

US  
**AUTO**  
**INDUSTRY**

CHARTBOOK

AUGUST 2017



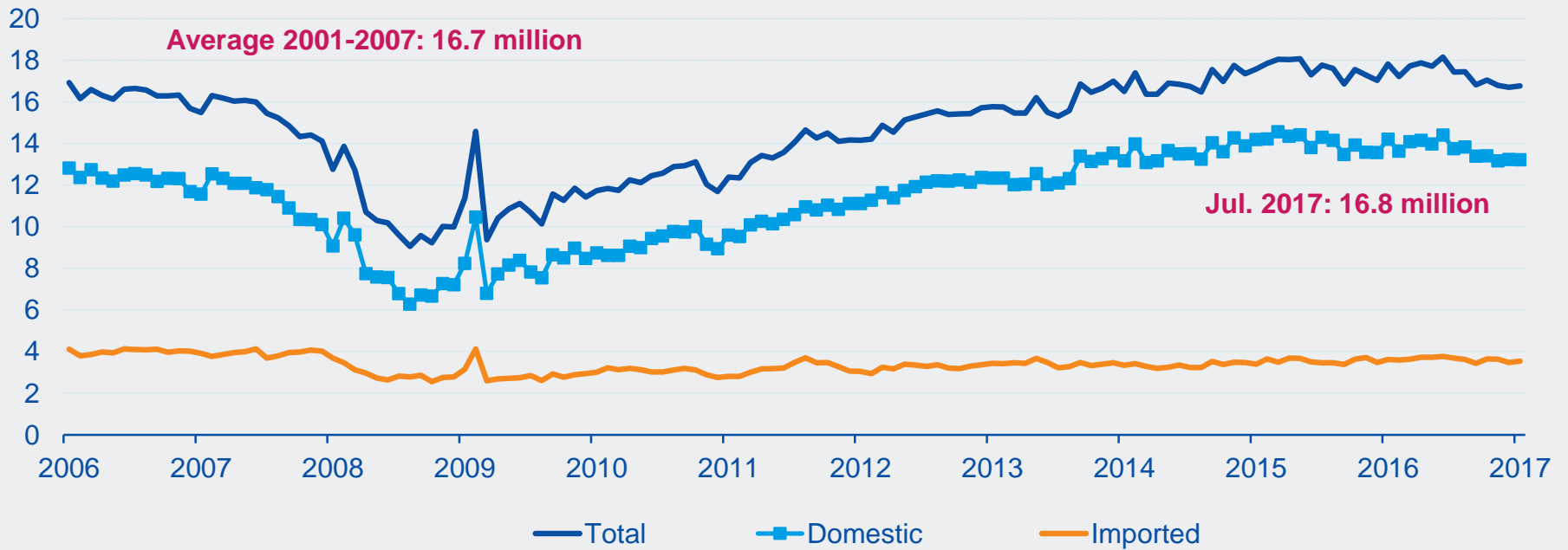
- Despite supportive economic fundamentals and generous incentives, demand for new vehicles continues to slow down
- Increasing off-lease returns exert downward pressures on sales and prices of new cars and trucks
- Consumers continue to show a strong bias towards light-trucks, which reached 63% of total sales in July
- The shift to light-trucks has kept transaction prices high, supporting profitability in spite of lower volumes
- Leasing could wane as the industry struggles with lower terminal values and a glut of pre-owned units, opening opportunities for traditional auto lending
- The alternative fuel segment continues to expand, a substitution effect is taking place between hybrid-gasoline and increasingly reliable PHEV and BEV

# SALES



# Sales

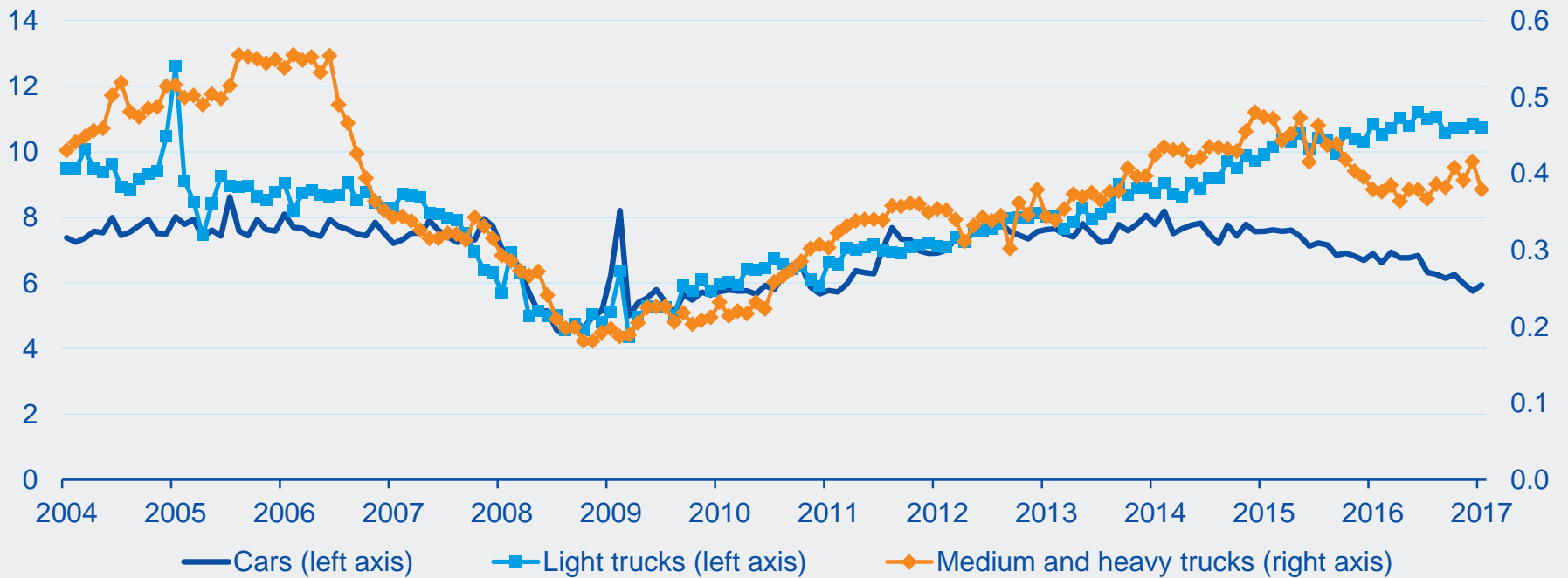
**U.S. Total light weight vehicle sales**  
(SAAR\*, million units)



\*SAAR = seasonally adjusted annual rate  
Source: Haver Analytics

# Sales

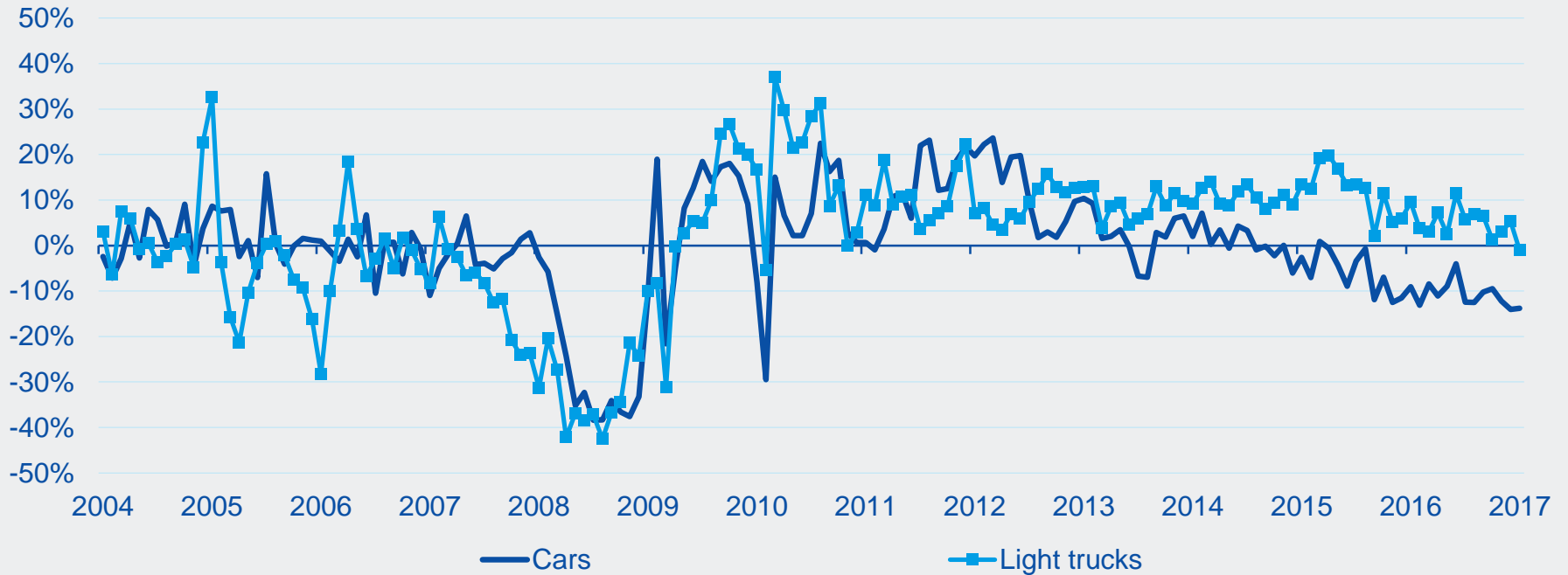
**U.S. Total vehicle sales**  
(SAAR\*, million units)



