An Outlook for the Wisconsin Economy

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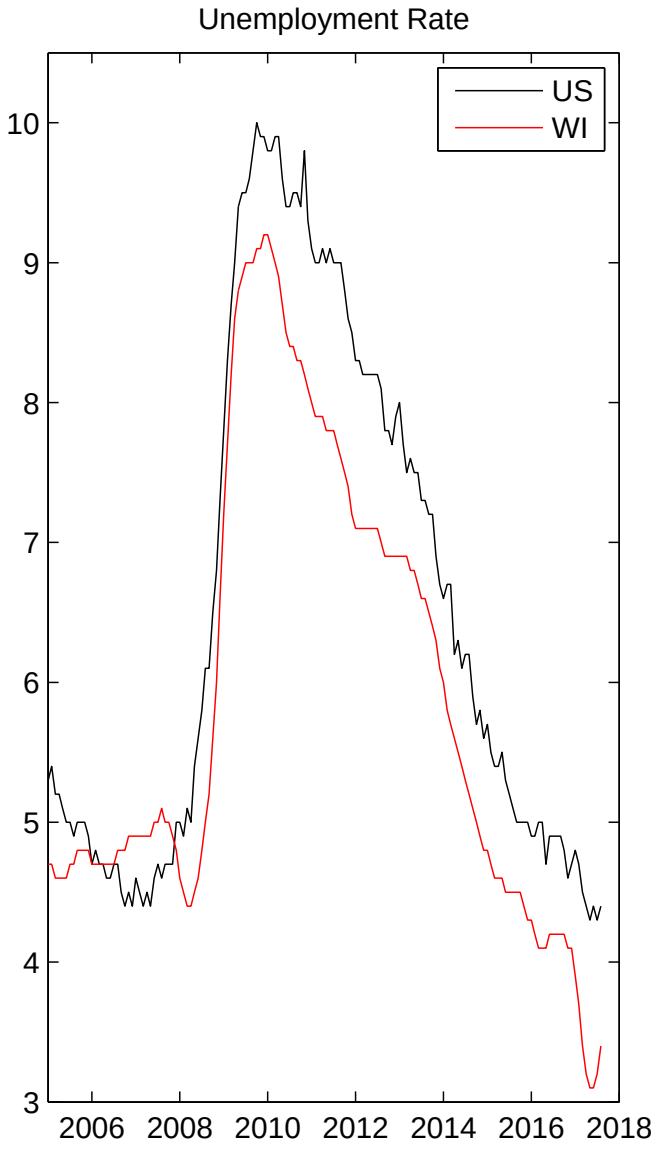
CROWE: Brief Introduction

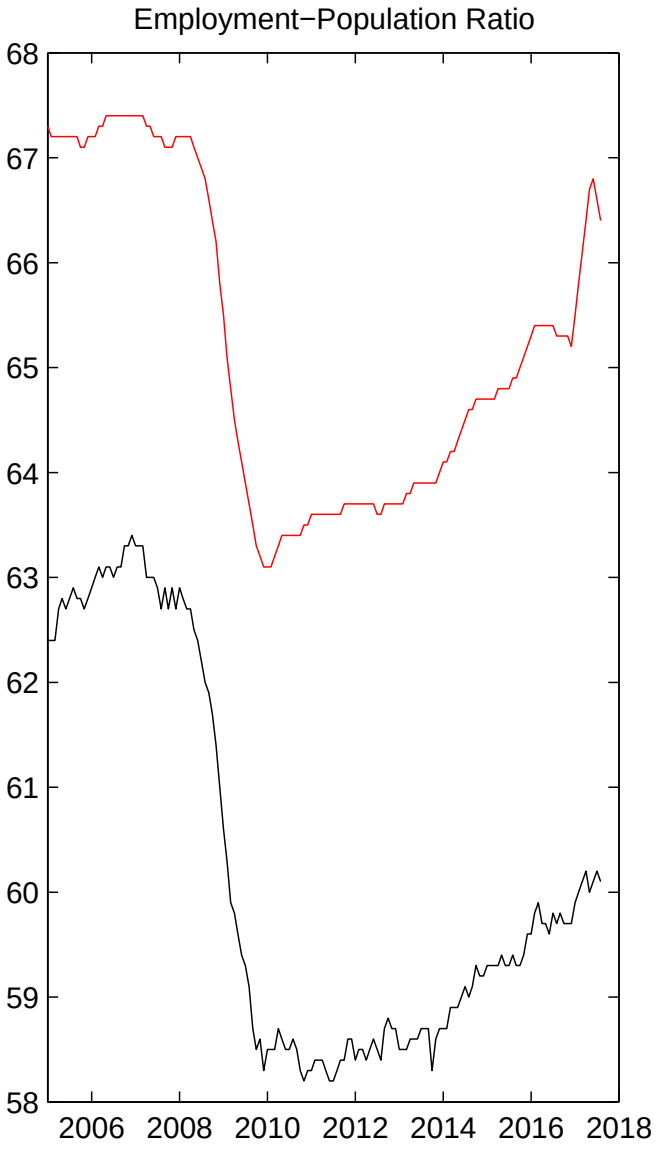
- Center for Research on the Wisconsin Economy (CROWE) recently established in the Department of Economics at UW-Madison.
- The primary mission is to support and disseminate economic policy research, with particular focus on Wisconsin economy and state-level economic policy issues.
- In addition to me: full-time staff economist, fellows and affiliates in Department of Economics
- Recent research reports: The Impact of the Manufacturing and Agriculture Credit in Wisconsin
  An Evaluation of the Economic Impact of the Foxconn Proposal
- Inaugural event on **October 26** with John Taylor

