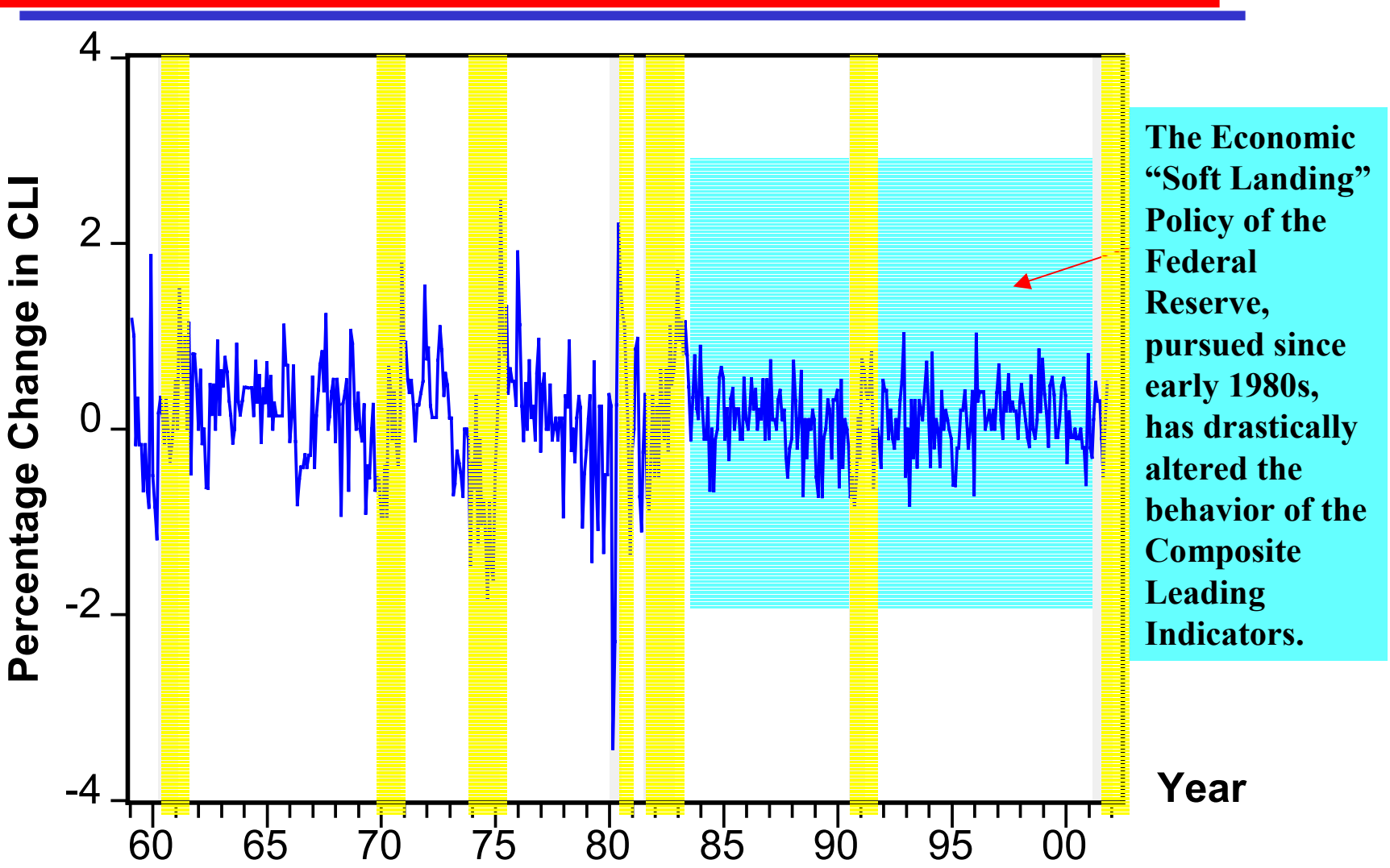
Influence Diagram of the Monetary Policy Impacts on the CLI and on the Overall Economy