\*SAAR = seasonally adjusted annual rate  
Source: Haver Analytics

# Sales

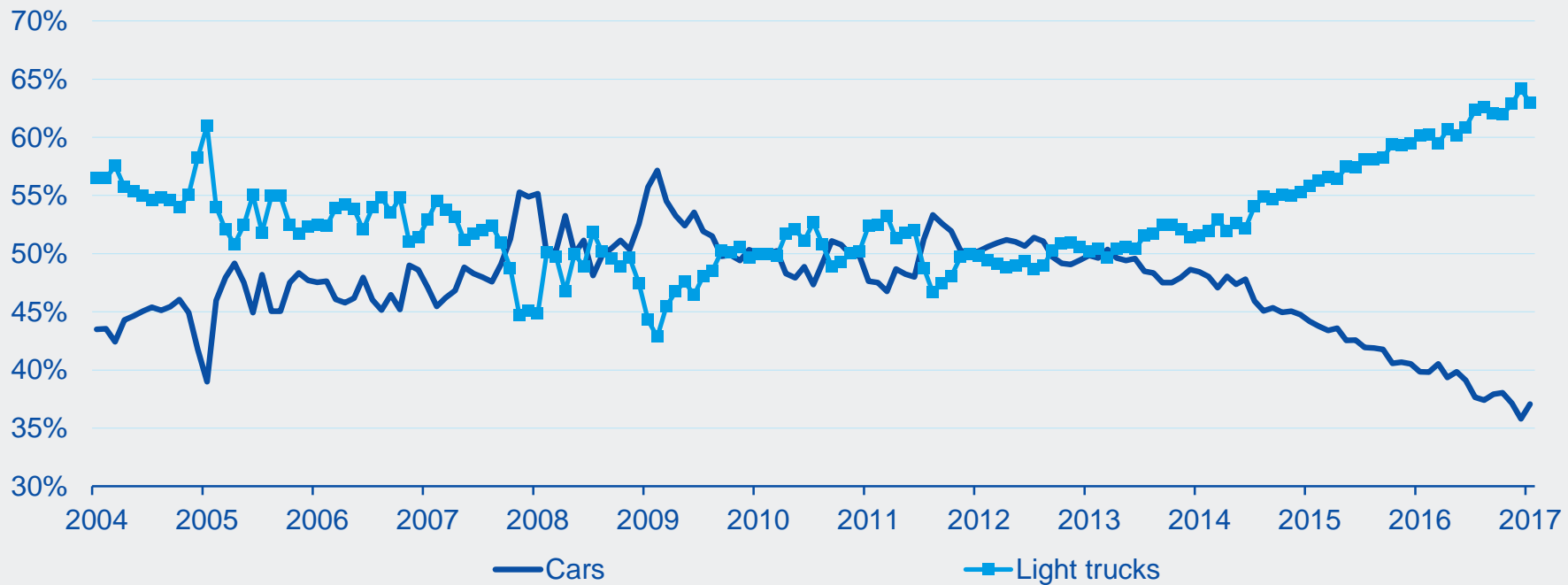
**U.S. Total vehicle sales**  
(yoy % change)



\*SAAR = seasonally adjusted annual rate  
Source: Haver Analytics

# Sales

**U.S. Total light weight vehicle sales**  
(share of total)



\*SAAR = seasonally adjusted annual rate  
Source: Haver Analytics

# Sales

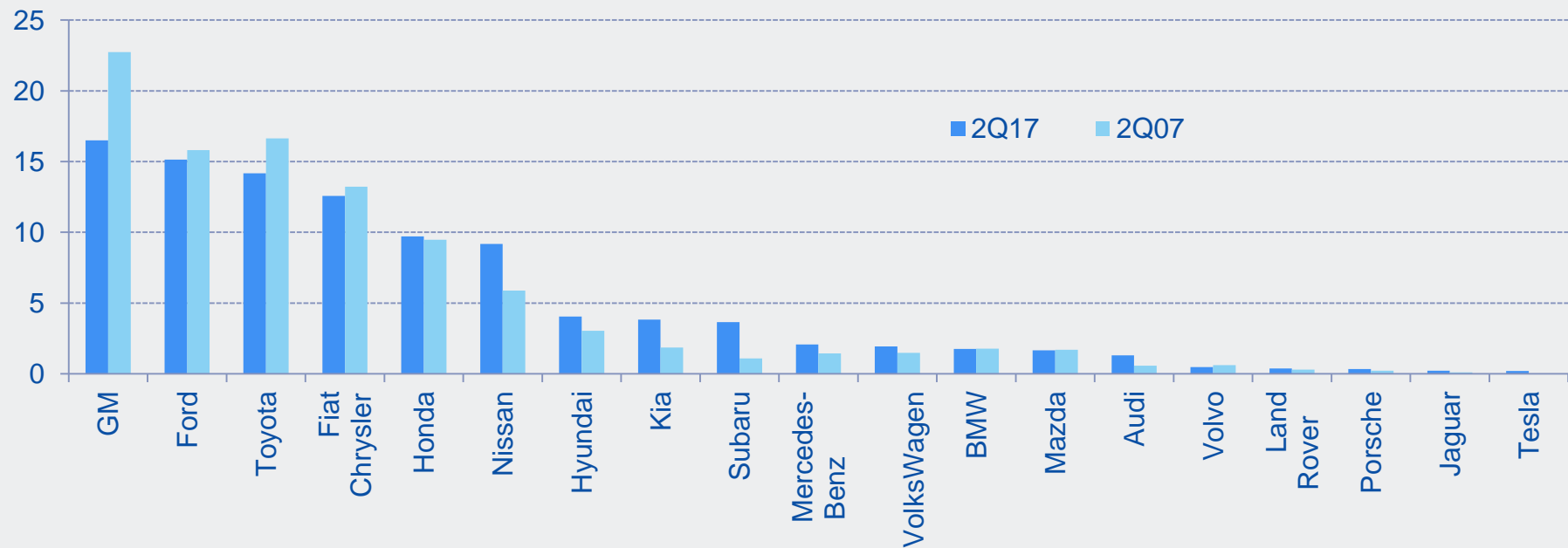
**U.S. Domestic auto inventory/sales ratio**  
(seasonally adjusted)





# Sales

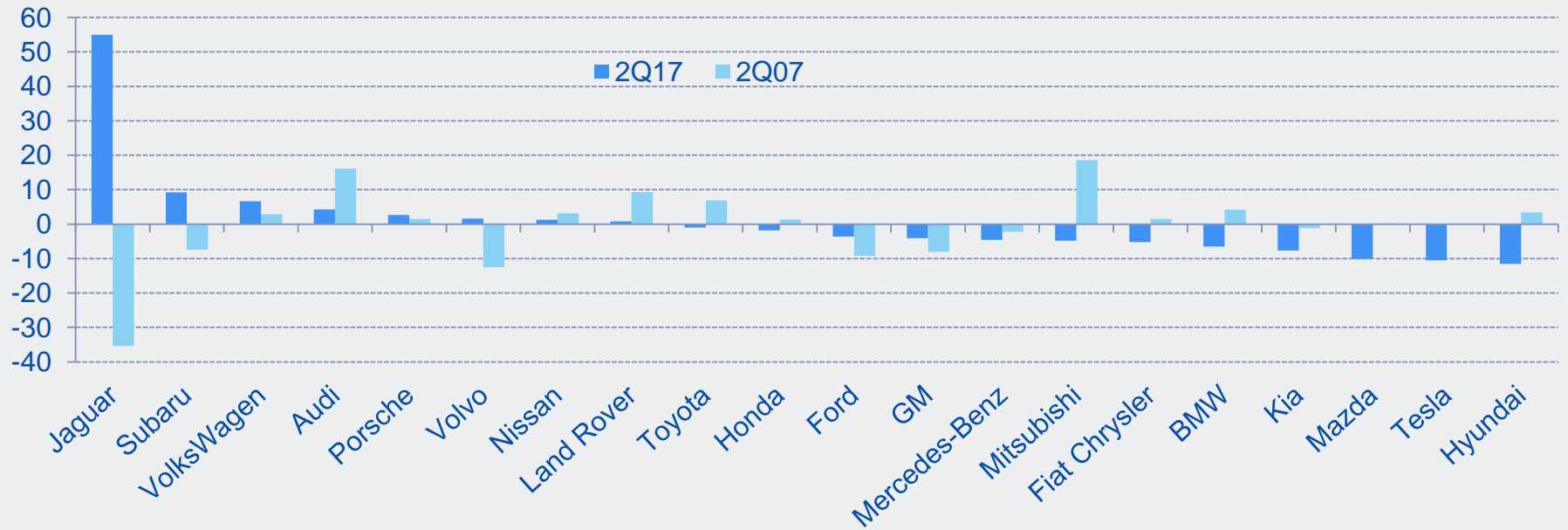
**U.S. Market share by brand**  
(%)