Outlook for the Wisconsin Economy

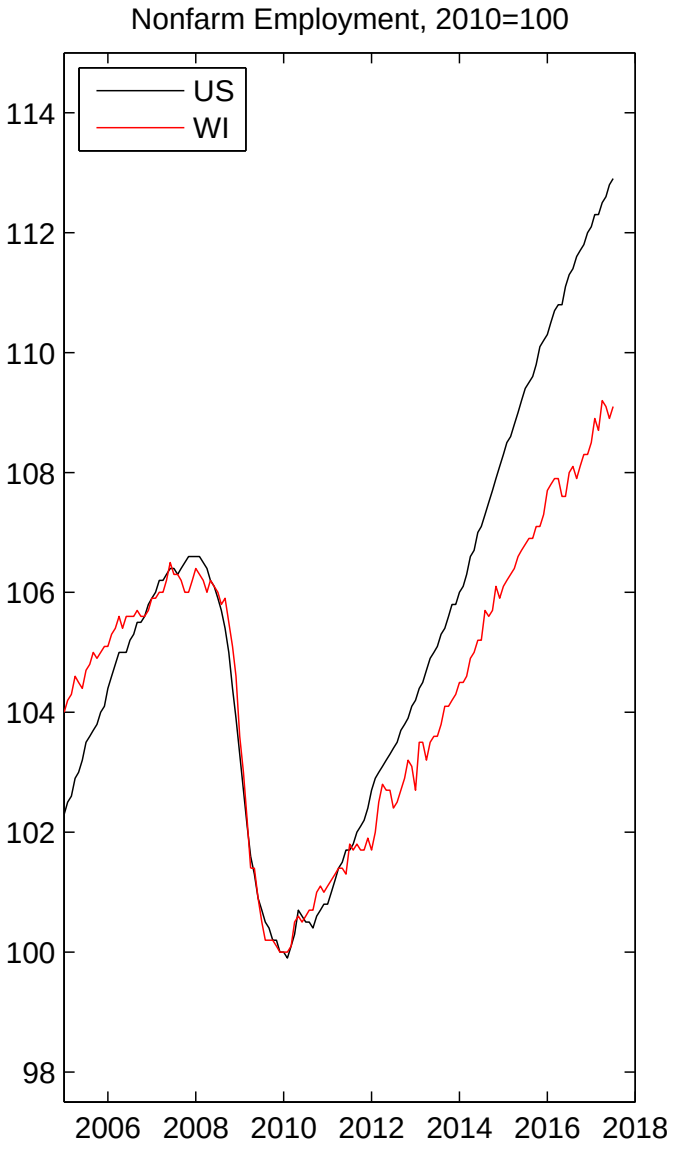
- Tight labor market: low unemployment, high employment-population ratio
- Labor force challenges: low population growth, aging workforce, net outmigration
- State economy has diversified but remains manufacturing-heavy, lacks vibrant urban center
- Biggest economic story: Foxconn. High fiscal costs but potential large gains
- Forecasts: slow and steady growth over next 2+ years

