

Essays on Unemployment Insurance and The Business Cycle

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Abstract

This dissertation analyzes the interaction between unemployment insurance (UI) in the United States and the business cycle. In my first essay I find that UI should become more generous for the long-term unemployed during recessions. While in this essay I assume that the state of the economy is known, in my second essay I use a Markov Switching model to identify when unemployment insurance benefit extensions should occur, given that economic conditions are unobservable. UI benefit extension programs may have disincentive effects on the amount of effort exerted to find a job, which is the focus of my final essay. I use a difference-in-differences approach to identify the impact of increasing UI generosity during recessions.

Model Features

To determine the optimal benefit system in recessions and expansions a dynamic search model is used. Key features of the model are:

- Insurance and moral hazard

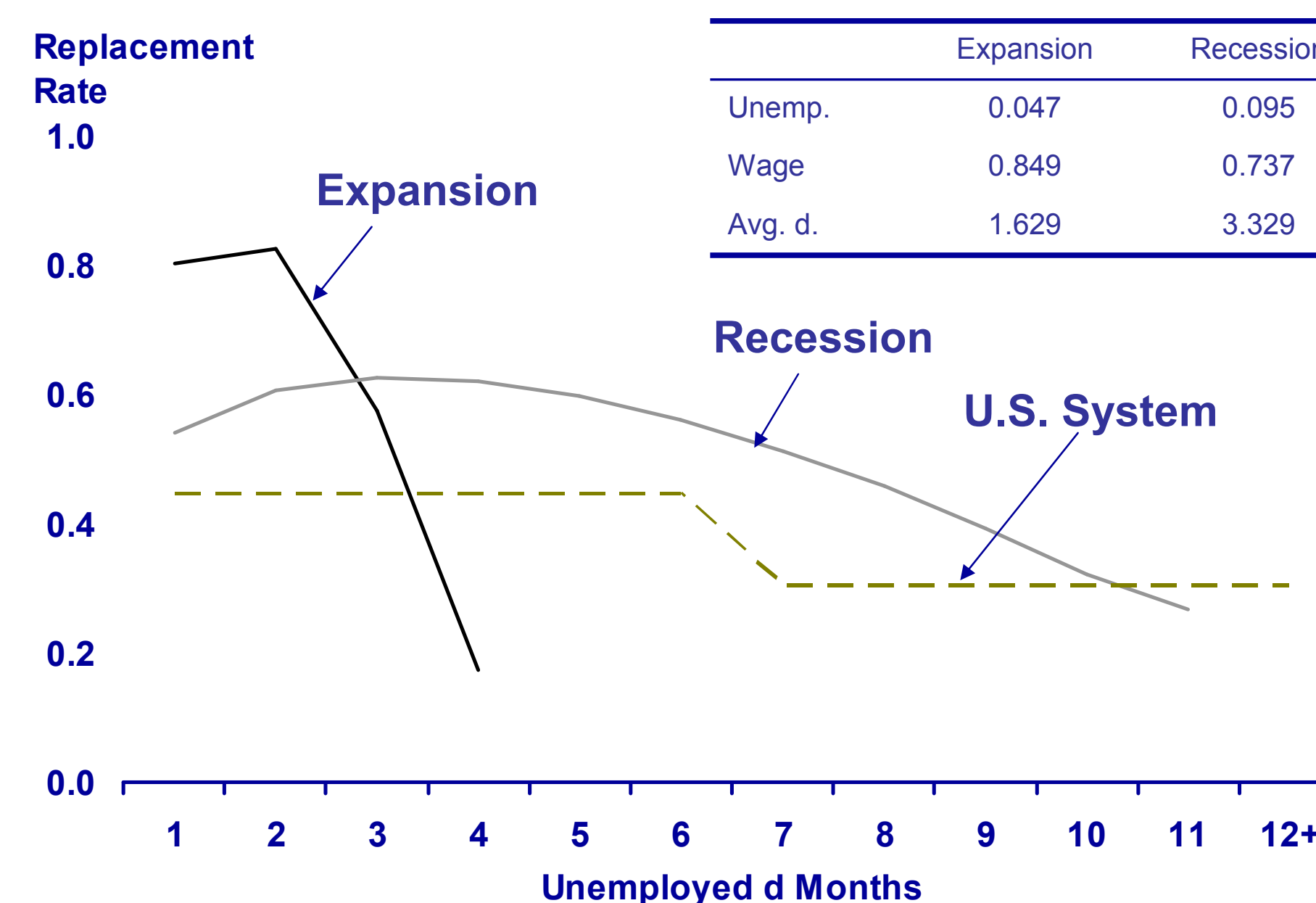
"It is well known that the level of unemployment benefits influences wages, labor cost and labor demand as well as search intensity." (Cahuc and Lehmann)

