

Research Seminar in Quantitative Economics University of Michigan Ann Arbor, Michigan 734-764-2567

Isa.umich.edu/econ/rsqe.html

THE U.S. AND MICHIGAN ECONOMIC OUTLOOK FOR 2018–2020

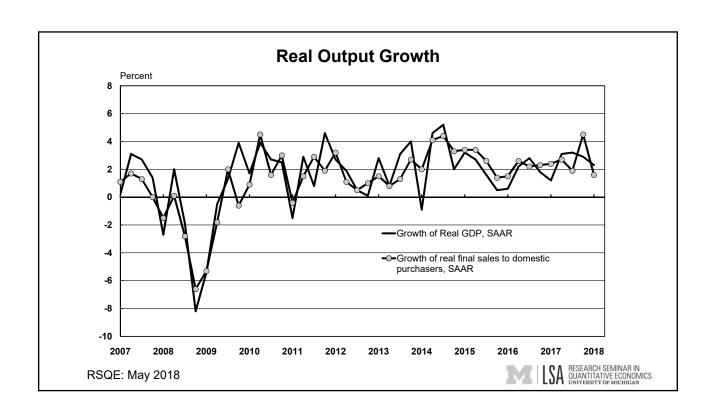
PREPARED FOR PRESENTATION AT THE CONSENSUS REVENUE ESTIMATING CONFERENCE

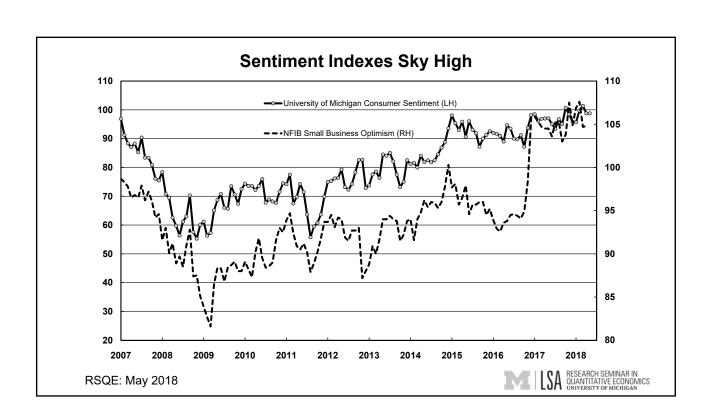
LANSING, MICHIGAN MAY 16, 2018

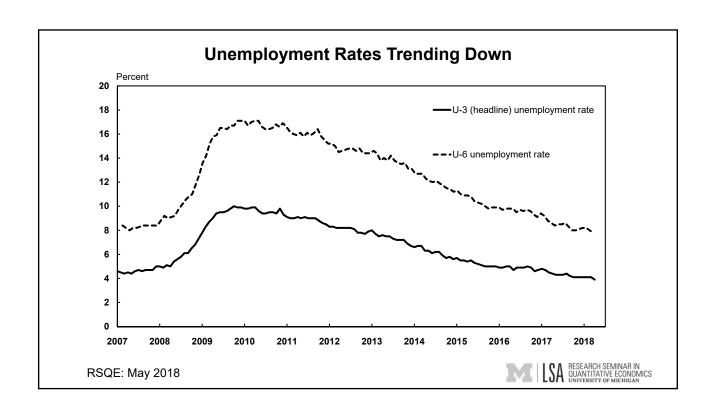
BY

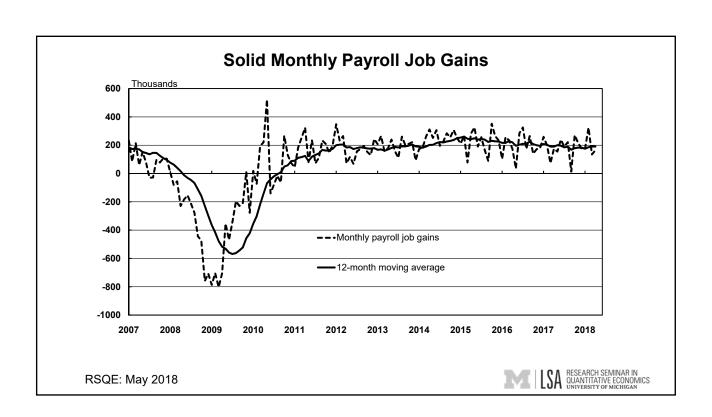
JACOB BURTON
GABRIEL EHRLICH
DANIIL MANAENKOV
MICHAEL MCWILLIAMS
OWEN NIE
ADITI THAPAR