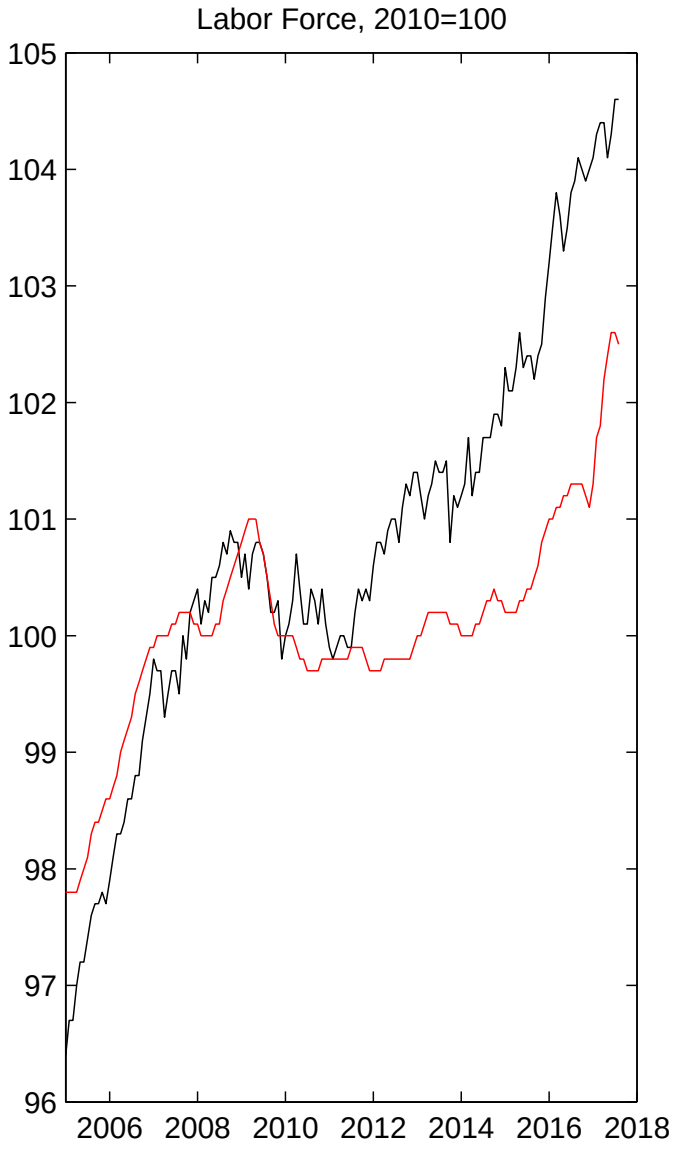
Unemployment and Employment-Population





Employment and Labor Force





Aging and Outmigration

Distruibution of population, Census Bureau

	United States			Wisconsin		
	1999	2010	2015	1999	2010	2015
Under 20	28.7	26.9	25.6	28.8	26.4	25.1
20-44	37.0	33.6	33.4	36.2	32.2	31.6
45-54	13.1	14.5	13.4	13.3	15.3	13.9
55-65	8.6	11.9	12.7	8.6	12.4	13.8
65+	12.7	13.1	14.9	13.2	13.7	15.6
Median Age	35.5	37.2	37.8	36	38.5	39.2