Source: Bloomberg

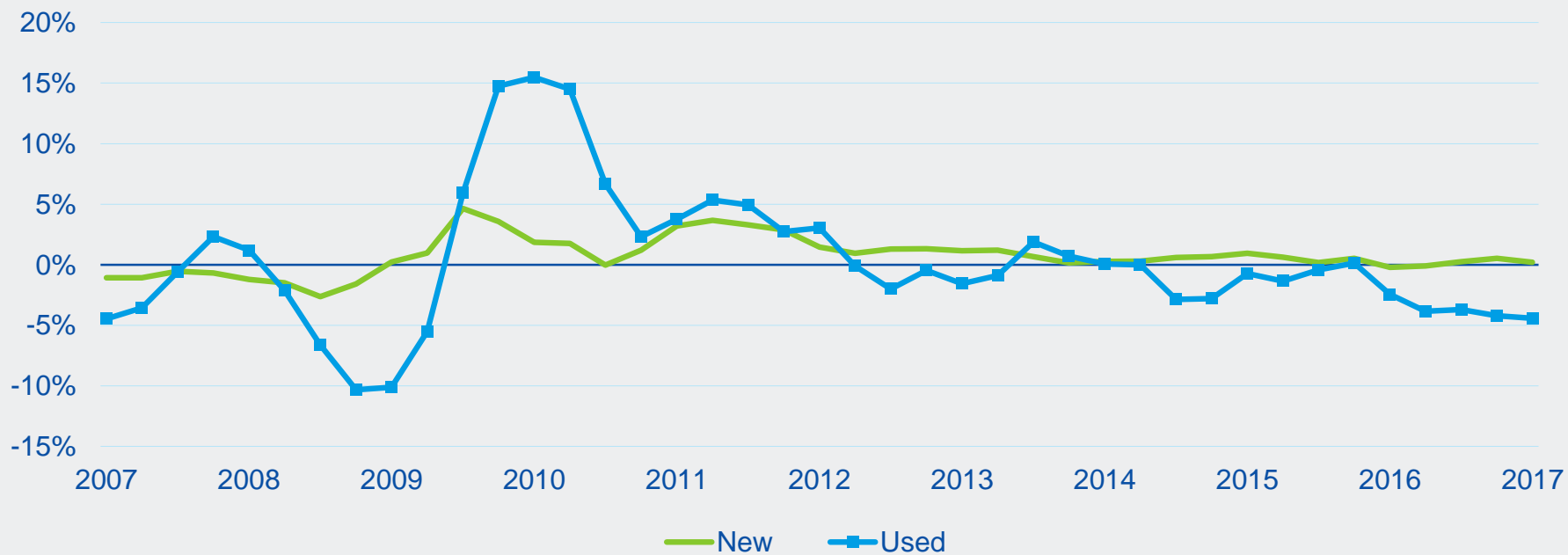
# Sales

**U.S. Quarterly unit sales**  
(yoy % change)



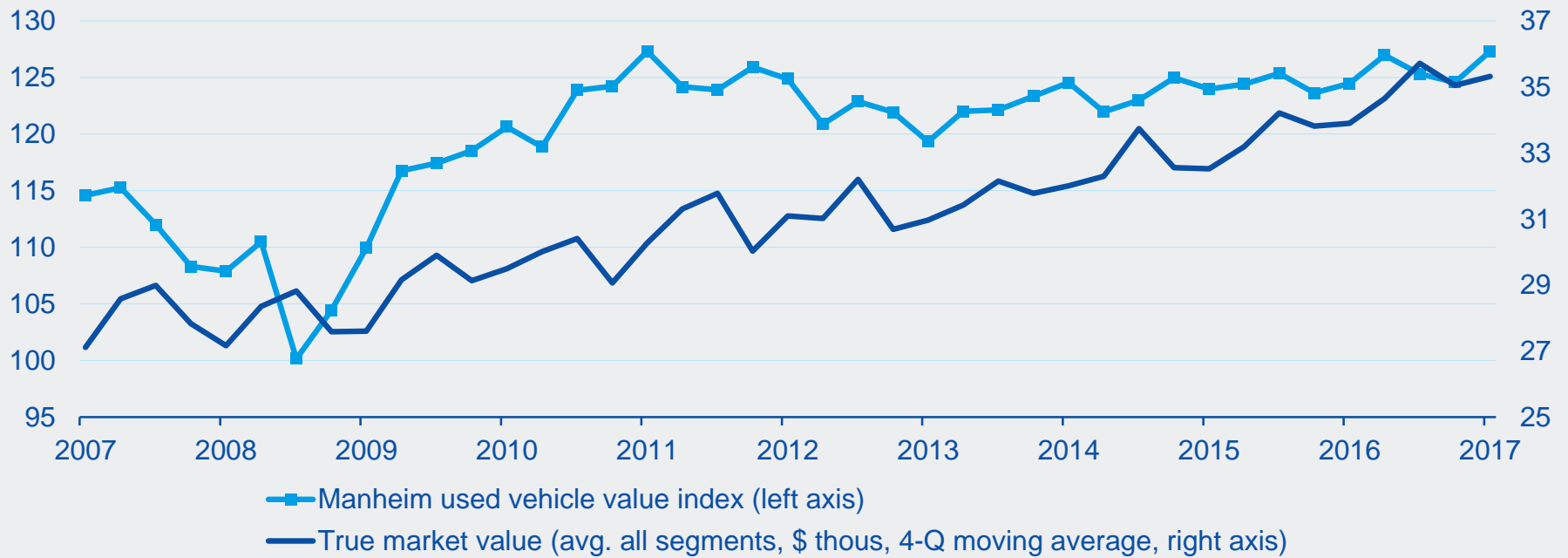
# Prices

**U.S. Consumer price index: cars and trucks**  
(yoy % change)



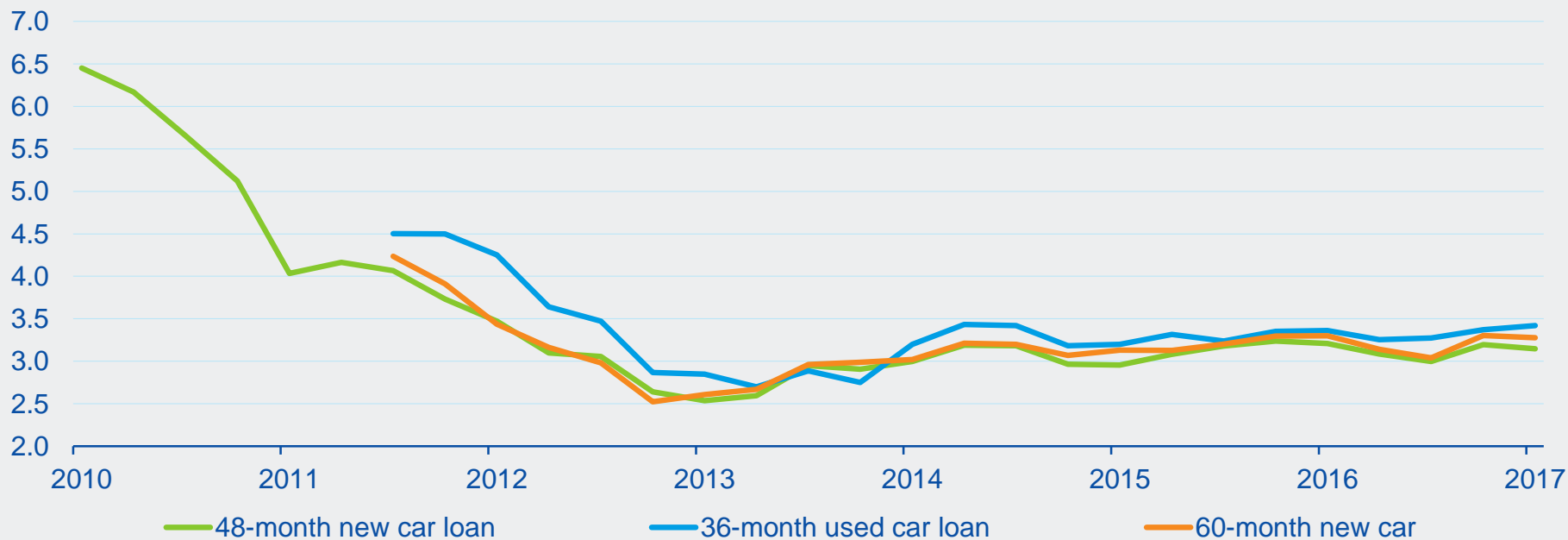
# Prices

## U.S. Auto prices



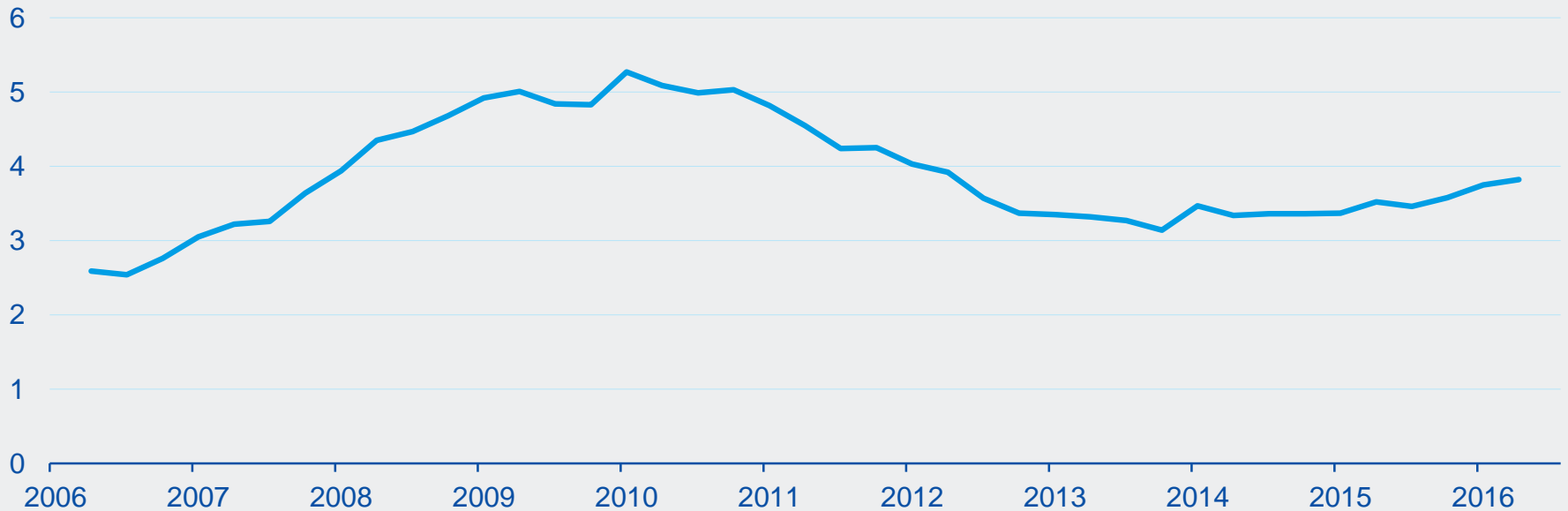
# Financing Conditions

**U.S. Car loan rates**  
(%)