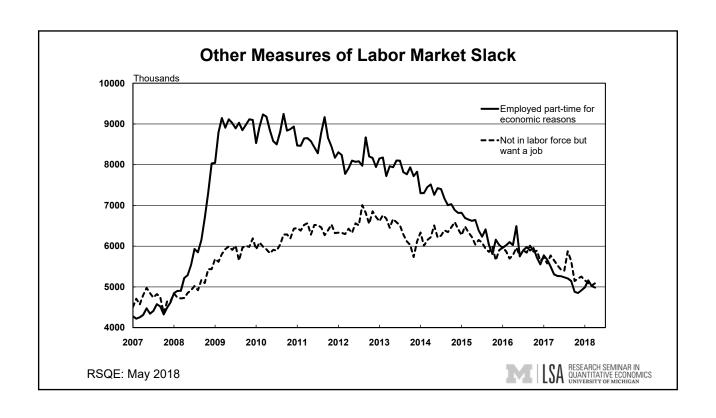
"The Michigan Model"

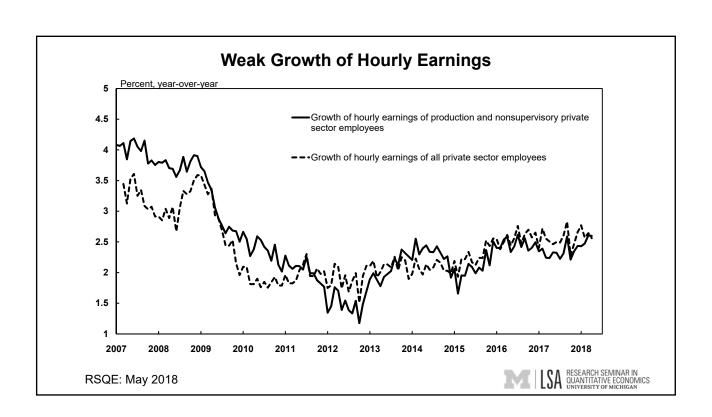


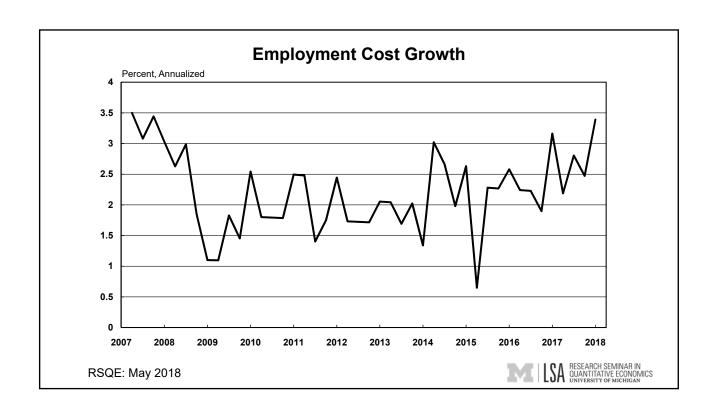


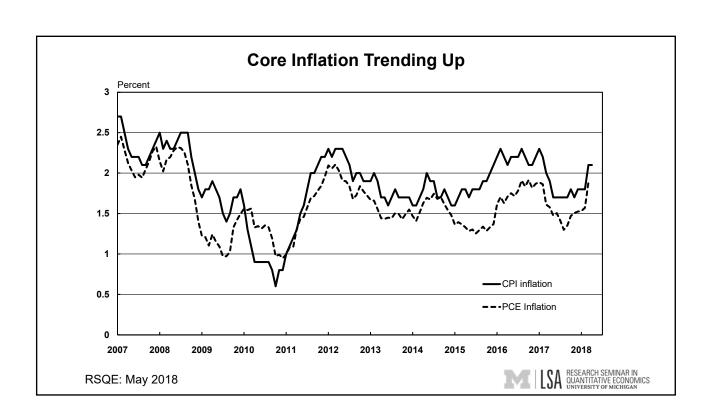


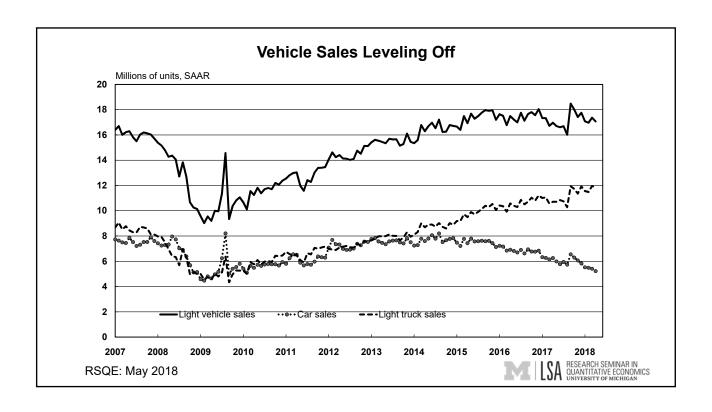








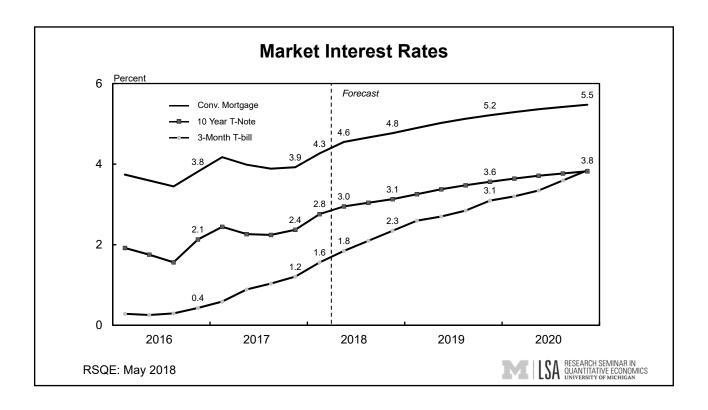




Monetary Policy: Steady Tightening

- Federal funds rate path consistent with our outlook:
 - Latest rate hike in March, 2018
 - Three more 25 basis point hikes in 2018, three in 2019
 - The latest Fed "dot plot" has only two more hikes
- ➤ New leadership at the Fed
 - Jerome Powell leadership style not yet clear. Continuity expected.