- UI influences wages and job creation
- Effort varies throughout unemployment spell
- Government optimizes a utilitarian welfare function

Optimal UI: Results

The model is simulated using a Chebyshev polynomial approximation of the social welfare function. Model parameters are taken from the literature and the recession of the 1990s. Three benefit systems were simulated, a replacement rate that

changes throughout the unemployment spell, a two tiered system where benefit levels and duration of benefits change, and a two tiered system where only UI benefit duration changes.

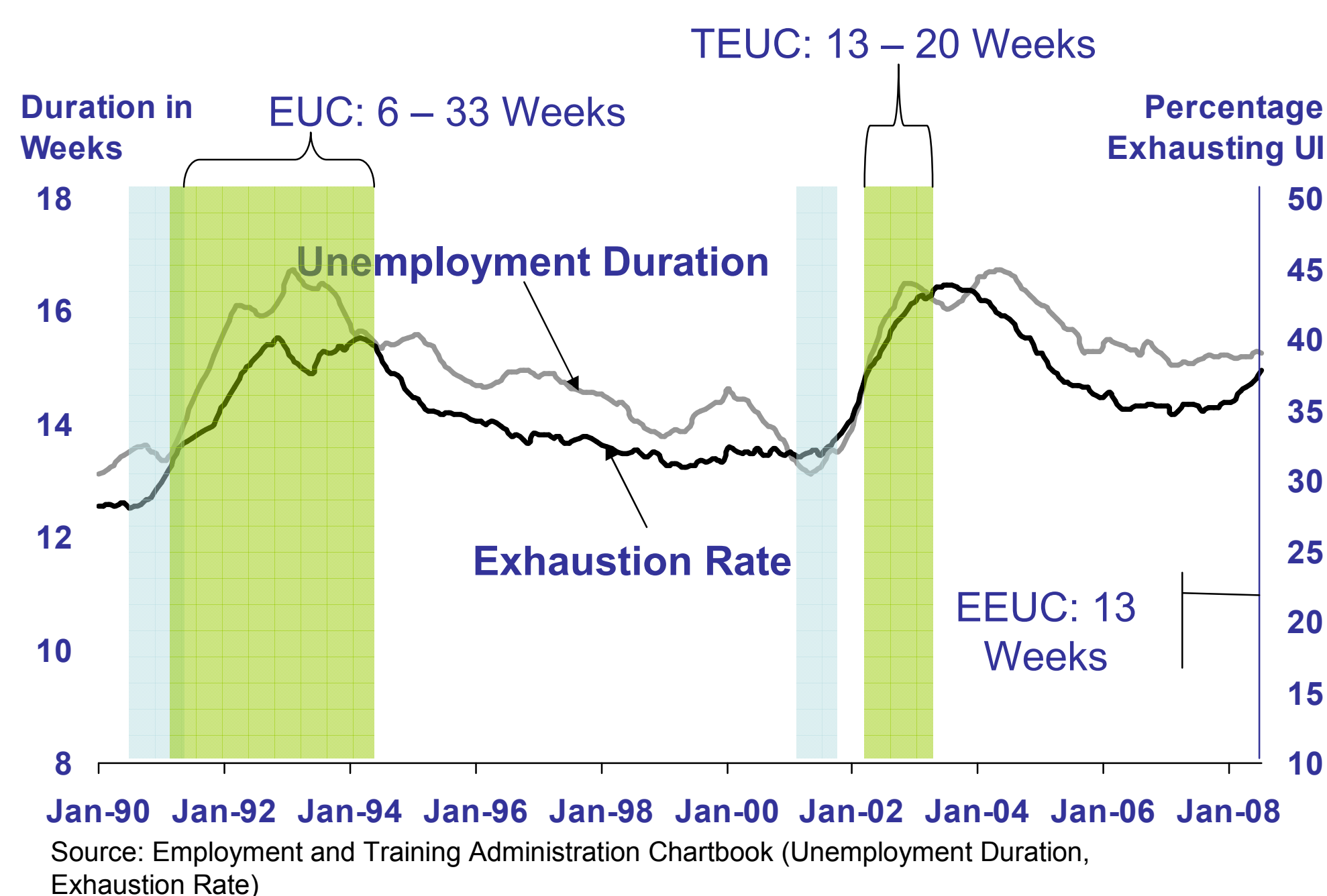


	Flexible Benefits		Fixed Benefits		1990 U.S. System	