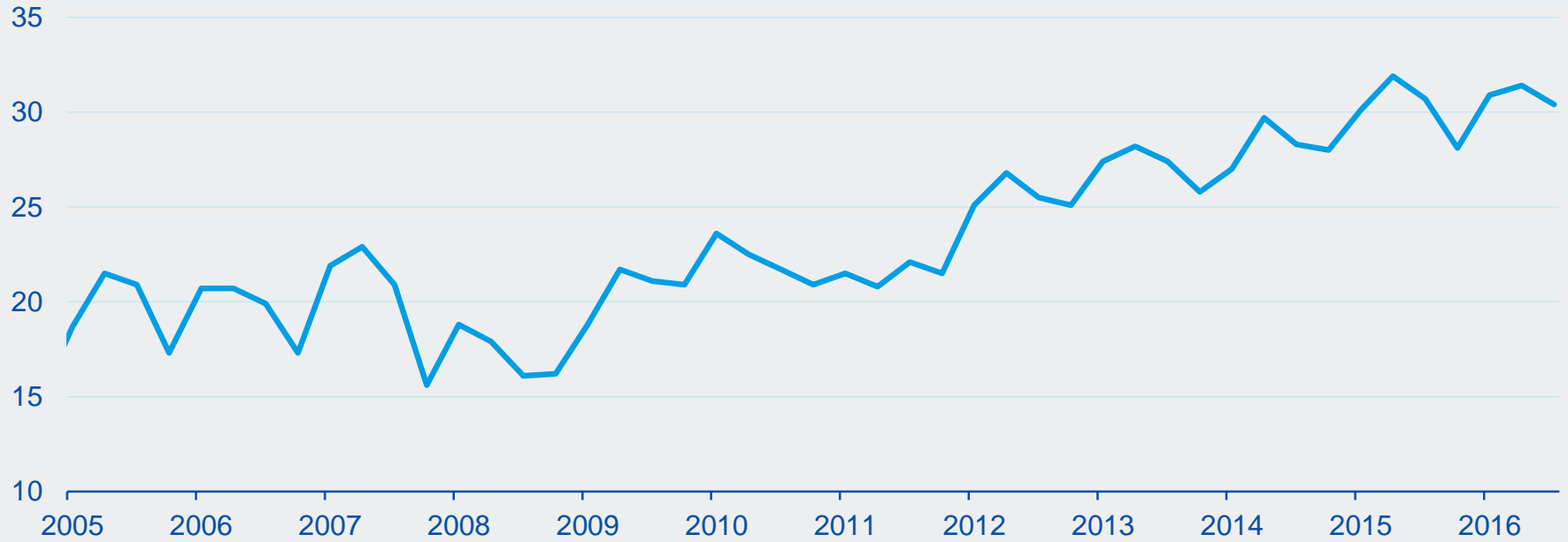
# Financing Conditions

**U.S. Auto loan 90+ days delinquent**  
(% of balance)



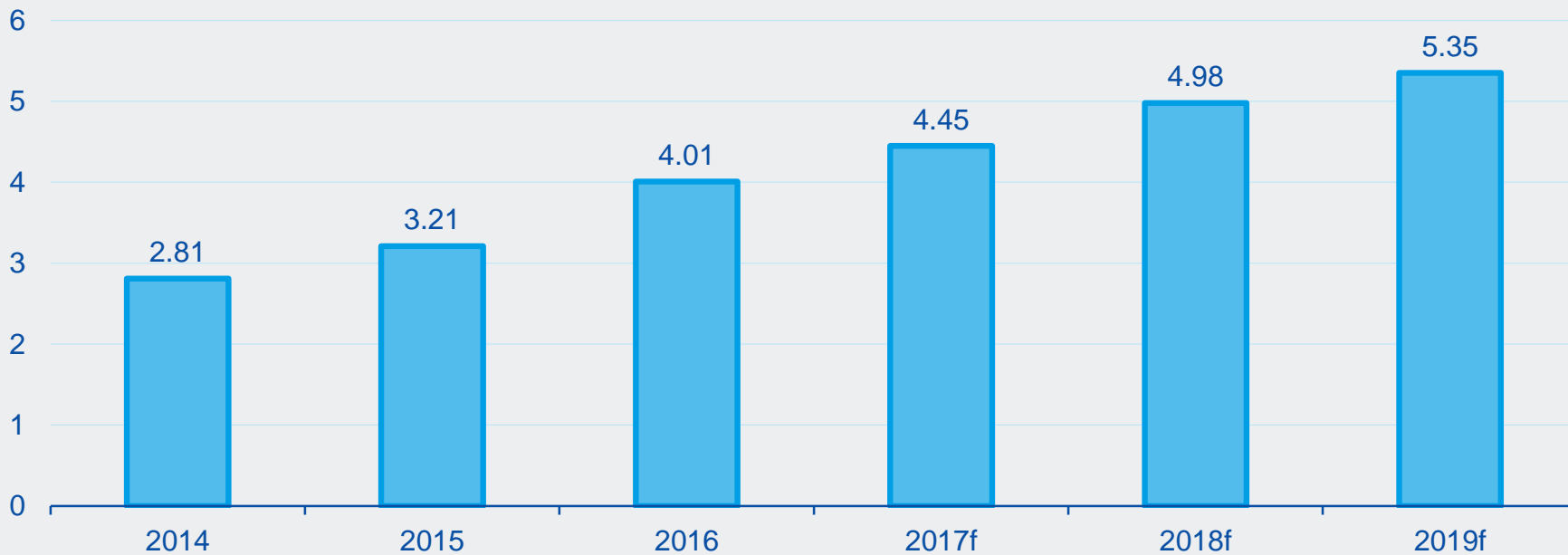
# Leasing

U.S. Leasing penetration rate (%)



# Leasing

**Off-Lease returns and supply\***  
(Fiscal years, millions of units)

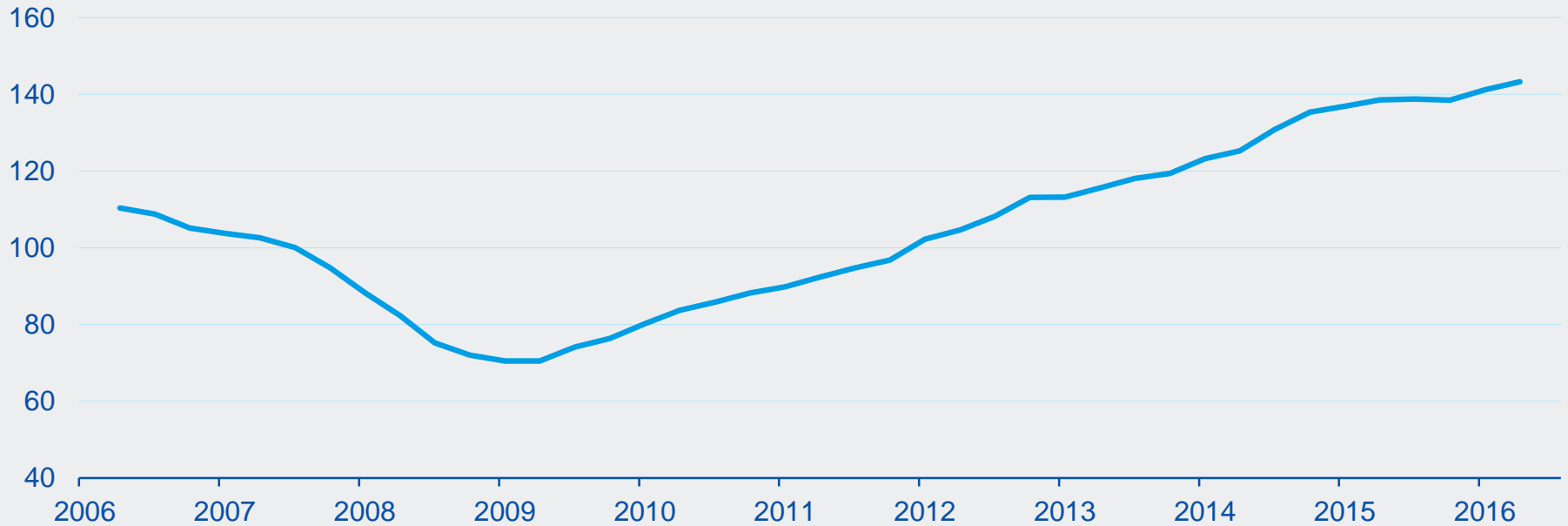


\*Assumes 36-month lease terms  
Source: Bloomberg with data from company filings and Edmunds.com