 - Four open seats at the Board of Governors



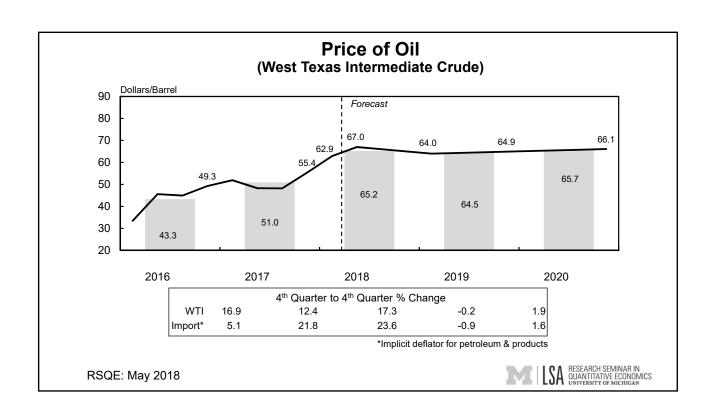


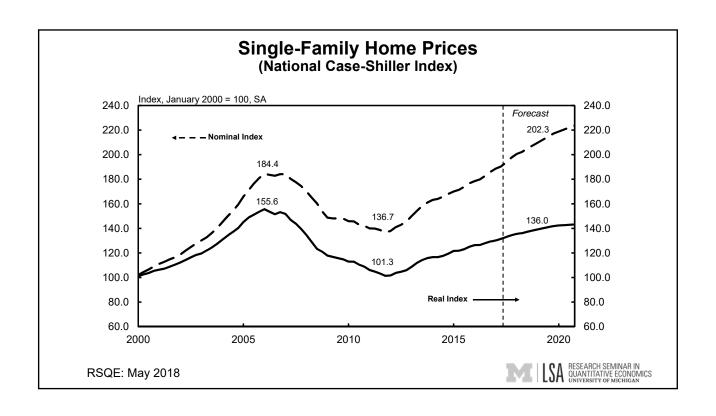
Fiscal Policy—A Major Boost to the Outlook

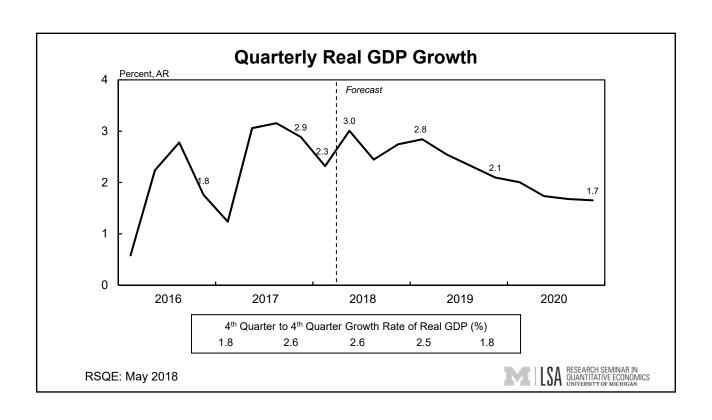
- ➤ Tax Cuts and Jobs Act
 - \$1.5 trillion in new deficits over 2018–27
 - Boosted our GDP forecast by ~0.2pp in 2018–19
- ➤ Bipartisan Budget Act of 2018 & The Omnibus
 - Authorized almost \$300 billion in new spending during fiscal 2018–19
 - More than 12 percent increase in discretionary caps compared to 2017
 - It will take time to ramp up government spending
 - Lifted our GDP forecast by 0.2pp in 2018, 0.3pp in 2019, and 0.1pp in 2020