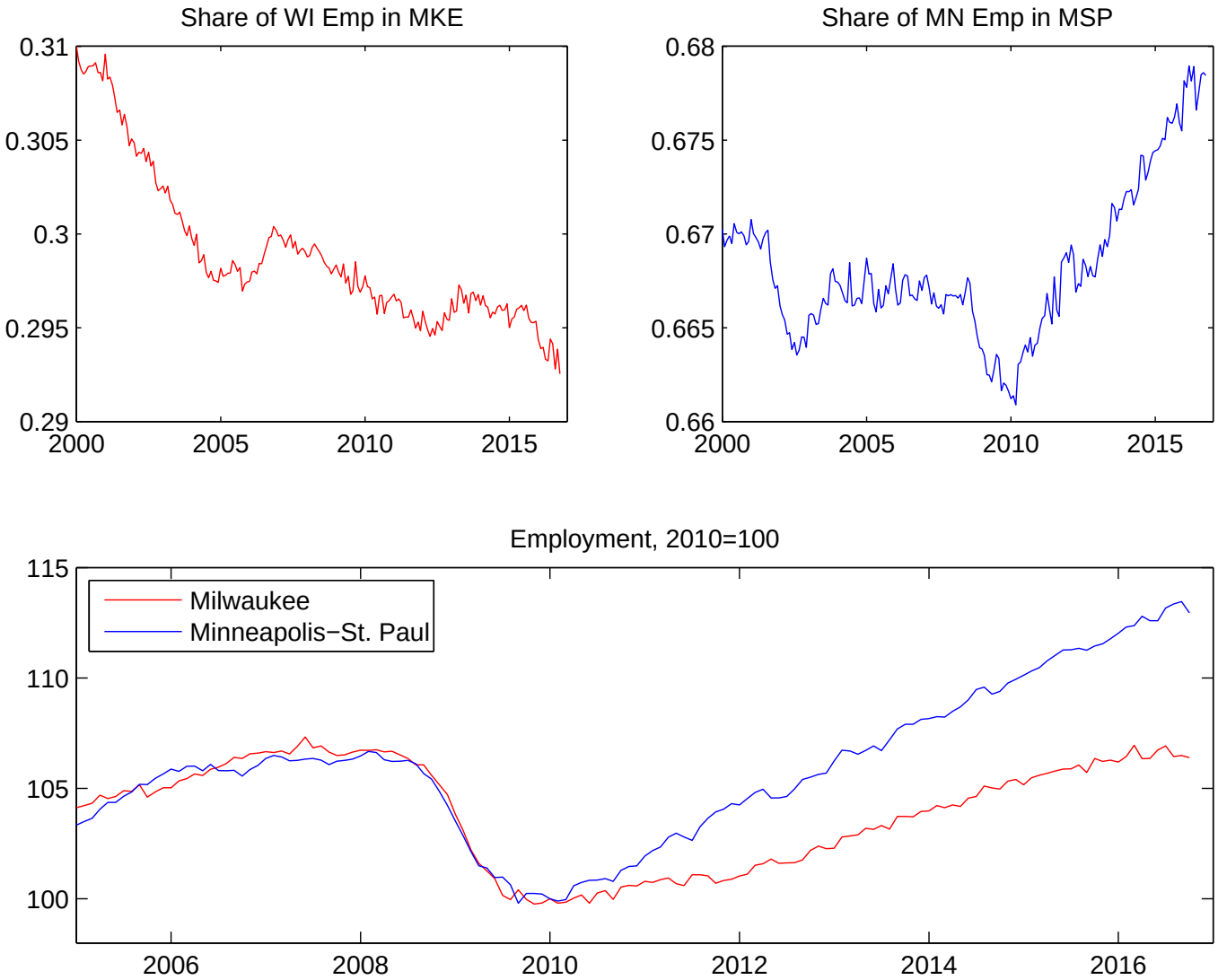
Net Migration (Exemptions)
IRS Data 2014-15

By Age	WI
Total	**-7,441**
Under 26	-2,041
26-35	-1,175
35-45	-1,340
45-55	-720
55-65	-943
65+	-1,222

Differences in Sector Shares and Growth

Real GDP by State by Industry	United States			Wisconsin	
Industry	2016 Share	2011-16 Growth		2016 Share	2011-16 Growth
All industry total (billion)	$ 16,259	10.5		$ 273	7.4
Private industries	88.0	12.3		89.1	8.9
Construction	4.0	19.7		3.9	21.8
Manufacturing	11.7	5.3		18.6	4.3
Wholesale & Retail trade	12.1	13.2		12.0	12.1
Information	5.5	23.2		3.8	24.5
Finance and insurance	6.3	4.3		7.0	11.0
Real estate and rental and leasing	13.5	11.2		12.5	2.9
Professional, scientific services	7.4	17.6		4.3	13.6
Health care and social assistance	7.5	14.5		8.8	8.4
Government	12.0	-0.7		10.9	-3.2

Urban Concentration: Wisconsin vs Minnesota



Wildcard: Foxconn

- Foxconn investment deal announced in July, legislation in September, contract ongoing, planned opening 2019-20.
- Planned investment of up to $10 billion, initial employment of 3,000 increasing to up to 13,000
- State subsidies of $2.85 billion over 15 years tied to scale: 15% of investment, 17% of payroll.
- At full operation, I estimated 32,000-39,000 total direct and indirect jobs including Foxconn's supply chain and other induced activity
- Even if all output produced by Foxconn except direct labor income went out of state, cumulative multiplier of 3.9 on the states subsidy costs.
- Recent studies have shown large plant openings can have big spillovers on incumbent companies especially in productivity. But wide variation in outcomes.

