# D.A.B.E.

**Bob Fish Memorial Auto Outlook** 

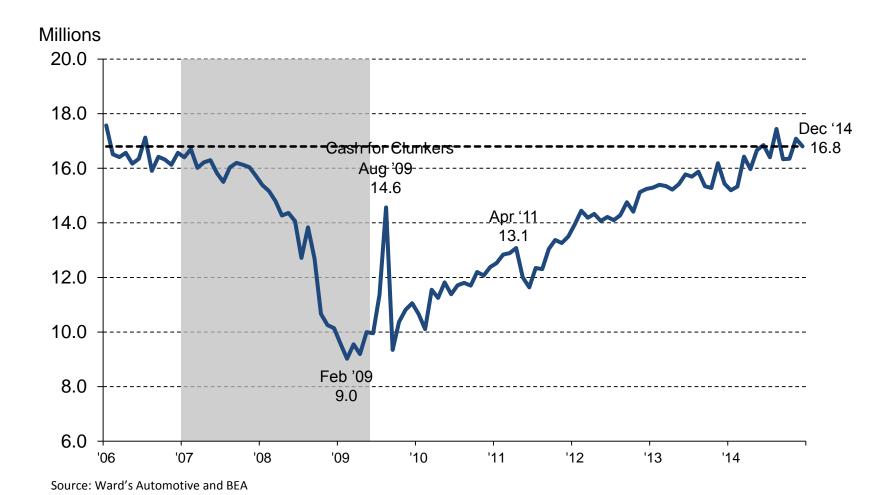
Federal Reserve Bank of Chicago January 22, 2015 Paul Traub
Senior Business Economist