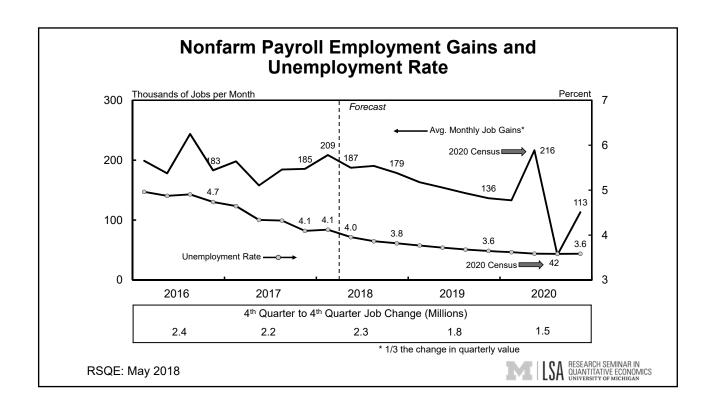


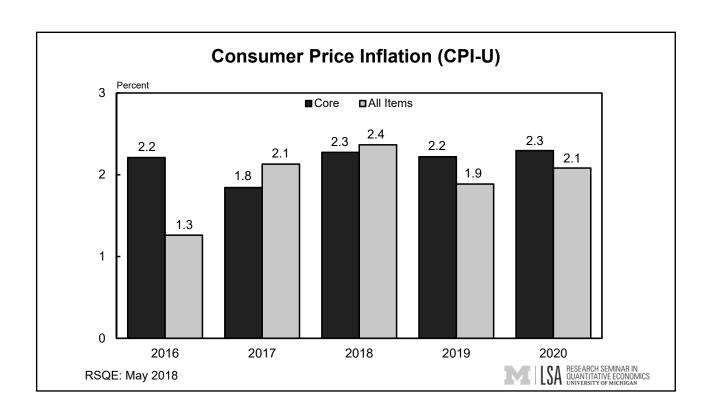
(Billions of Dollars)								
	Forecast							
	<u>FY'17</u>	<u>FY'18</u>	<u>FY'19</u>	FY'20	FY'21			
Current receipts	3560.8	3612.7	3749.5	3951.1	4183.1			
% change	3.0	1.5	3.8	5.4	6.1			
Current expenditures	4217.3	4462.3	4740.3	4994.9	5208.4			
% change	2.4	5.8	6.2	5.4	4.7			
Consumption	971.4	1012.5	1098.4	1156.7	1152.3			
% change	0.8	4.2	8.5	5.3	1.7			
Transfer payments	2693.5	2811.2	2932.2	3054.4	3190.8			
% change	2.4	4.4	4.3	4.2	4.4			
Surplus (+) or deficit (-)	-656.4	-849.5	-990.8	-1043.8	-1025.2			
Percent of GDP	-3.4	-4.2	-4.7	-4.7	-4.5			