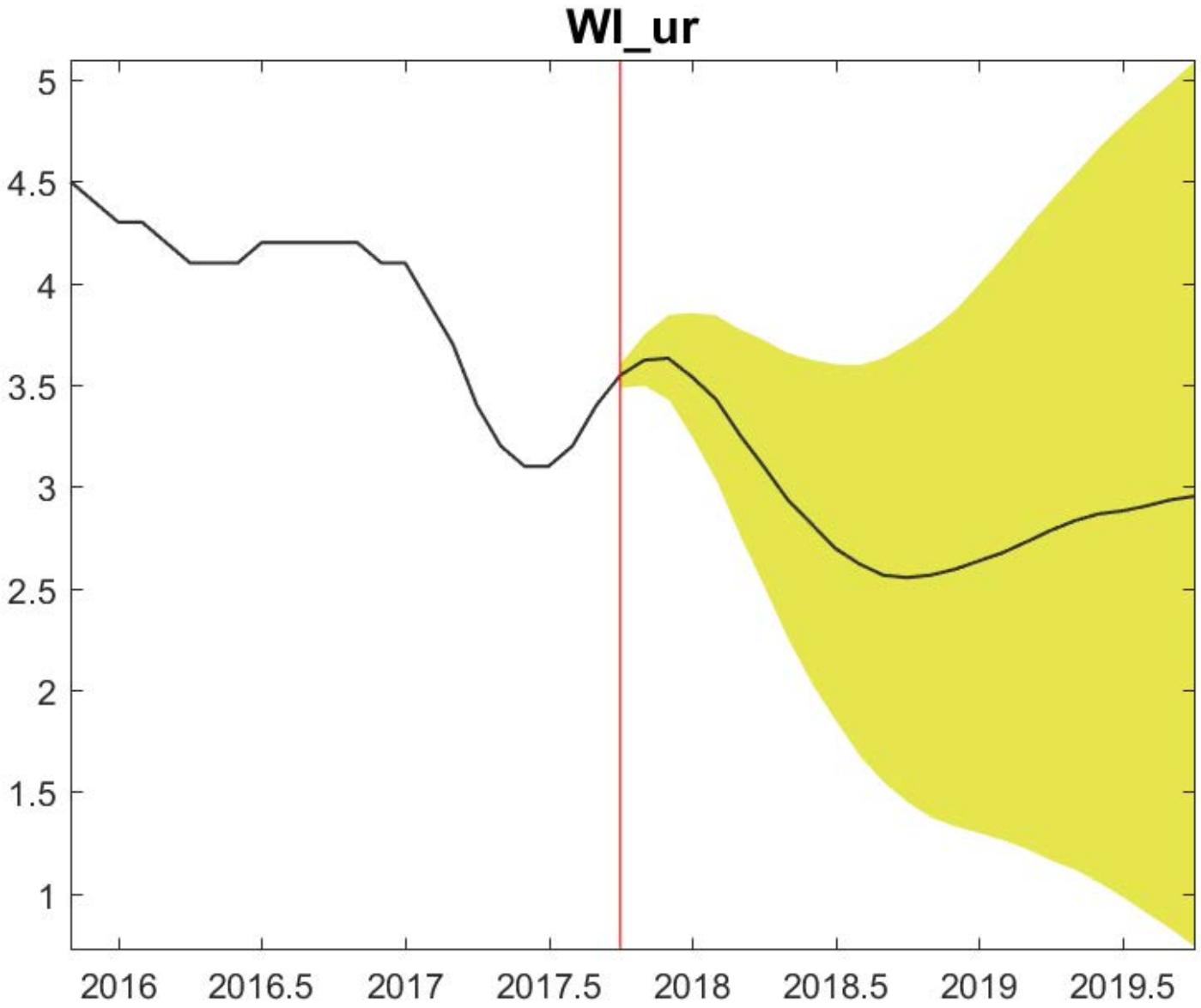
Economic Forecasts

- Recently at CROWE we have constructed an empirical model for the US and WI economies
- We adapt an approach that was used the Federal Reserve Bank of Minneapolis to forecast the U.S. economy.
- Our approach uses the relationships among 28 variables: 17 national and 11 at the state level. State-level variables depend on national but not vice versa.
- We estimate the model and then use it to project over the next two years.