# **Auto Industry**

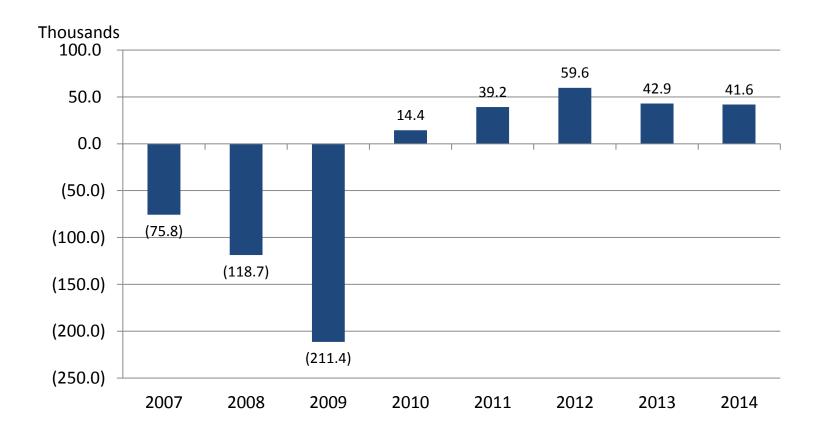
## U.S. Light Vehicle Sales

#### S.A.A.R - Millions of Units



### **Annual Job Growth**

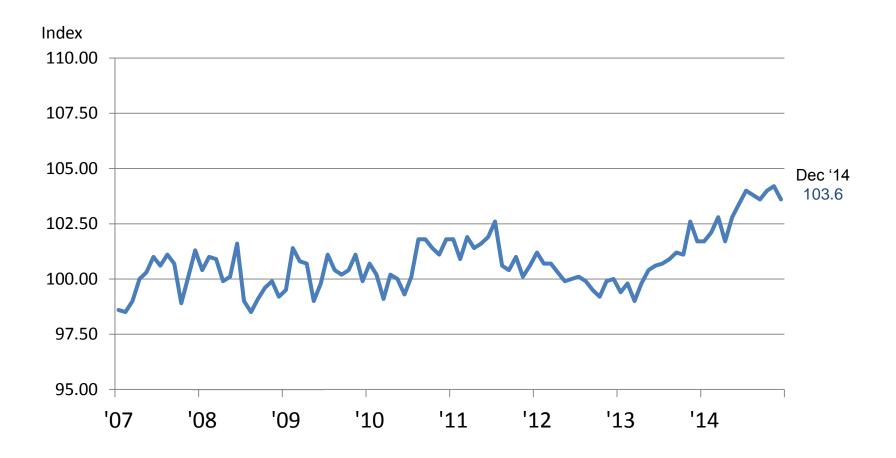
#### **Automobiles & Parts**



Source: U.S. Department of Labor: Bureau of Labor Statistics

## Average Hourly Earnings

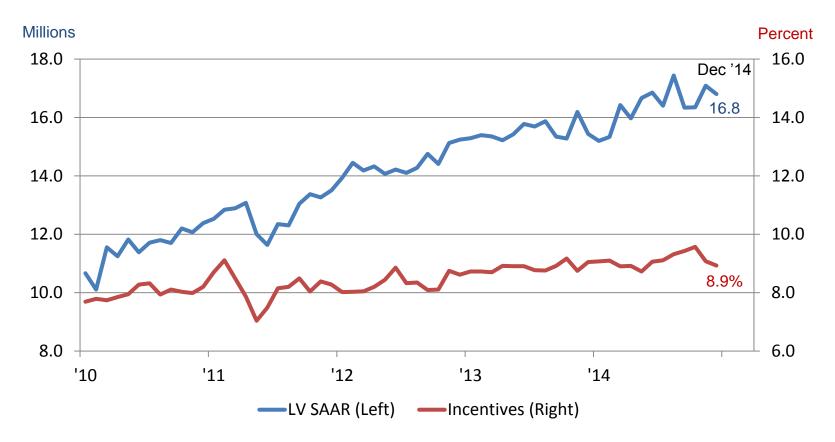
Total Automotive & Parts, Index -2007 = 100



Source: Author's calculations using U.S. Department of Labor: Bureau of Labor Statistics data.

## U.S. Light Vehicle SAAR & Incentives

#### S.A.A.R – Millions of Units & Incentive as % of Total Price

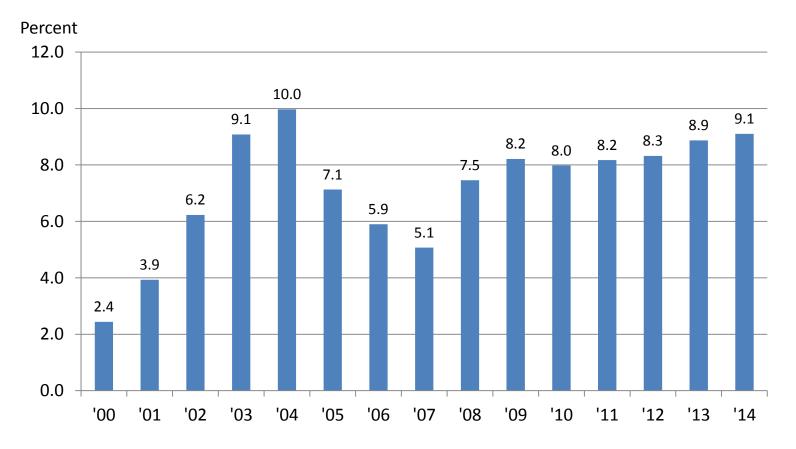


Note: Total price = Average Transaction Price + Average Incentive

Source: Author's calculation using Ward's Automotive and J.D Power data.