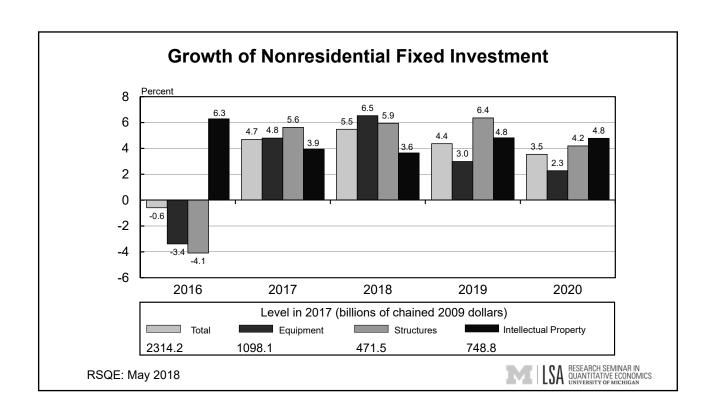


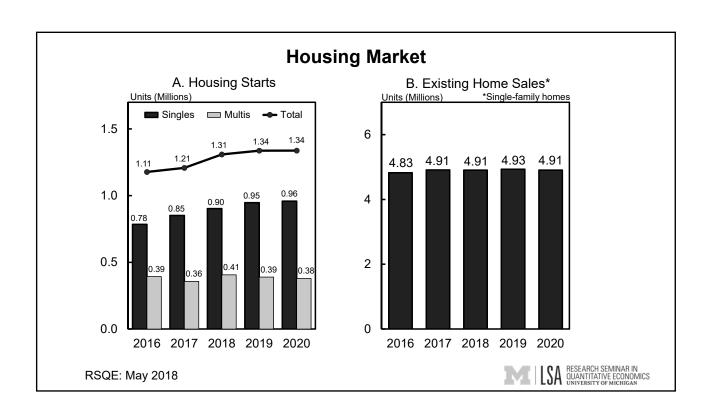


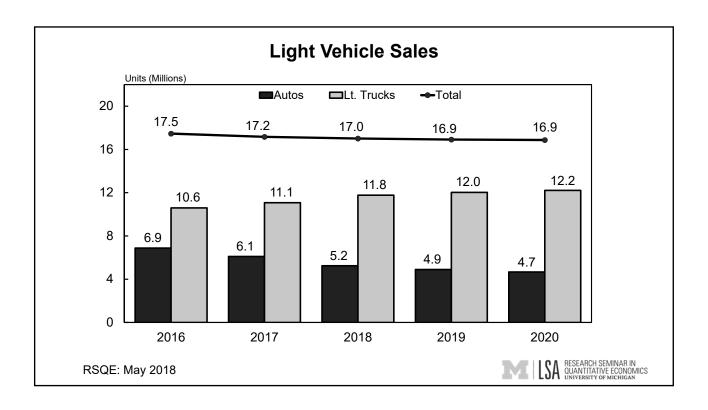






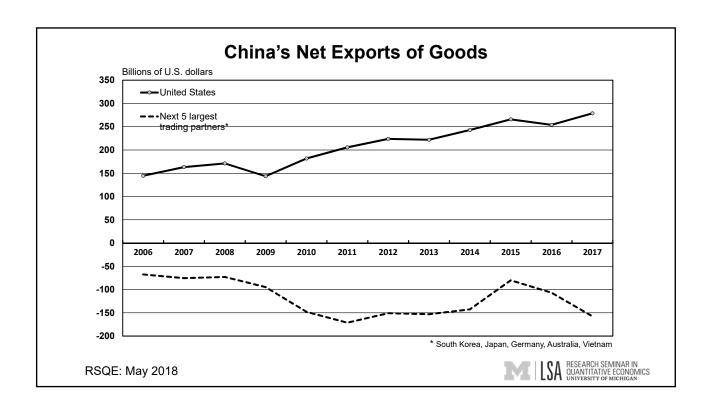






Brief Thoughts on China Trade Tensions

- ➤ China's current role in global supply chains: point of assembly
- ➤ China runs significant goods trade deficit with Australia, Brazil, Germany, Japan, South Korea, Switzerland
- ➤ And significant goods trade surplus with the United States
- ➤ Significant tariffs targeting China will lower trade with China, but might not narrow the trade deficit much
 - Supply chains will adjust eventually
 - Transshipping is hard to police when tariffs only target one country
- ➤ Raising trade barriers is unlikely to make up even a fraction of jobs lost due to globalization.



Limited China Escalation Scenario

- > \$50 billion of Chinese and US goods subject to 25% bilateral tariffs
- ➤ Short-term, U.S. trade deficit shrinks by ~\$25 billion
 - Returns to baseline path in the longer-run
- ➤ Overall consumer price level goes up by 0.1 percentage points
- ➤ Investment prices for equipment jump by 1 percentage point
- Slower consumption and investment undo GDP boost from net exports
- ➤ Medium-term growth is weaker due to net exports rising back to trend
- ➤ About 200,000 jobs and 0.3 percent of GDP lost through 2021



Risks to Our Outlook

- ➤ Oil Prices and Geopolitical Risks
- ➤ Fiscal Policy
- ➤ Monetary Policy
- ➤ Trade Policy
- ➤ Abnormal weather

RSQE: May 2018

RESEARCH SEMINAR IN QUANTITATIVE ECONOMICS UNIVERSITY OF MICHIGAN

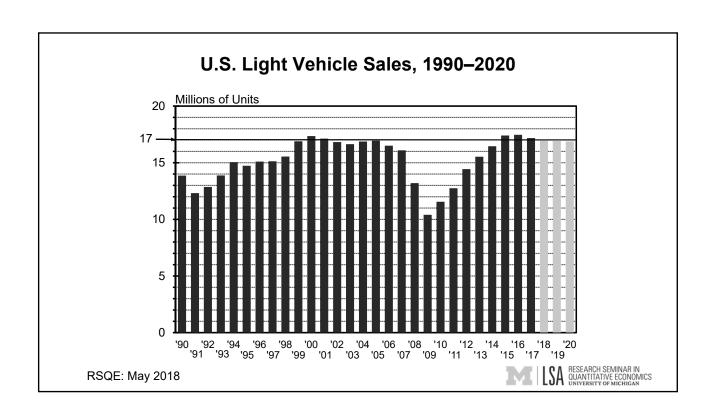
The Michigan Economic Outlook For 2018–2020