	High	Low	High	Low	High	Low
Unemp. Benefit	0.713	0.584	0.448	0.448	0.448	0.448
Welfare Benefit	0.180	0.391	0.306	0.306	0.306	0.306
Potential Dur.	5.827	6.929	4.297	7.302	6.000	6.000
Unemp.	0.070	0.097	0.049	0.065	0.054	0.064
Average dur.	2.420	3.522	1.854	2.511	2.089	2.429
Pr. Exhaustion	0.082	0.195	0.040	0.025	0.014	0.038

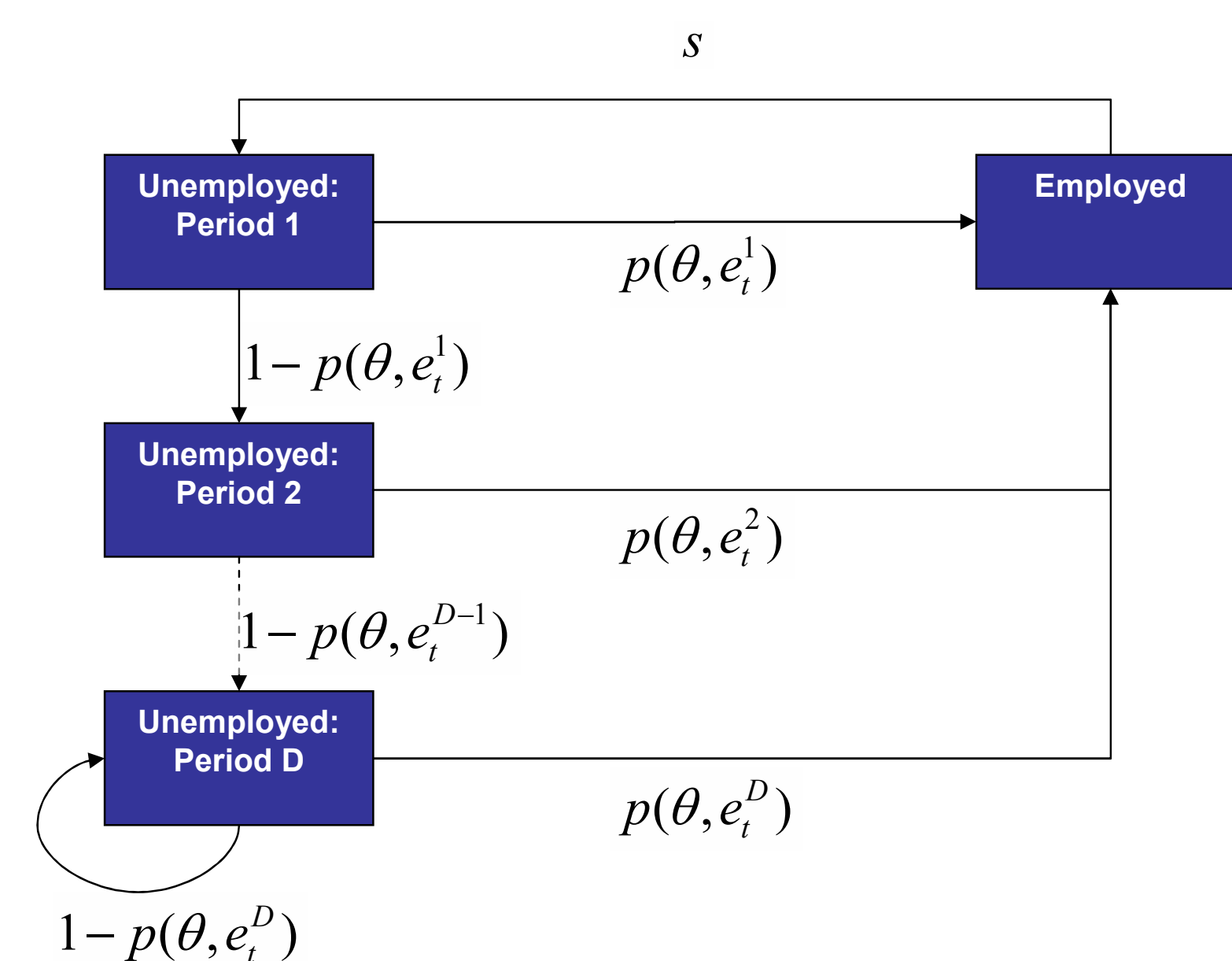
Elasticity with respect to u	
Unemp. Benefit	-0.553
Welfare Benefit	2.055
Potential Dur.	0.148
	1.818

Conclusion: Greater benefits should be provided to the long-term unemployed in recessions. The short-term unemployed may receive lower benefits to encourage job creation.