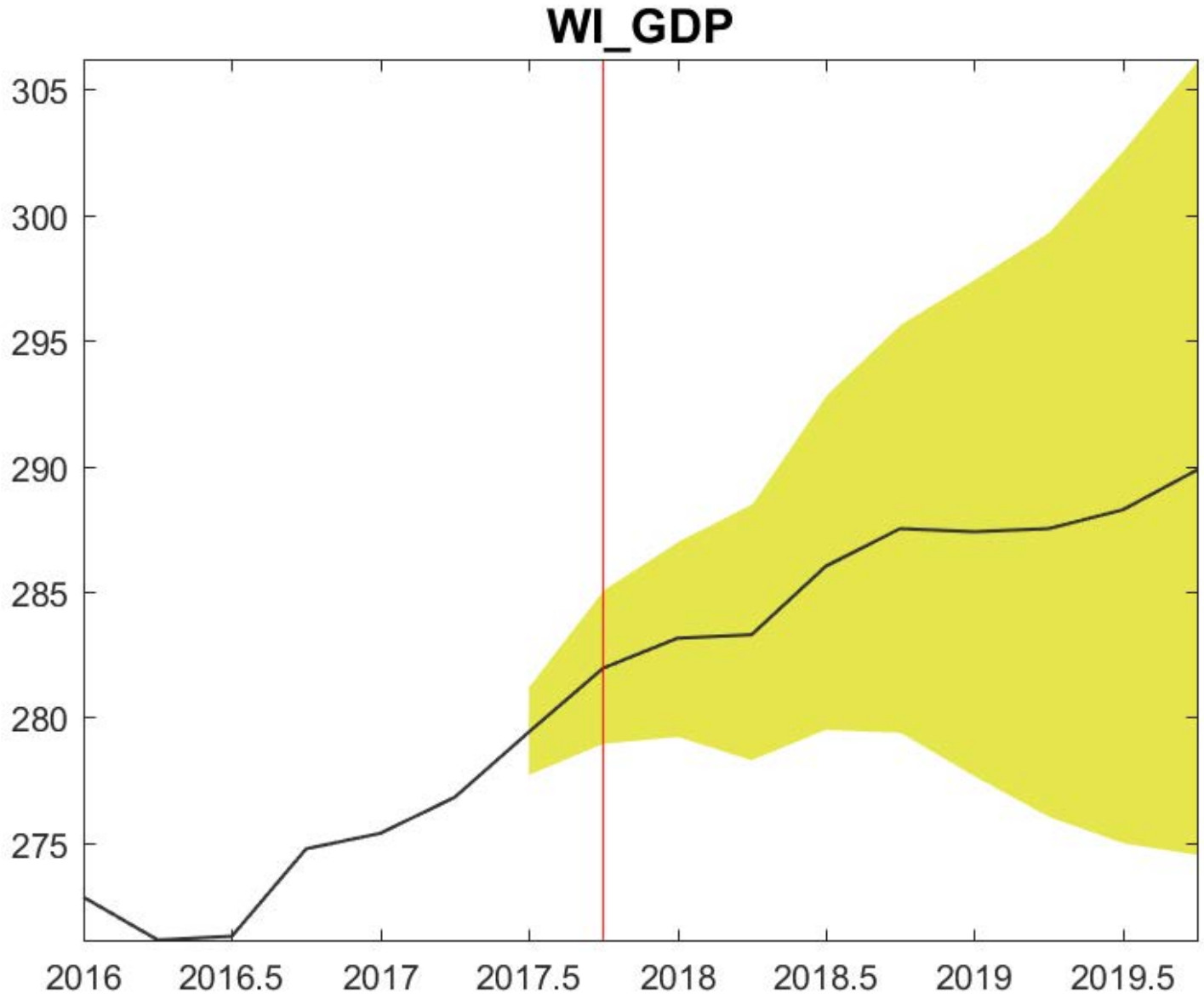
Forecast Summary

	Unemployment		Employment			GDP	
Month	US	WI	US	WI	Quarter	US	WI
2016M12	4.7	4.1	2240	26.4	2016Q4	1.8	0.9
2017M4	4.4	3.2	2200	35.9	2017Q1	2.0	2.1
2017M6	4.4	3.1	2220	34.3			
2017M8	4.4	3.4	2100	19.0	2017Q2	2.2	3.0
2017M9	4.5	3.5	1781	21.3	2017Q3	2.2	2.6
2017M10	4.5	3.6	2113	20.8			
2017M11	4.5	3.6	2146	18.4			
2017M12	4.5	3.5	2505	17.6	2017Q4	2.2	2.8
2018M3	4.2	3.1	2658	15.8	2018Q1	2.4	2.3
2018M6	4.1	2.7	3165	26.4	2018Q2	2.3	2.4
2018M9	4.0	2.6	3466	42.1	2018Q3	2.1	2.0
2018M12	4.1	2.6	2852	37.6	2018Q4	1.8	1.5