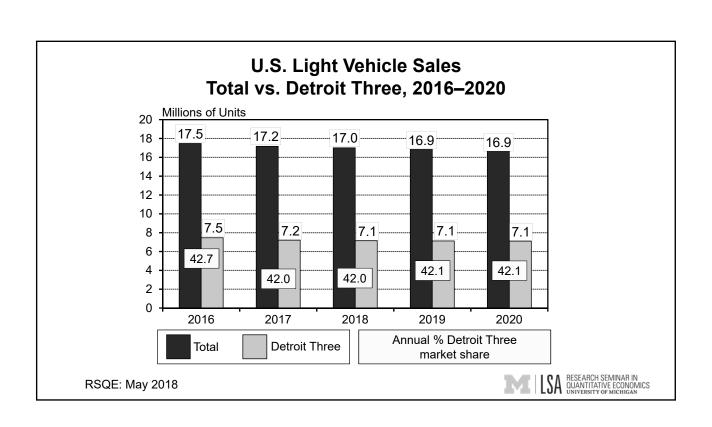


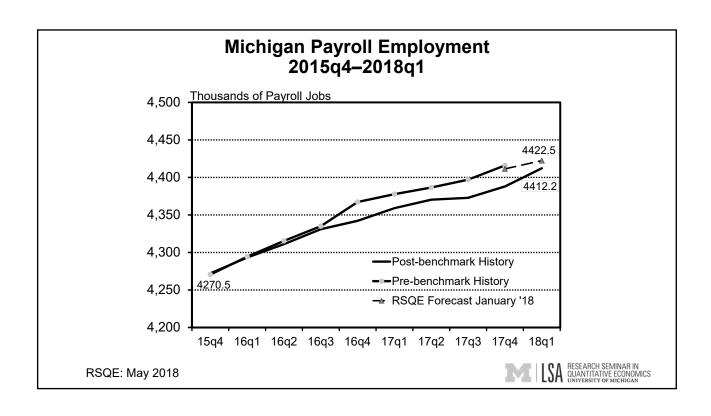
Consensus Revenue Estimating Conference Lansing, MI May 16, 2018

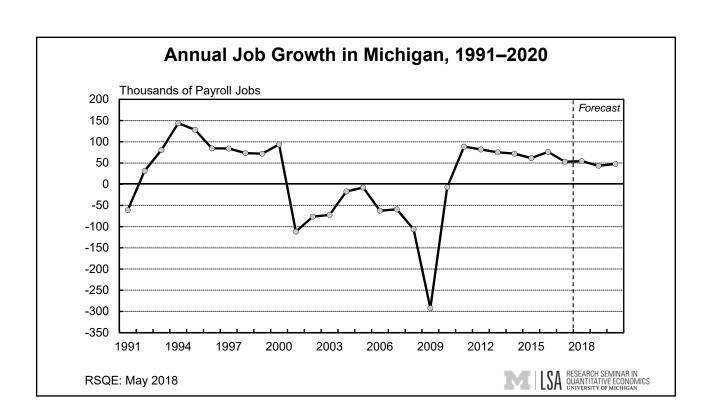
Research Seminar in Quantitative Economics