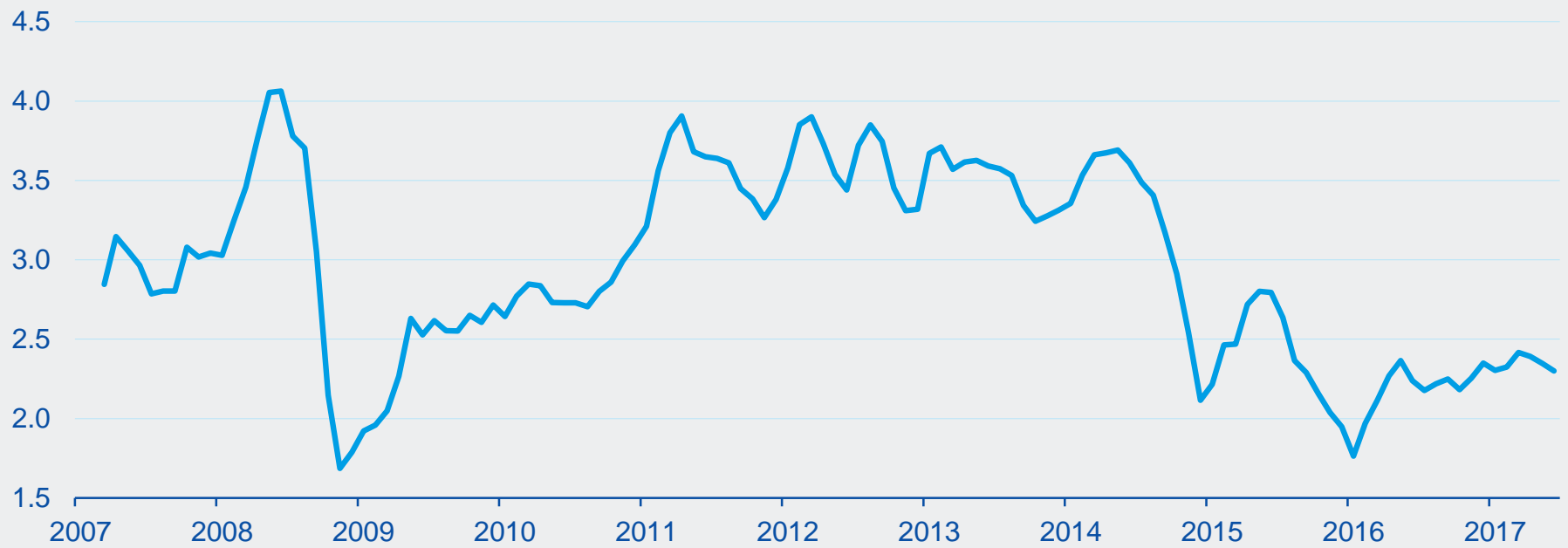
# Financing Conditions

**U.S. Newly originated installment auto loans**  
 (\$ billion, eop, 4-qtr moving avg.)



# Gasoline

**U.S. Spot price**  
(\$/gallon)



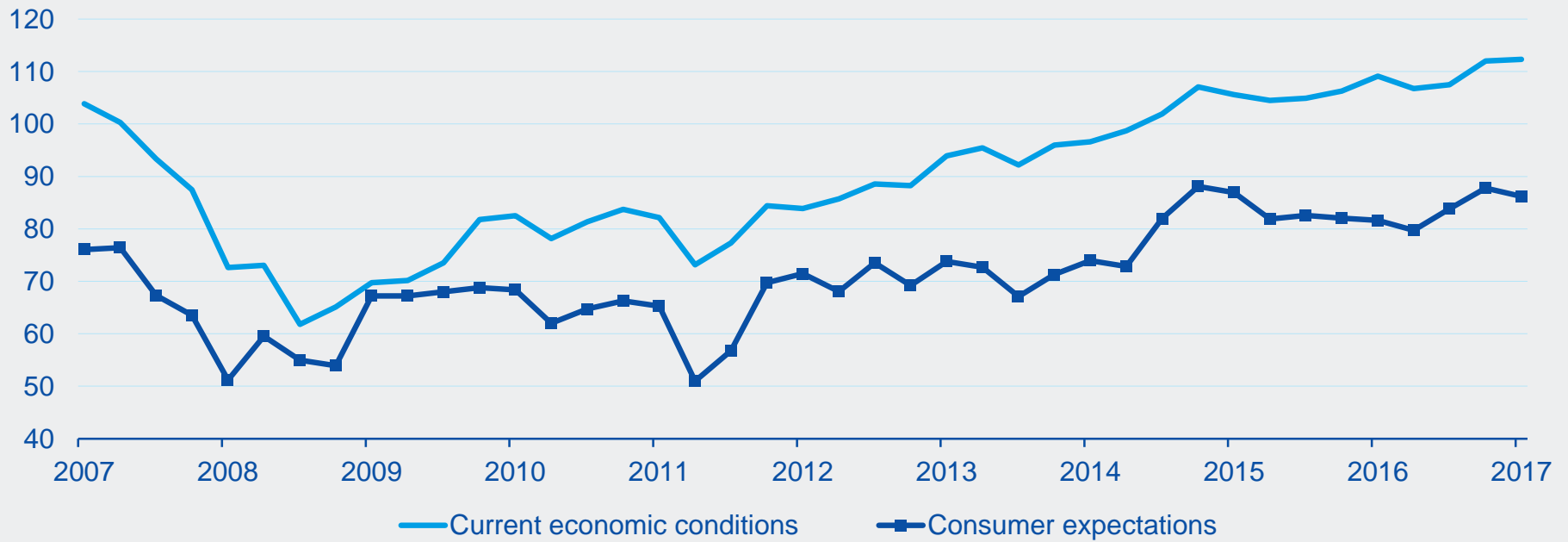
Source: Haver Analytics

# CONSUMERS



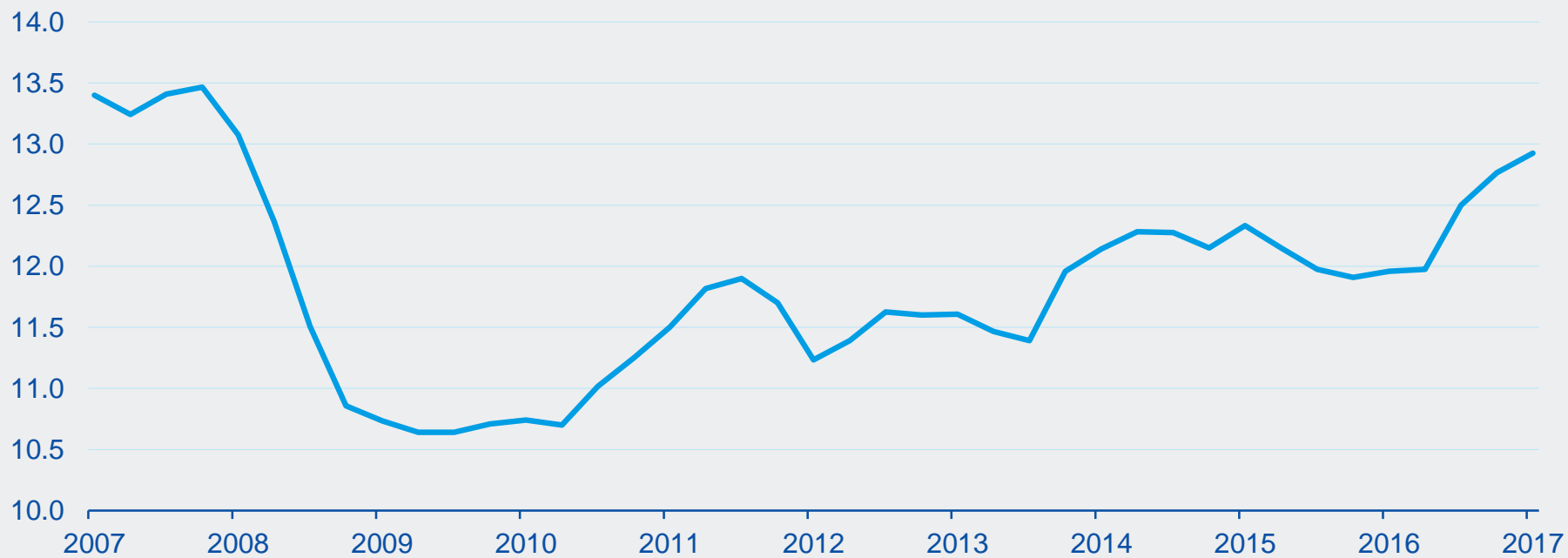
# Consumers

## U.S. Consumer sentiment index



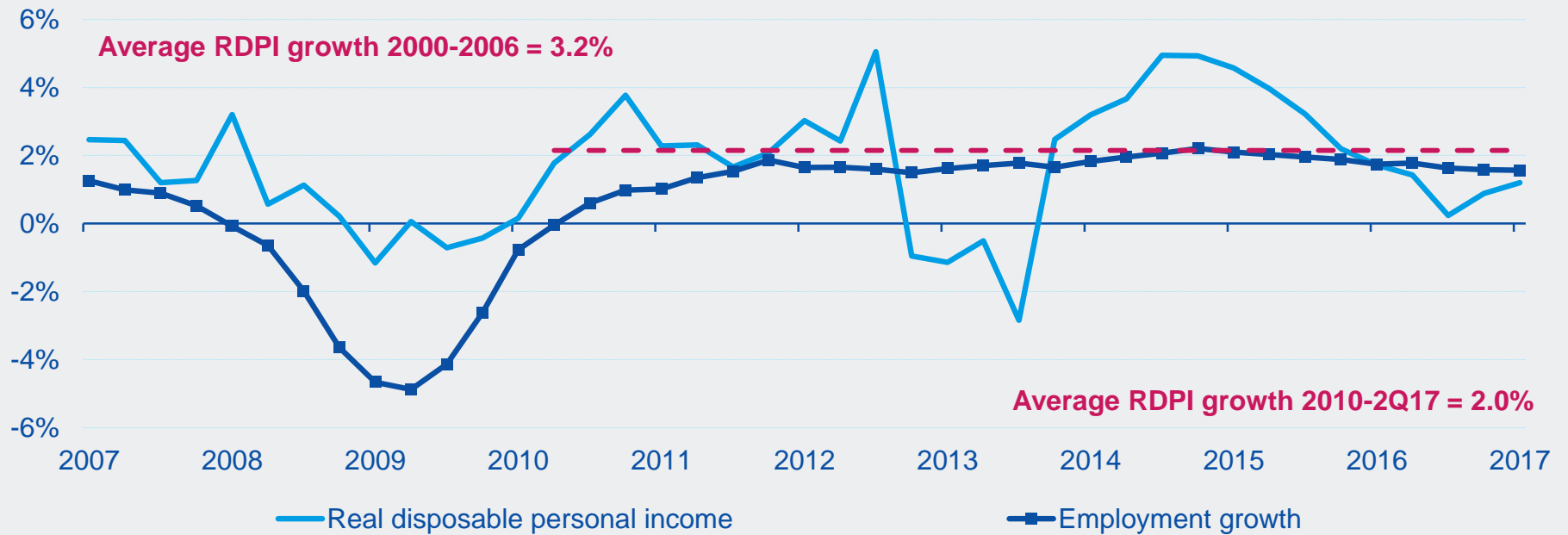
# Consumers

**U.S. Plans to buy a car within 6 months**  
(% of respondents)