Unemployment & Exhaustions

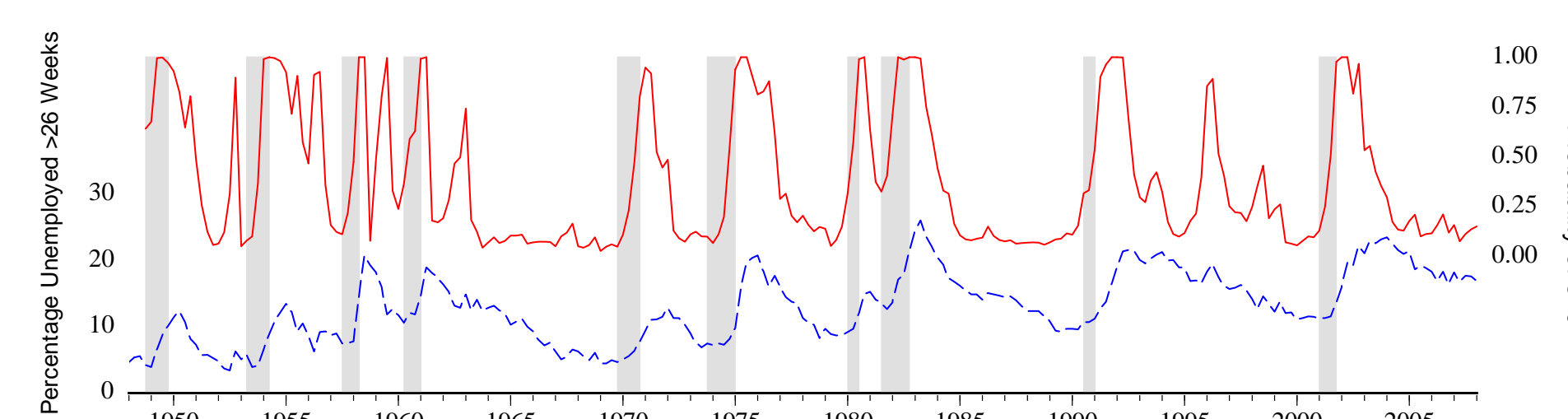
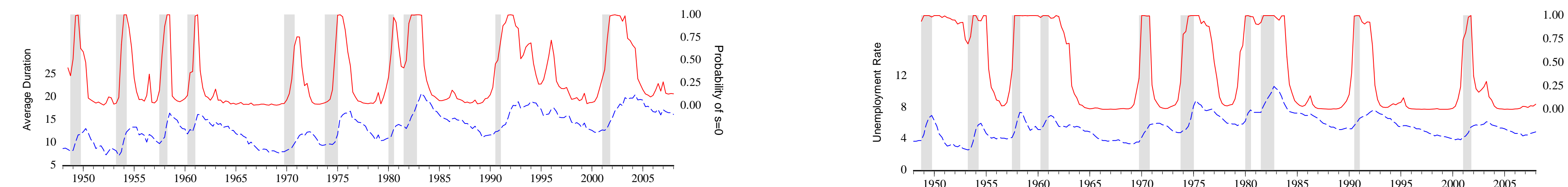