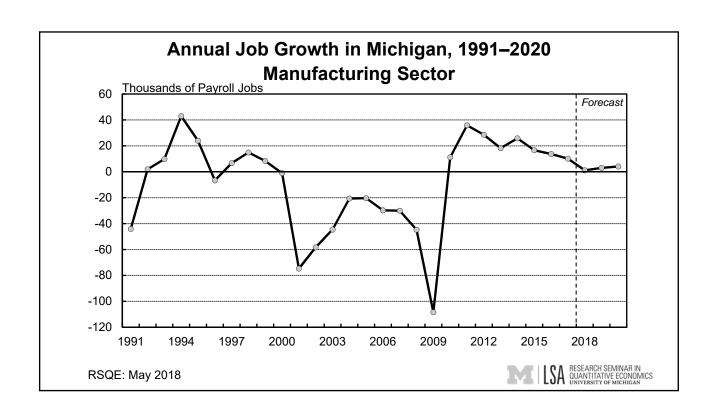




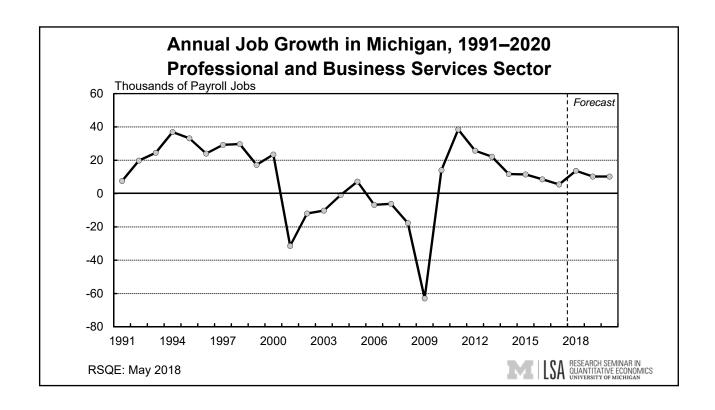


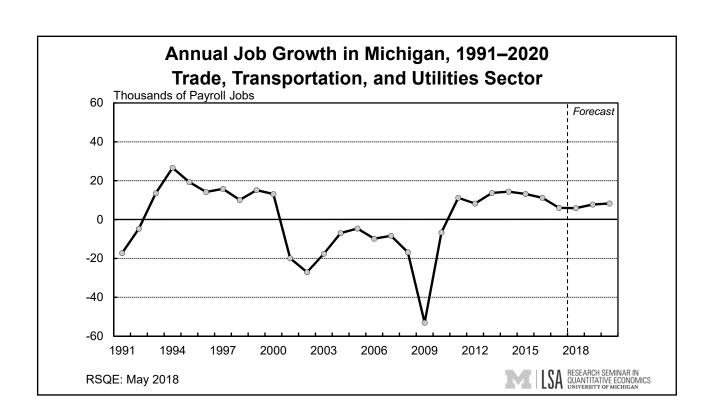


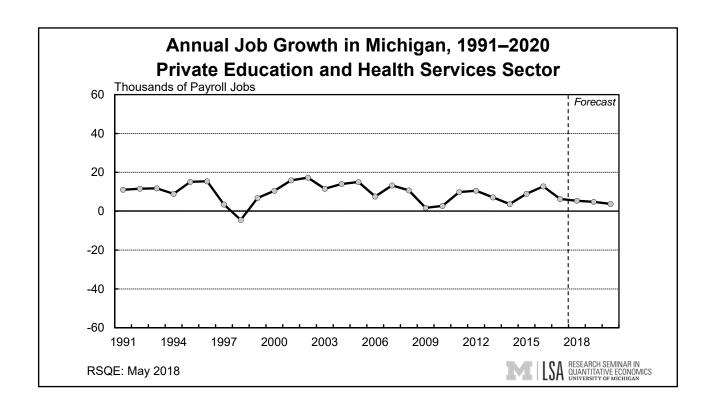


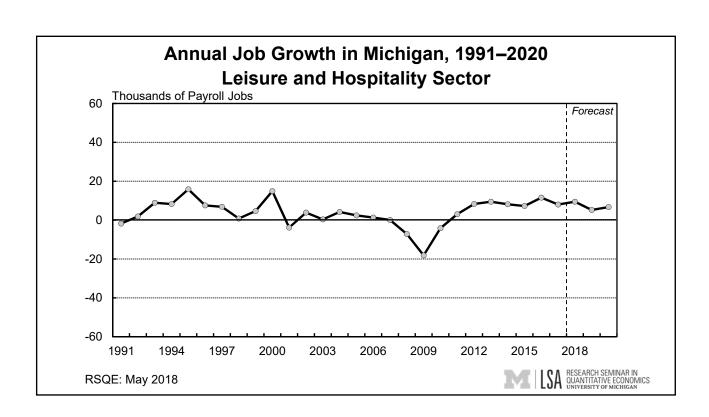


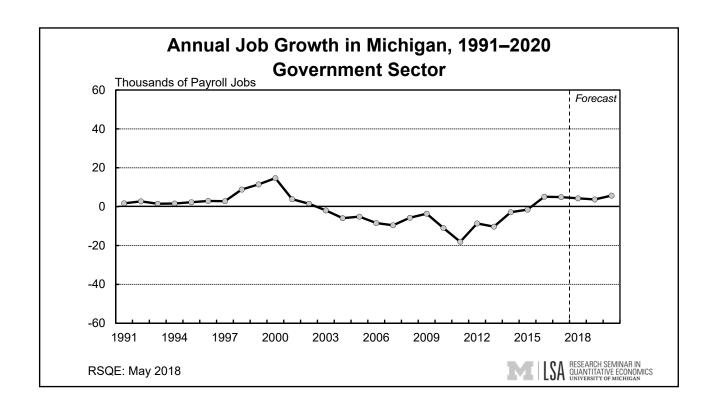


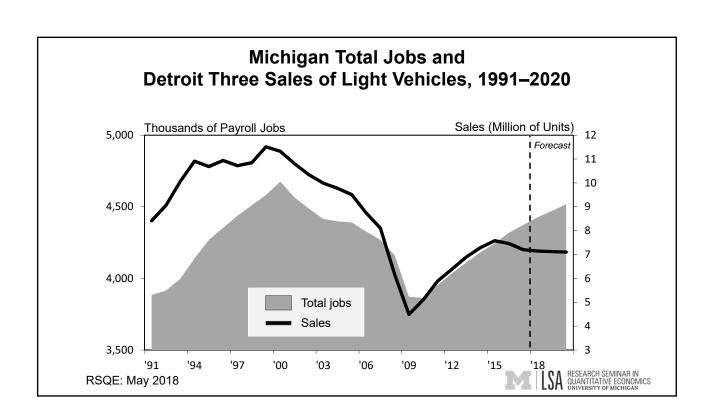


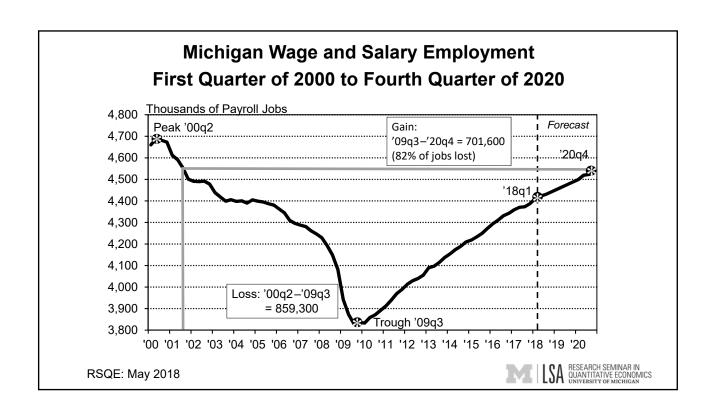


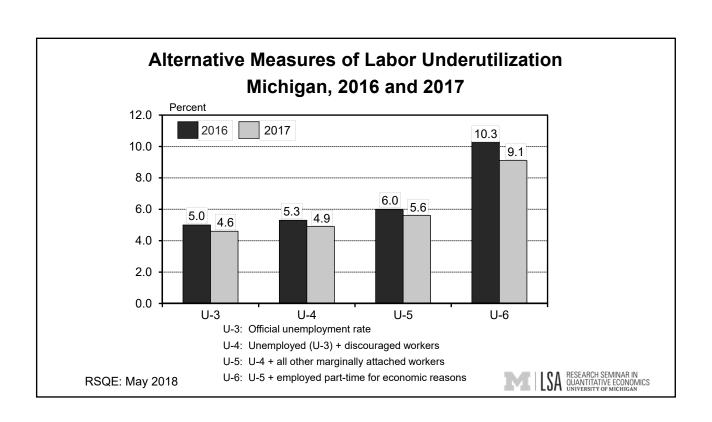


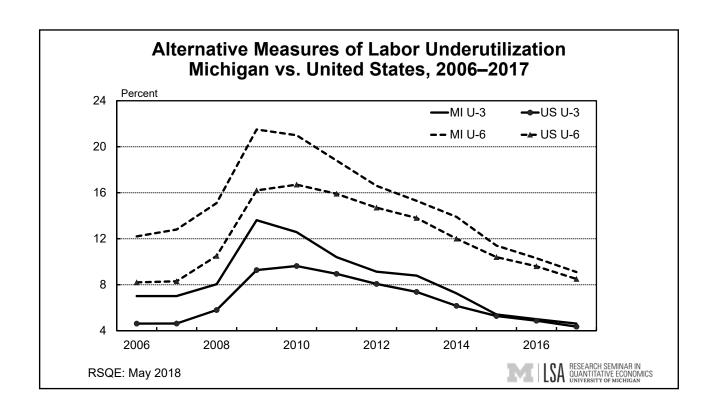


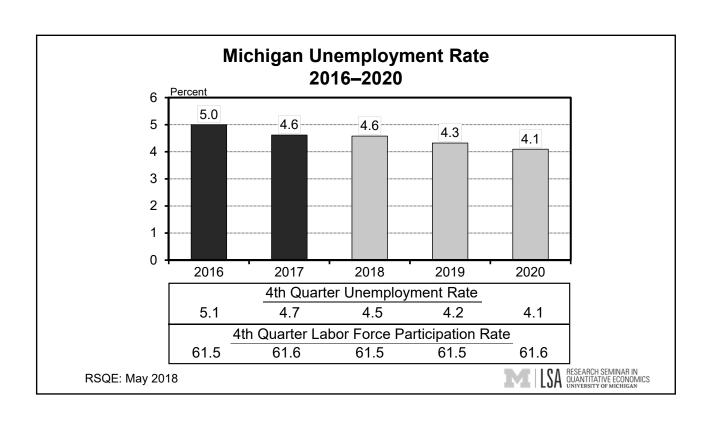












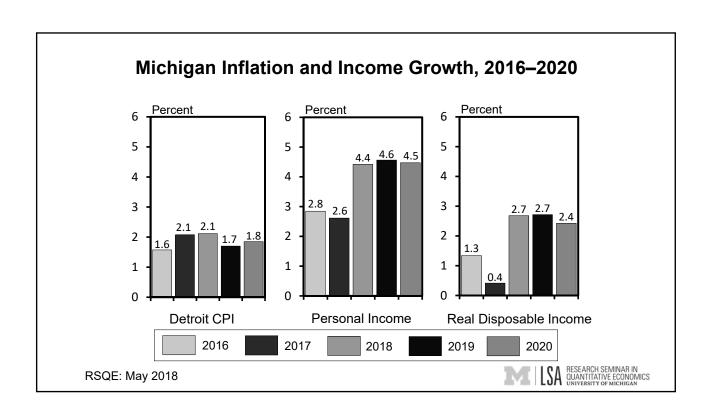


Table 1
Forecast of Payroll Jobs in Michigan by Major Industry Division, 2017–2020
(Thousands of jobs)

		Forecast Employment Change				
	2017	'17-'18	'18–'19	'19–'20	'17–'20	
TOTAL JOBS (Number of persons)	4,372.5	54.5	43.5	47.8	146.0	
(Annual percentage change)	(1.2)	(1.2)	(1.0)	(1.1)	(3.3)	
TOTAL GOVERNMENT	604.2	4.3	3.7	5.7	13.7	
TOTAL PRIVATE	3768.3	50.2	39.9	42.1	132.1	
Natural resources and mining	7.2	0.2	0.0	-0.1	0.1	
Construction	162.8	10.2	5.8	6.3	22.2	
Manufacturing	614.7	1.1	3.0	4.1	8.1	
Trade, transportation and utilities	788.8	5.9	7.7	8.3	21.9	
Information	56.4	-1.2	-0.5	-0.5	-2.2	
Financial activities	218.0	2.2	2.7	2.4	7.3	
Professional and business services	648.0	13.7	10.3	10.2	34.1	
Private education and health services	671.1	5.4	4.8	3.8	14.0	
Leisure and hospitality	433.3	9.5	5.2	6.7	21.4	
Other services	168.0	3.3	0.9	1.0	5.2	