## U.S. Light Vehicle Incentives

#### Incentive as Percent of Total Price

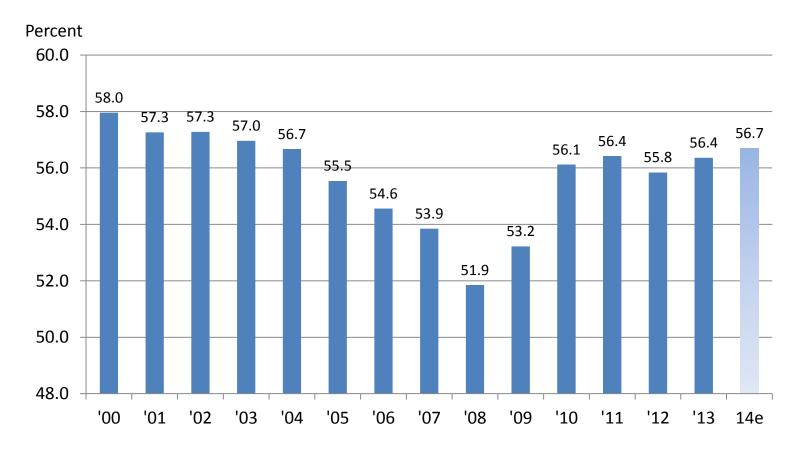


Note: Total price = Average Transaction Price + Average Incentive

Source: Author's calculation using J.D Power data.

## Light Vehicle Transaction Price

#### Price as Percent of Median Household Income

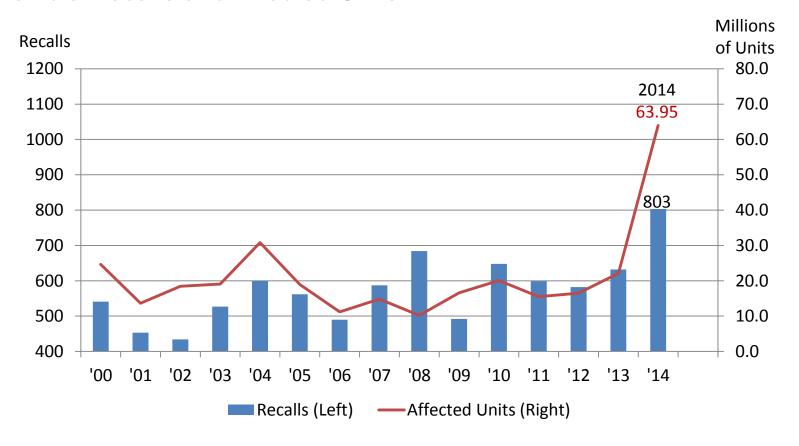


Note: Total price = Average Transaction Price + Average Incentive

Source: Author's calculation using J.D Power and U.S. Census Bureau data.