Worker Flows



When to Extend Benefits: Identify and Forecasting Downturns

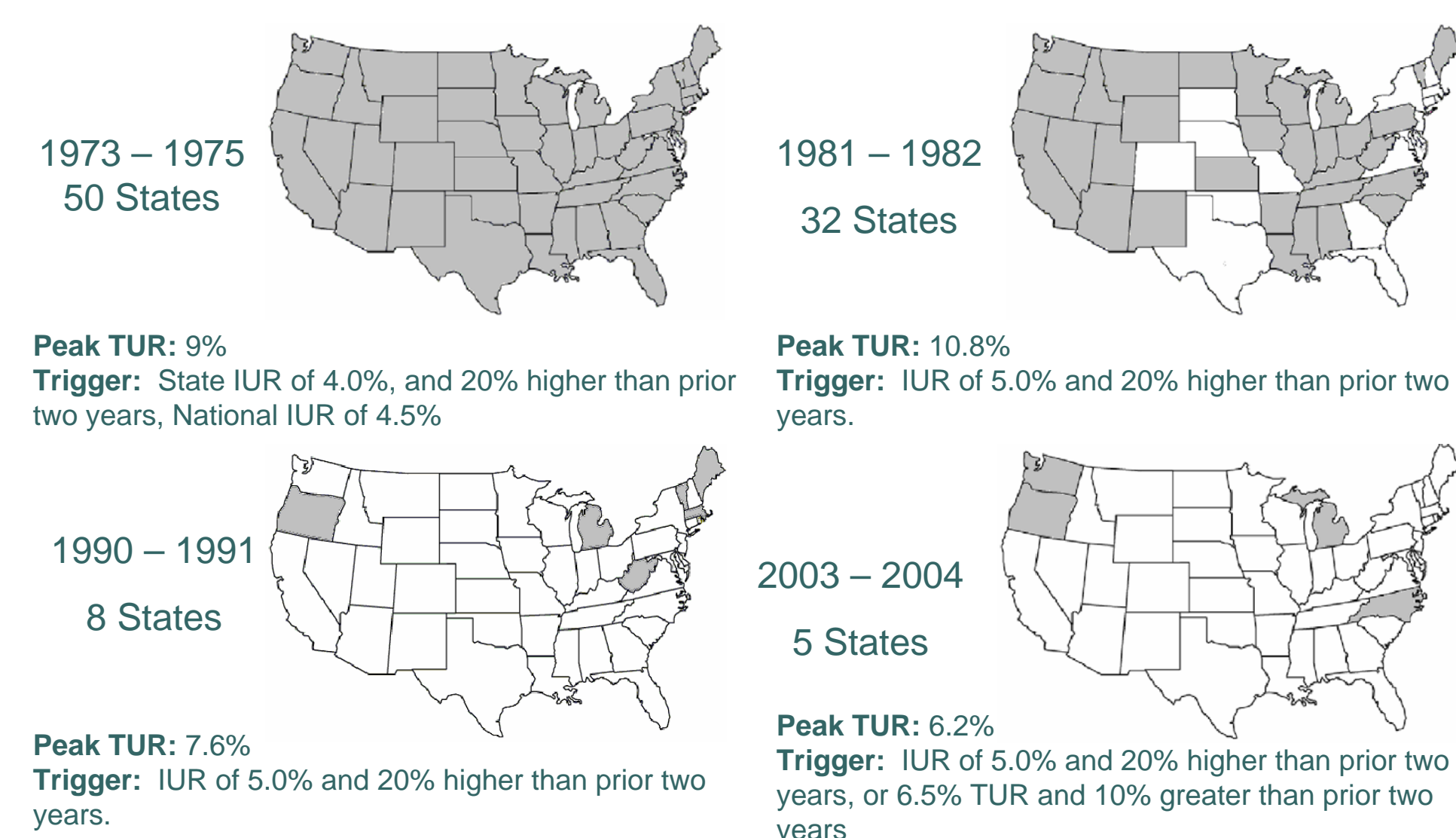
Several labor market series are estimated to identify periods of poor labor market conditions and evaluate their ability to be used to trigger extended unemployment benefits.



	MS Triggers			Wenger and Walters			
	Average Duration (1)	Unemp. Rate (2)	% > 26 Weeks (3)	NBER Recessions (4)	EEB Programs (5)	1970 IUR Trigger (6)	TUR Trigger (8)
Avg. Exhaustions Rate							
1973 - 1979	0.370	0.343	0.371	0.301	0.357	0.361	0.359
1980 - 1989	0.363	0.353	0.365	0.330	0.367	0.376	0.341
1990 - 1999	0.369	0.345	0.356	0.296	0.385		0.370
2000 - 2007	0.410	0.339	0.405	0.326	0.410		
1973 - 2007	0.379	0.347	0.372	0.317	0.375	0.366	0.352

Conclusion: A MS trigger based on the average duration of unemployment improves upon existing and proposed trigger mechanisms and removes the political process from the extension decision.

Automatic UI Extensions



Optimal Effort Level

Optimal level of effort balances marginal private costs and benefits and social benefits. Effort increases during expansions.