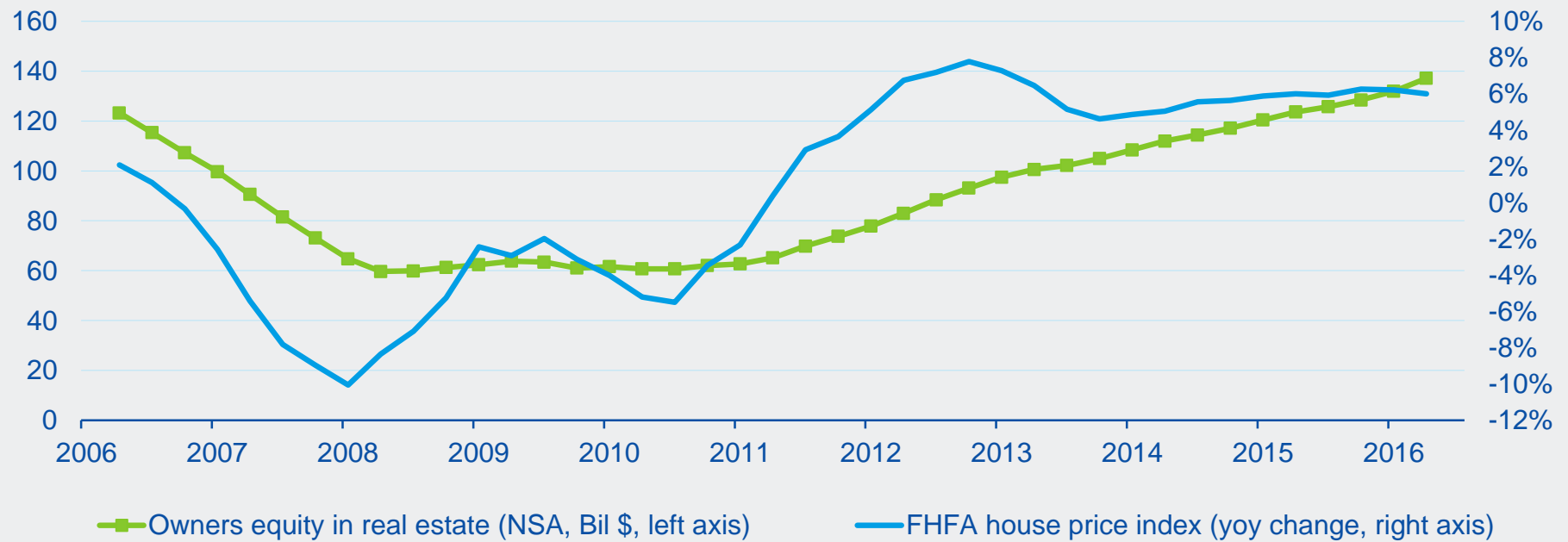
# Consumers

**U.S. Employment and real disposable personal income**  
(yoy % change)

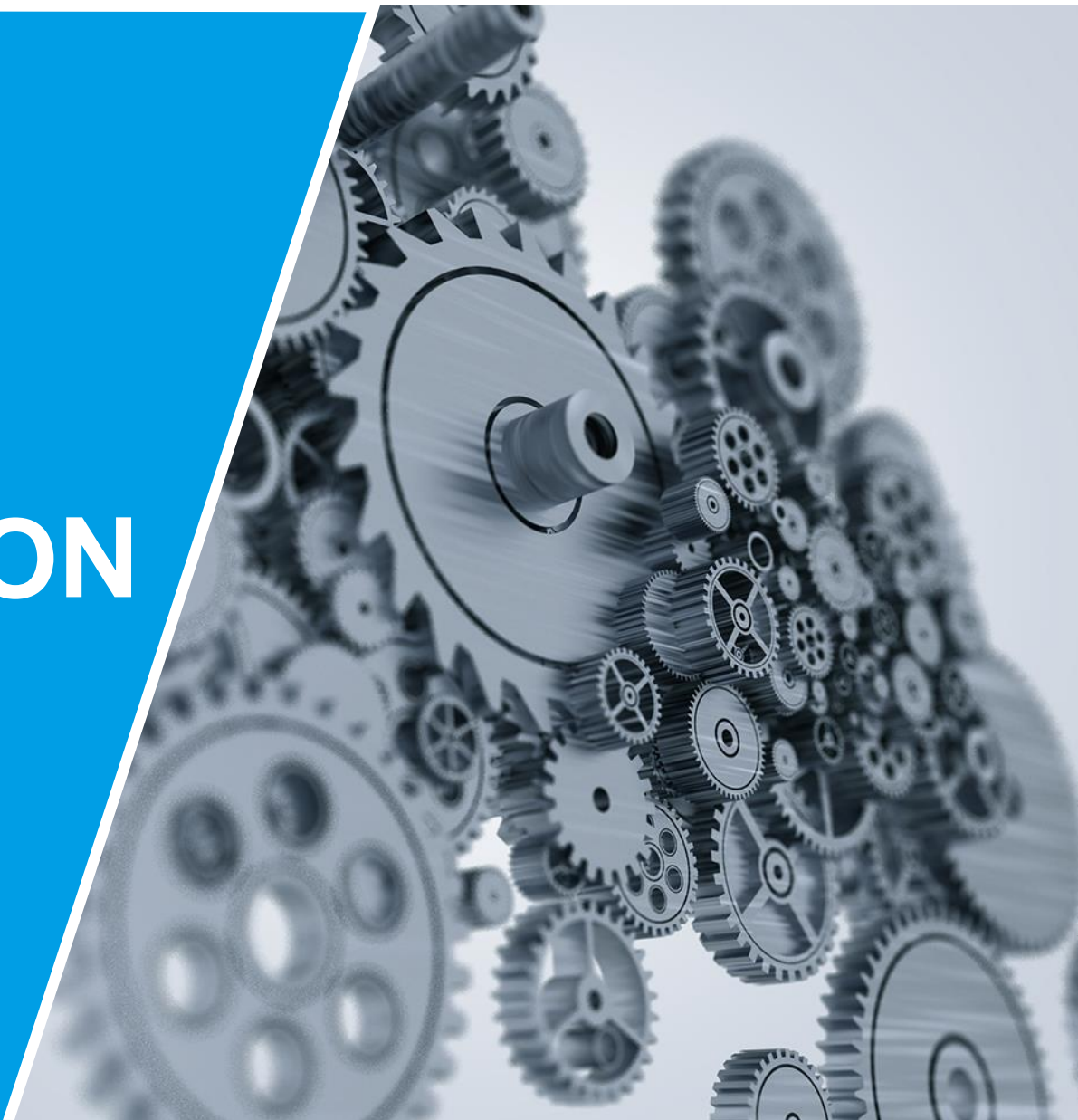


# Household Equity

U.S. Household equity and home prices



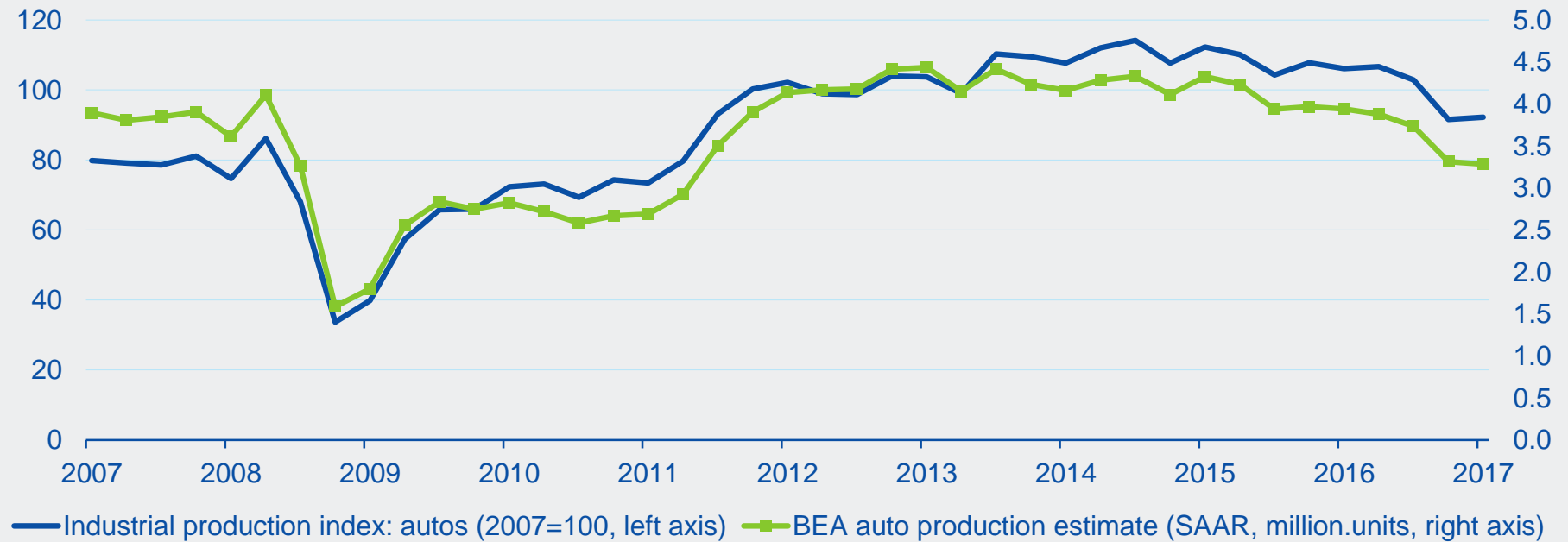
# PRODUCTION





# Production

## U.S. Auto production



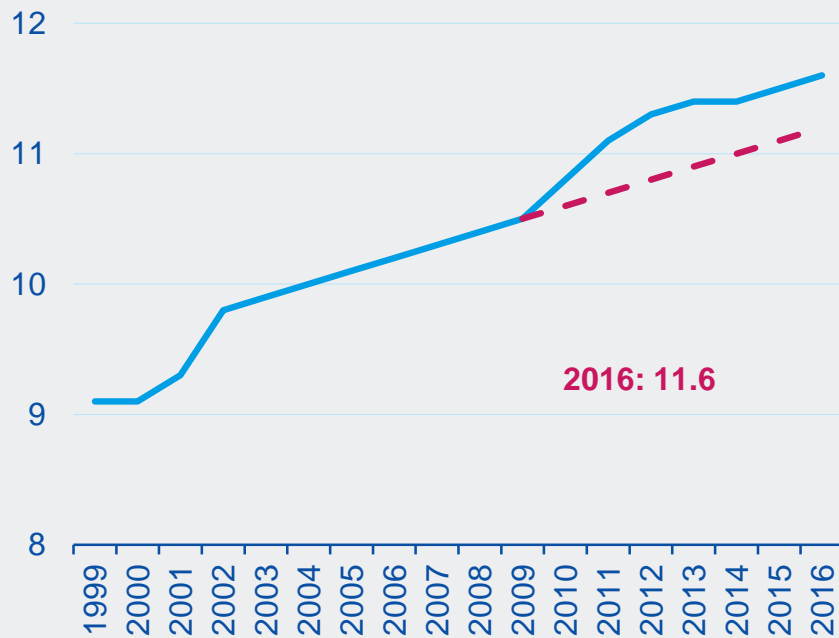
SAAR = seasonally adjusted annual rate, BEA = U.S. Bureau of Economic Analysis  
 Source: Haver Analytics