## Vehicle Recalls

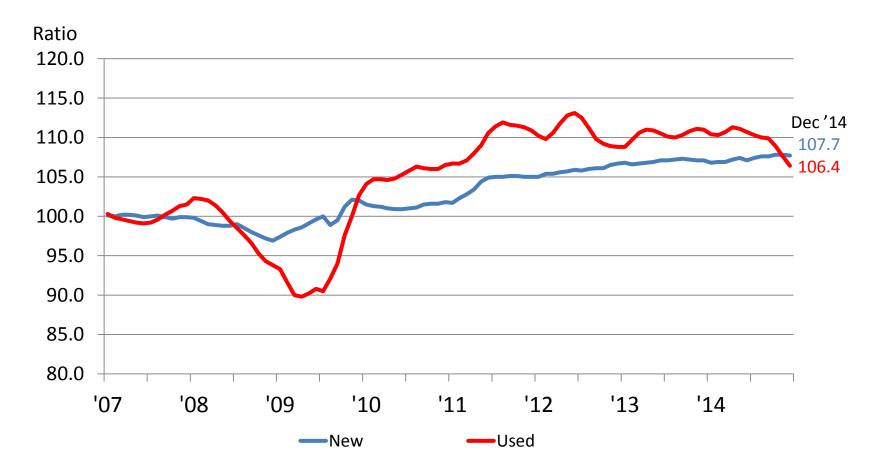
#### Vehicle Recalls and Affected Units



Source: U.S. Department of Transportation - NHTSA

## **CPI New and Used Autos**

Indexed: 2007 = 100



### **Auto Loan Rates**

### New Autos 48 Month Loan - Commercial Banks



Source: Federal Reserve Board of Governors

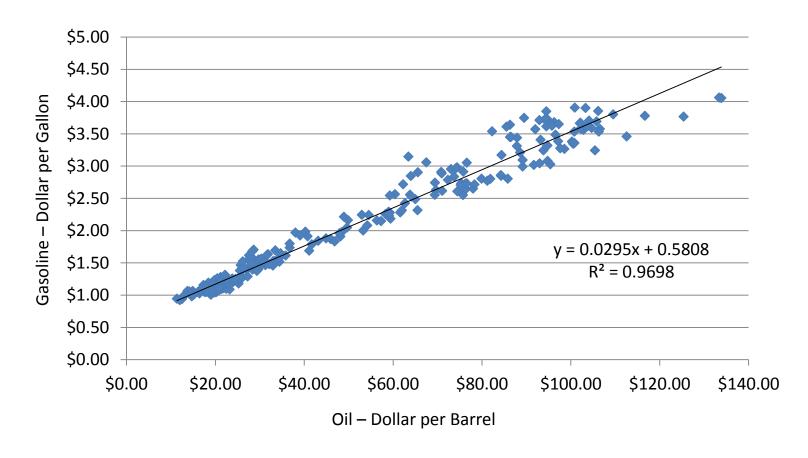
## **Changing Payment Durations**

### Percent Change in Payment to Percent Chang in Loan Rate

	Percent Change in Payment by Duration			
Percent Change in Loan Rate	36 Months	48 Months	60 Months	72 Months
1%	1.5%	2.0%	2.4%	2.9%
2%	3.1%	4.0%	4.9%	5.8%
3%	4.6%	6.0%	7.4%	8.7%
4%	6.2%	8.1%	10.0%	11.7%
5%	7.8%	10.2%	12.5%	14.7%