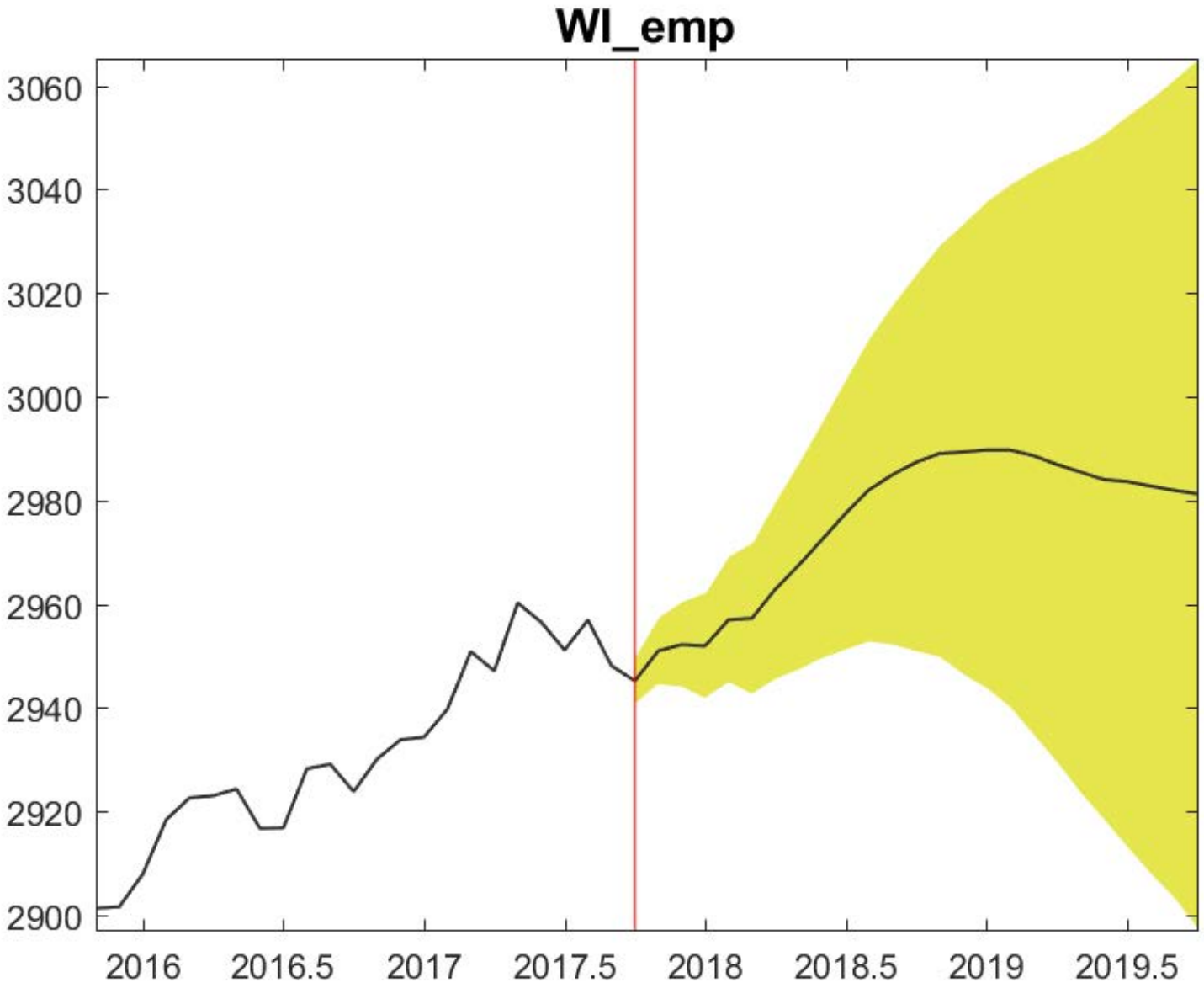
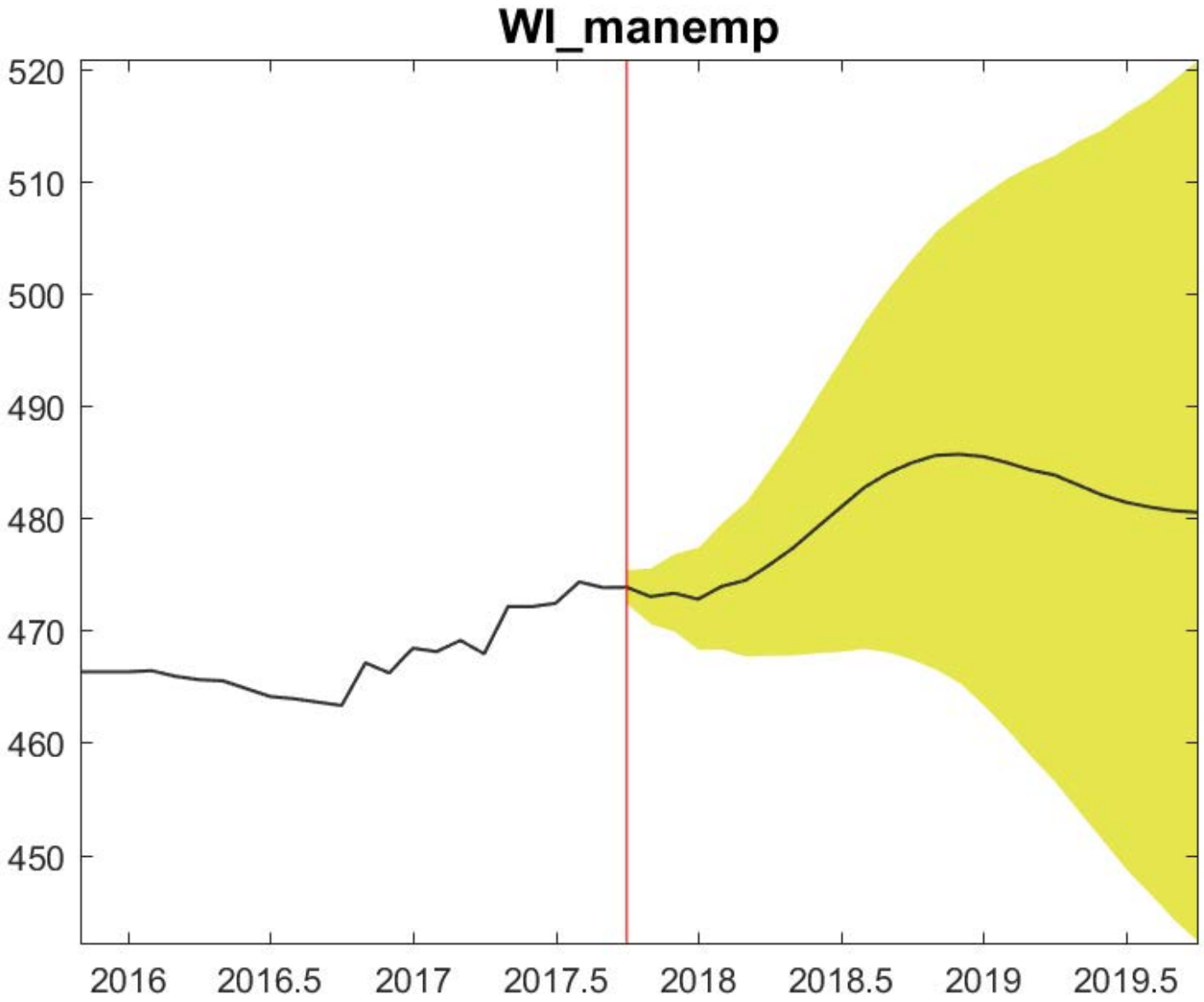
Wisconsin Forecast: Unemployment Rate



Wisconsin Forecast: GDP



Wisconsin Forecast: Employment



Wisconsin Forecast: Manufacturing Employment