# STRUCTURAL

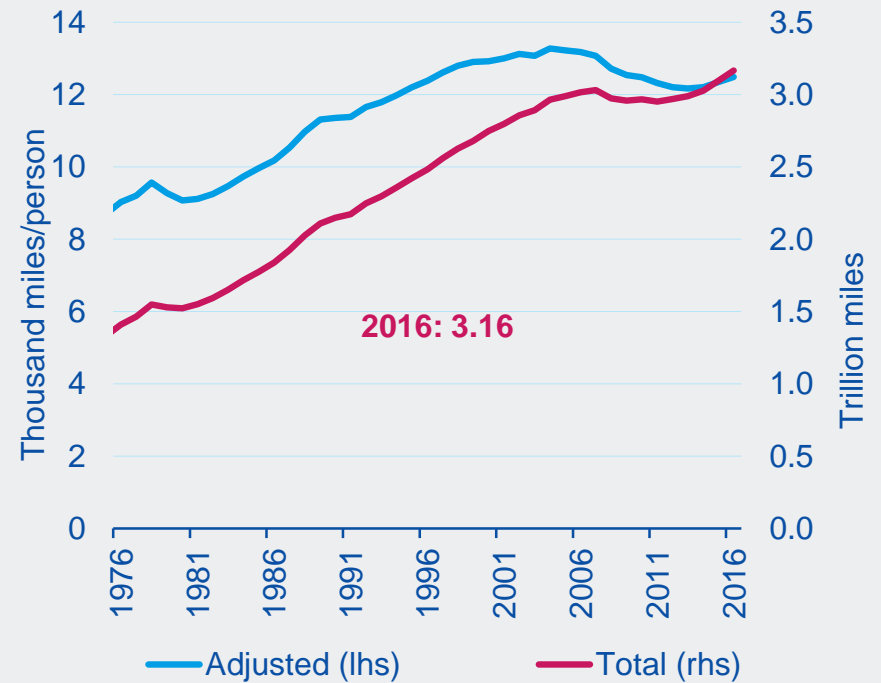


# Fundamentals

**Mean age of passenger cars in operation**  
(years)

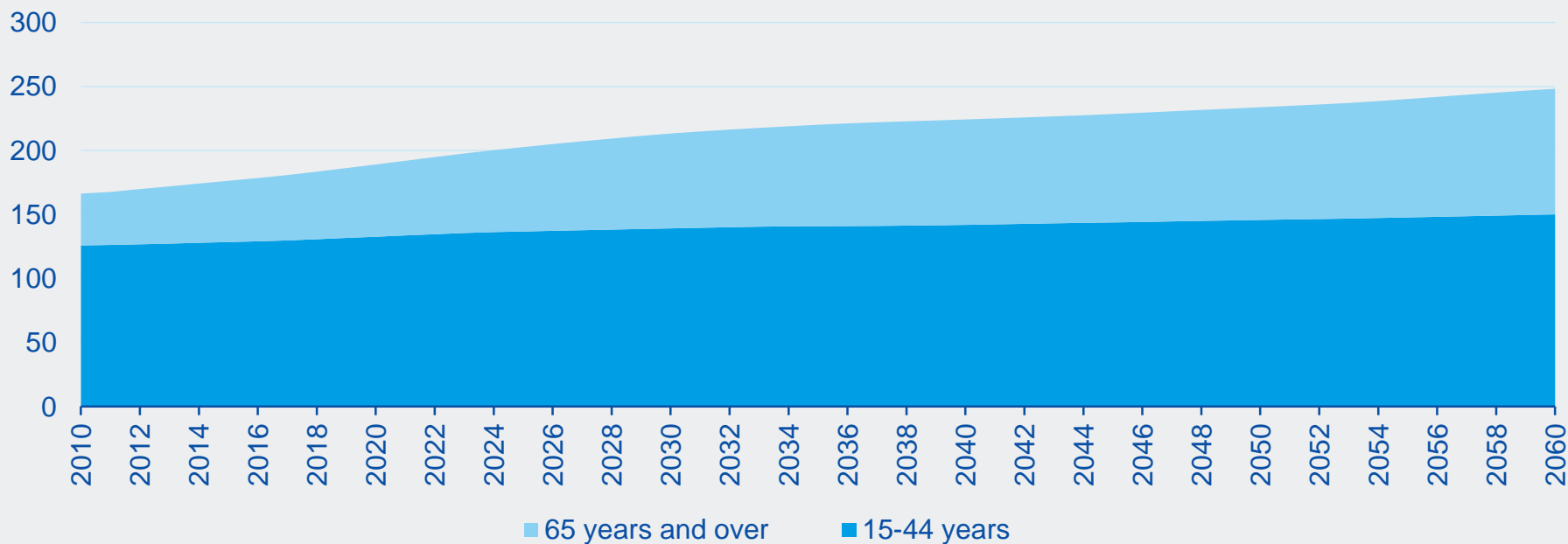


**Vehicle miles of travel**  
(total and adjusted by labor force)



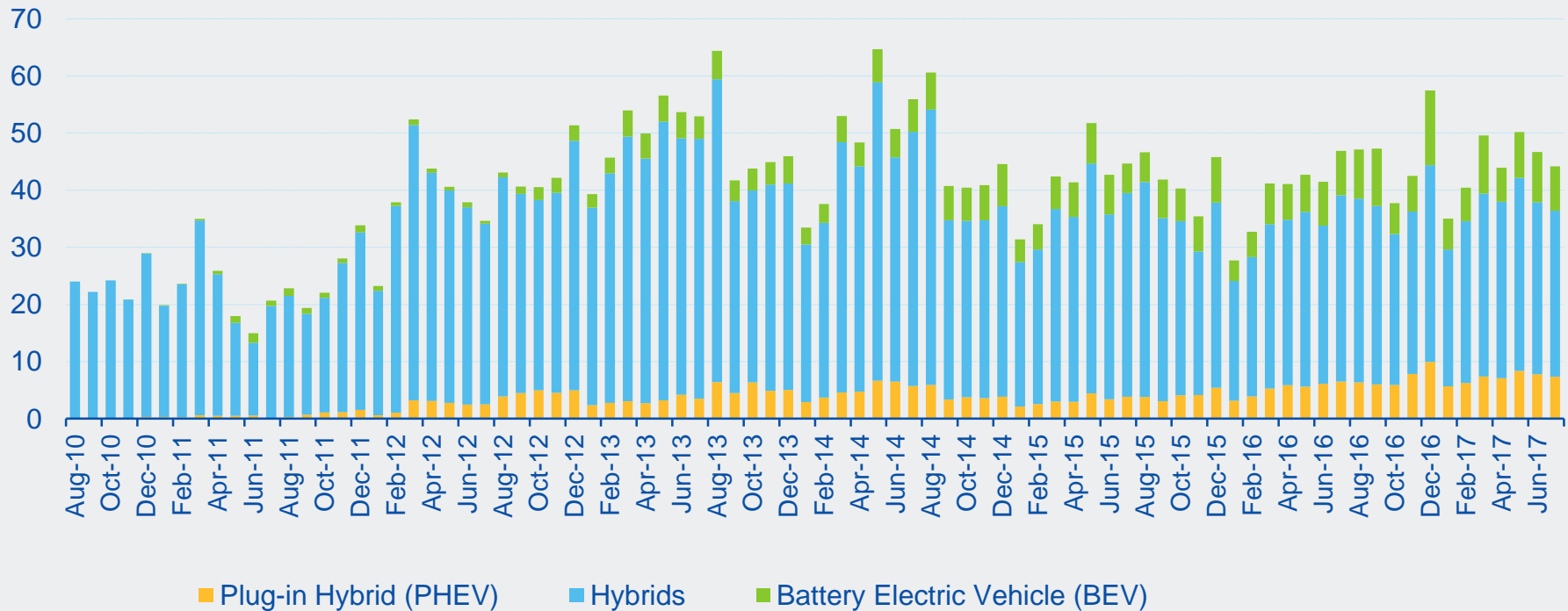
# Demographics

**U.S. Population projections by age**  
(millions)



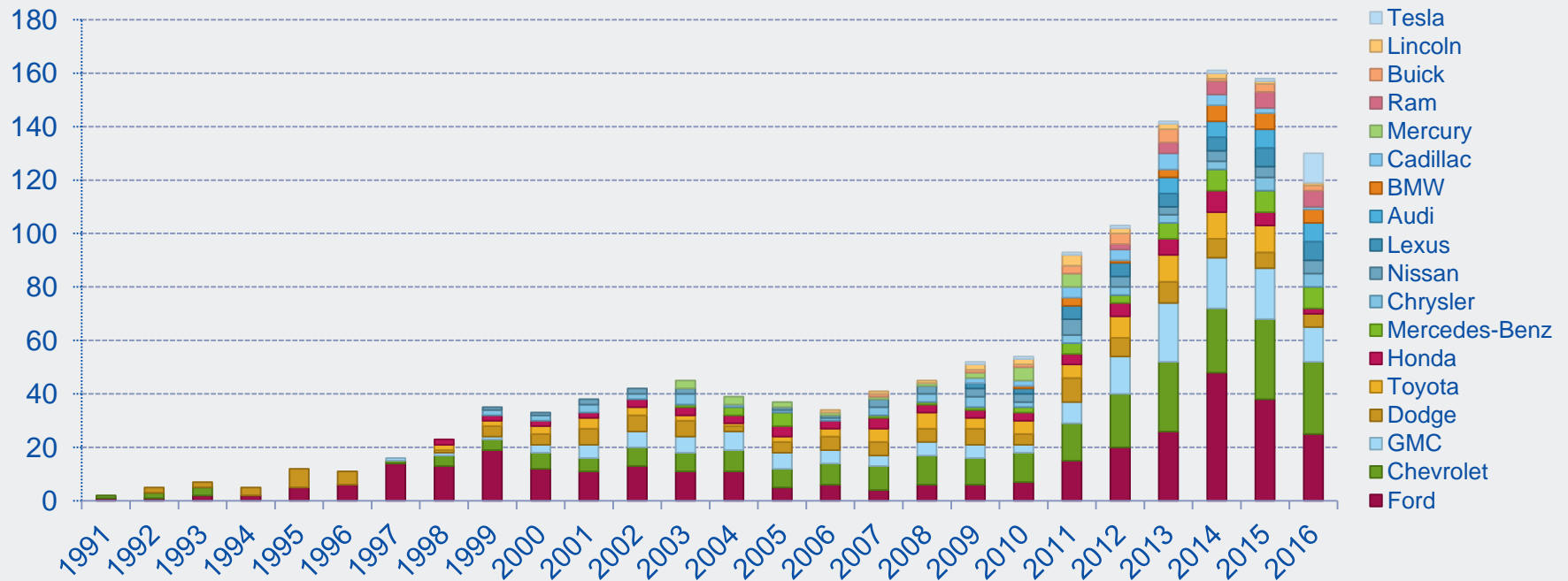
# Alternative vehicles

**U.S. New plug-in vehicle sales**  
(thousands)



# Alternative vehicles

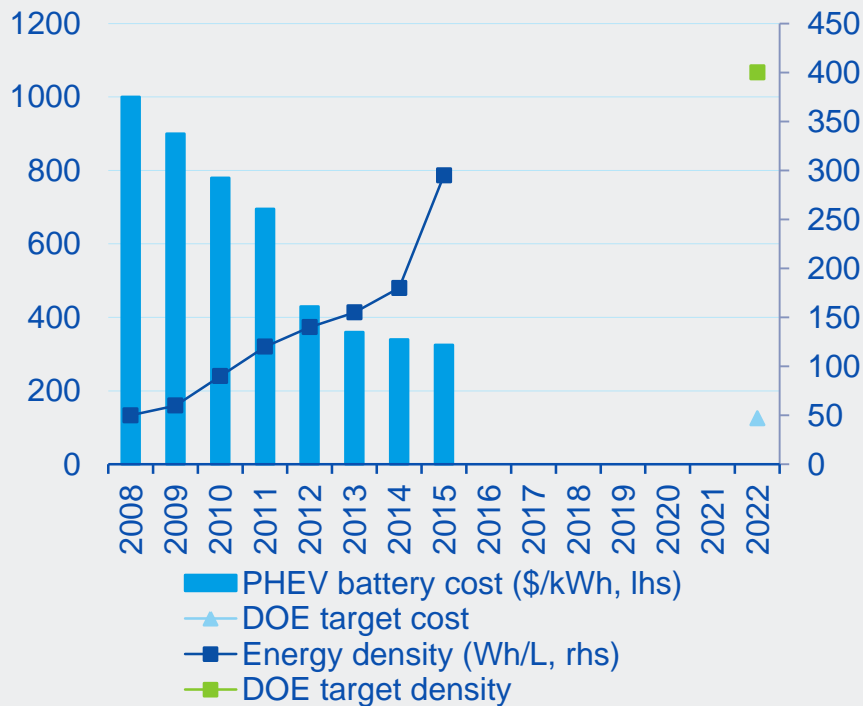
Alternative fueled vehicle/hybrid electric vehicle models by OEMs  
(units)\*



\* Top ten OEMs by number of models in 2016  
Source: DOE