## Falling Gasoline Prices

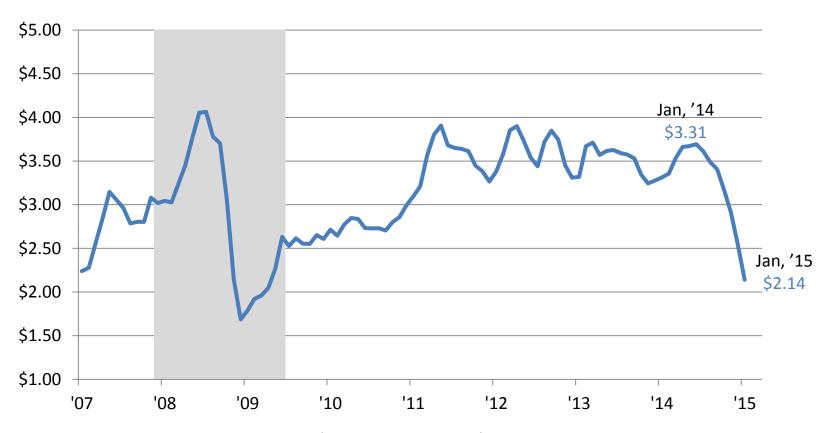
#### Oil to Gasoline Relationship



Source: U.S. Energy and Information Agency

### Crude Oil & Gasoline Price

### WTI & National Average All Formulas - In Nominal Dollars

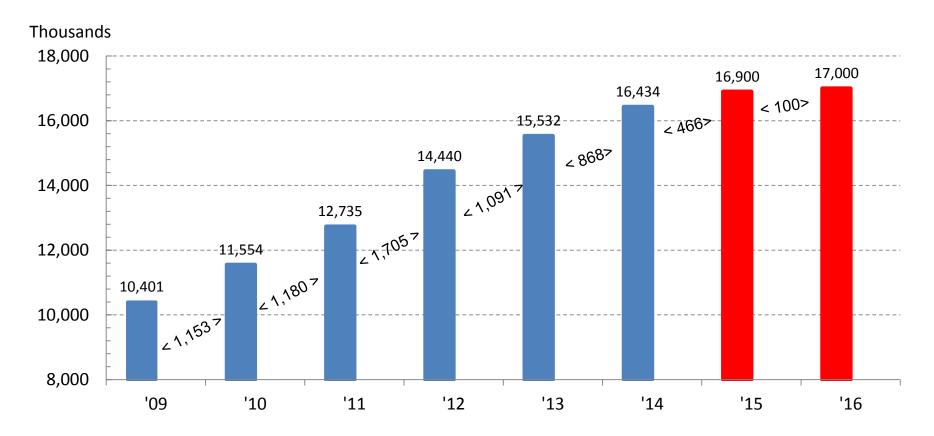


Note: The average driver will save about \$6.00 / year for ever \$0.01 decline in fuel price.

Source: U.S. Department of Energy .

## U.S. Light Vehicle Sales

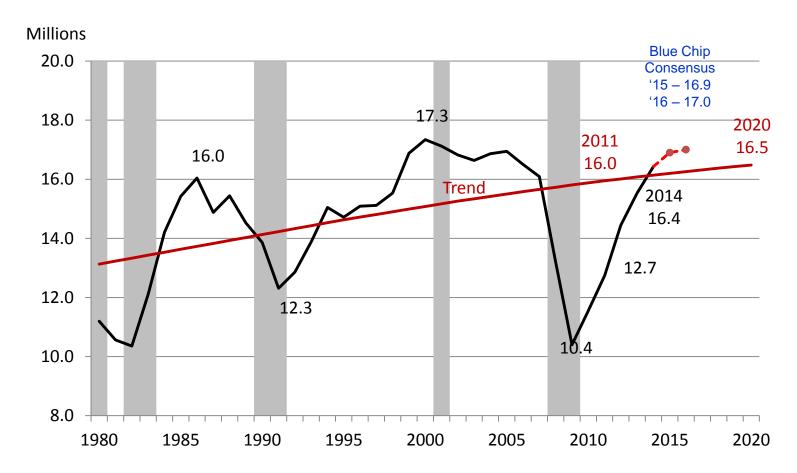
#### Thousands of Units - Calendar Year



Source: Ward's Automotive and BEA and IHS Automotive.

## U.S. Light Vehicle Industry

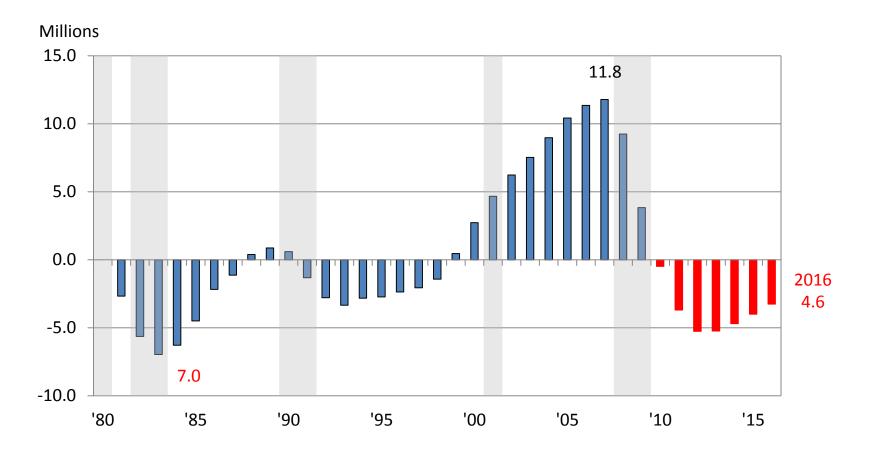
#### Millions of Units



Source: Ward's Automotive

## U.S. Light Vehicle Pent-Up Demand

### Millions of Units



http://michiganeconomy.chicagofedblogs.org/