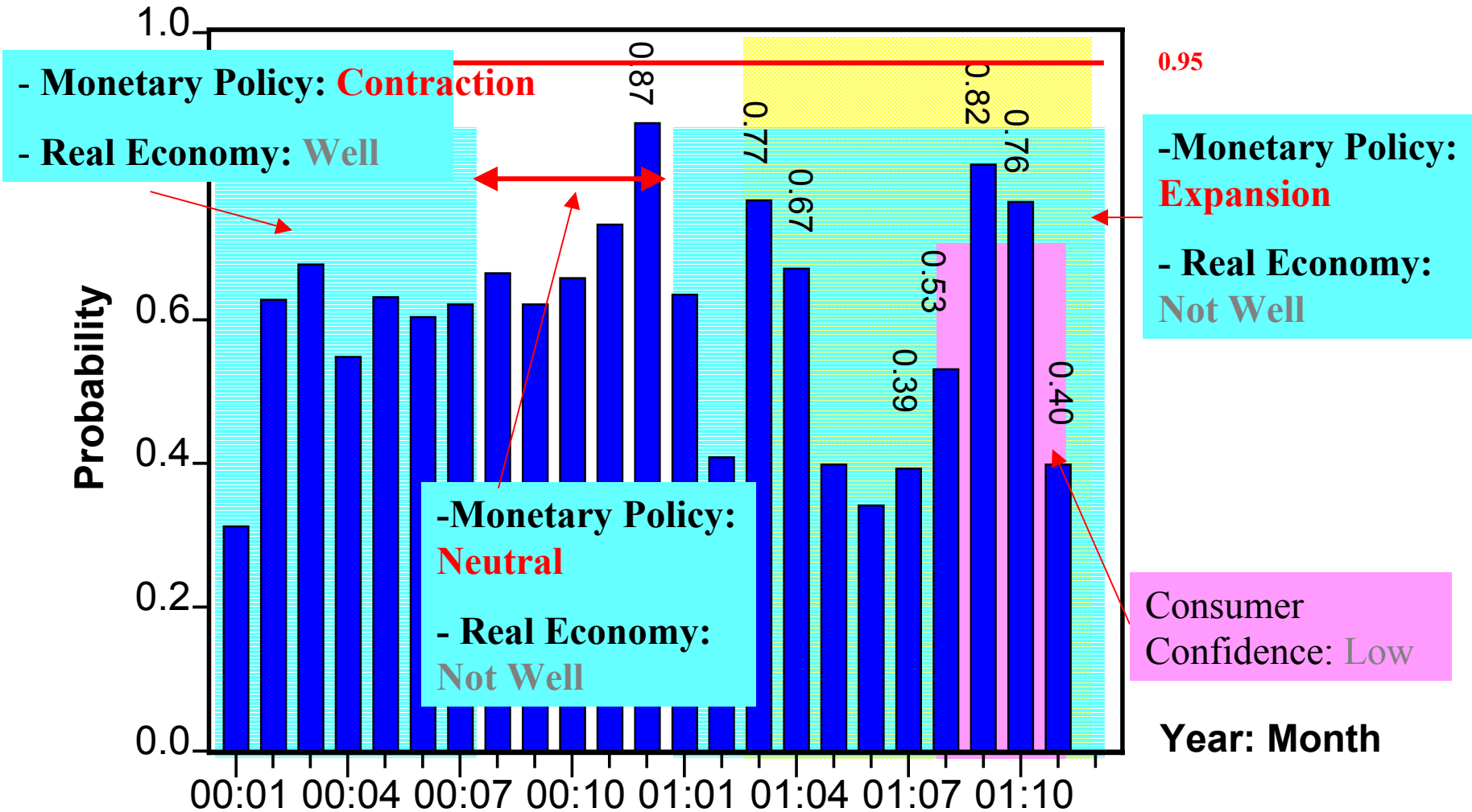
Influence Diagram of the Monetary Policy Impacts on the CLI and on the Overall Economy



Percentage Change in the Composite Leading Indicators - CLI1996.



Is the Monetary Policy Applied Beyond Its Effective Level?



Source: Mostaghimi M. (2001), An Information-Theoretic Methodology for Estimating Bayesian Probability Forecast of a Downturn in the U.S. Economy, Manuscript, Department of Economics and Finance, Southern CT State U., New Haven, CT 06515.
 Jan-20-2002
 Departmental Seminar
 M. Mostaghimi

What can be done?

- Monetary Policy:
 - Recognizing the limitations of the monetary policy and applying it to its effectiveness.
- Composite Leading Economic Indicators:
 - Monetary policy tools are great predictors of the near future state of the overall economy and have a good credibility among the business and financial communities.
 - However, these tools are discretionary, their predictive effectiveness are limited by the degree to which the overall economy respond to them.
 - Assigning about 64% of the CLI weights to the monetary policy tools is over exposing the CLI to the Type II error:
 - *The error of not to signaling a downturn, when in fact it is a downturn.*
 - Recommendation: Reduce the CLI's exposure to the monetary policy tools.
- Bayesian Probability Forecast of a downturn (BPDF2):
 - Can prior probabilities be used to overcome the CLI's shortcoming?
 - Subjective versus empirical e.g., diffusion index.