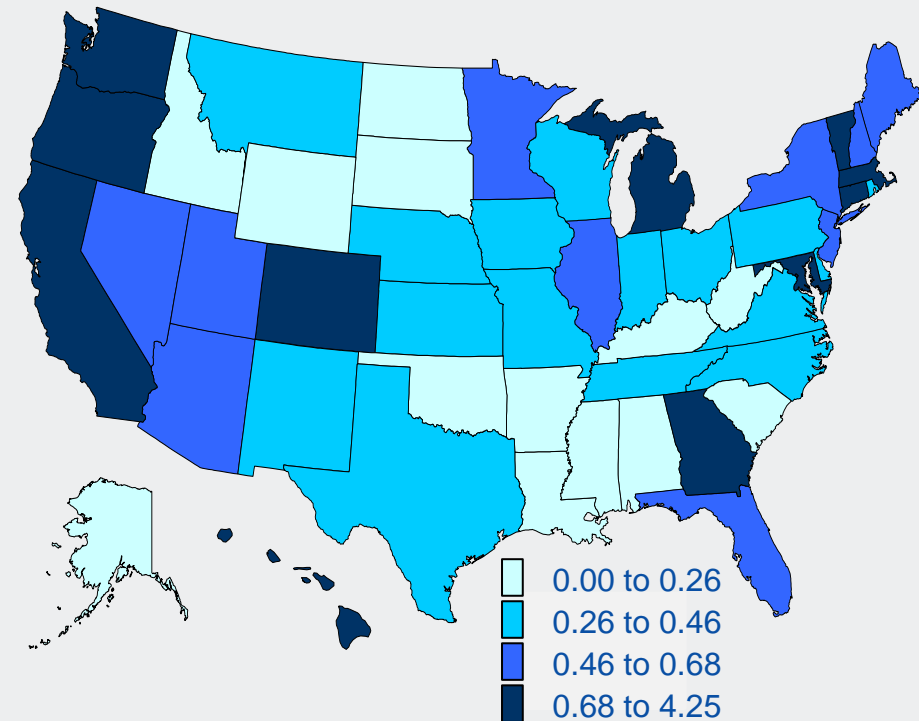
# Alternative vehicles

### PHEV Battery Cost and Energy Density



Source: DOE

### PEV registrations per 1,000 people



Source: DOE

# FORECASTS





## Forecasts

	2014	2015	2016	2017	2018	2019
<b>Auto sales</b> (millions units)	16.5	17.4	17.5	<b>16.8</b>	<b>16.3</b>	<b>16.6</b>
<b>Real GDP growth</b> (% change)	2.4	2.6	1.6	<b>2.1</b>	<b>2.2</b>	<b>2.1</b>
<b>Unemployment rate</b> (% avg.)	6.2	5.3	4.8	<b>4.3</b>	<b>3.9</b>	<b>4.0</b>
<b>Fed funds</b> (%, eop)	0.25	0.50	0.75	<b>1.50</b>	<b>2.00</b>	<b>2.50</b>
<b>5-year Treasuries</b> (%, avg)	1.64	1.53	1.34	<b>1.90</b>	<b>2.31</b>	<b>2.71</b>

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