

# U.S. Auto Industry Chartbook

BBVA Research USA

Houston, TX

Fourth Quarter 2013

## Key messages

- Pent-up demand supports vehicle sales in the short-run
- Access to credit improves as banks ease standards
- Business demand benefits from the recovery of the housing market and the energy boom
- Exports are gaining momentum due to rapid growth in emerging markets

## Key messages

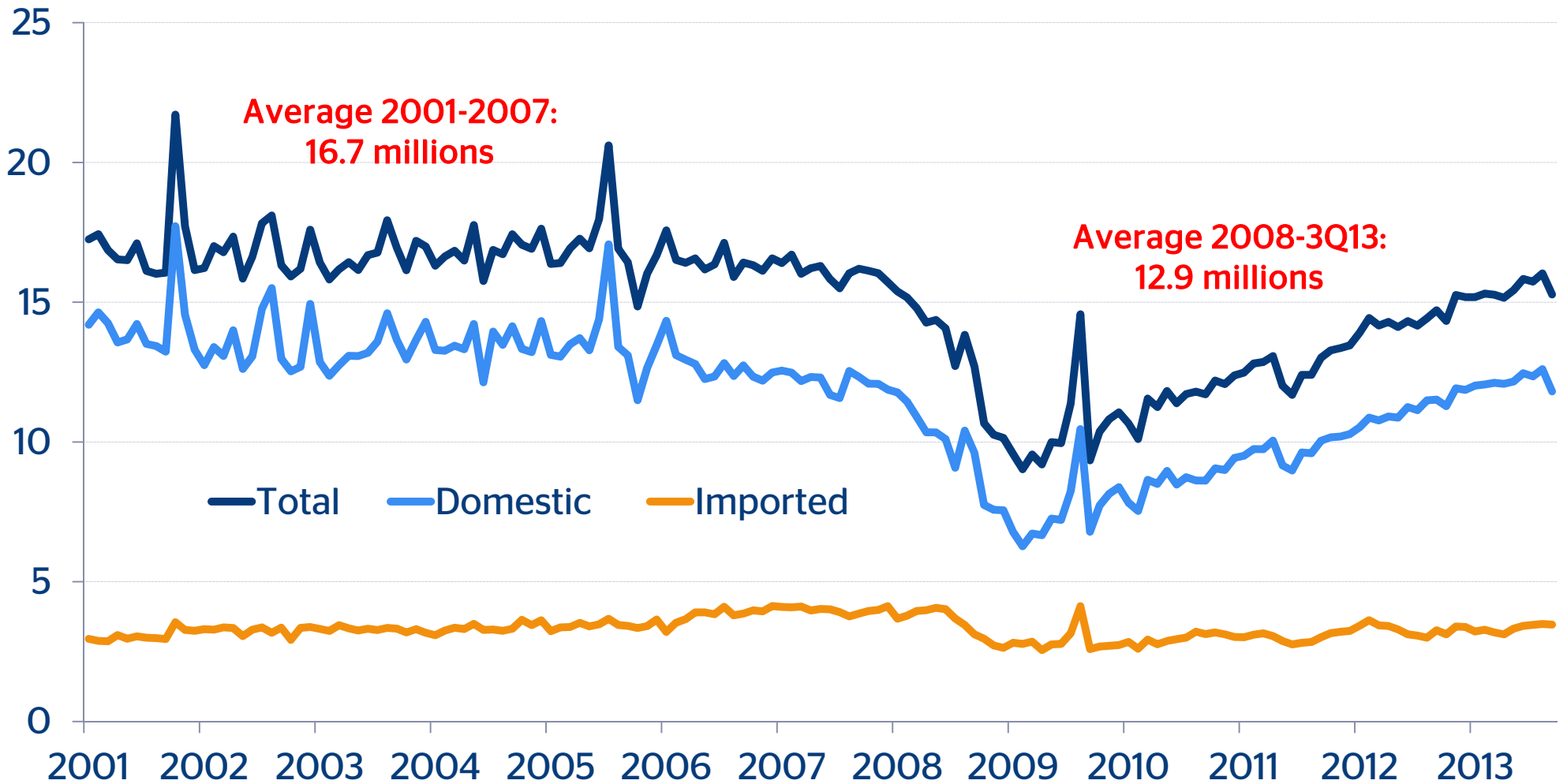
- Excess inventory could lead to a period of strong discounts
- Slow personal income growth points to a gradual expansion of sales
- Asian brands continue to gain market share
- Population growth assures a sustained demand; the aging process is shifting preferences

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Sales

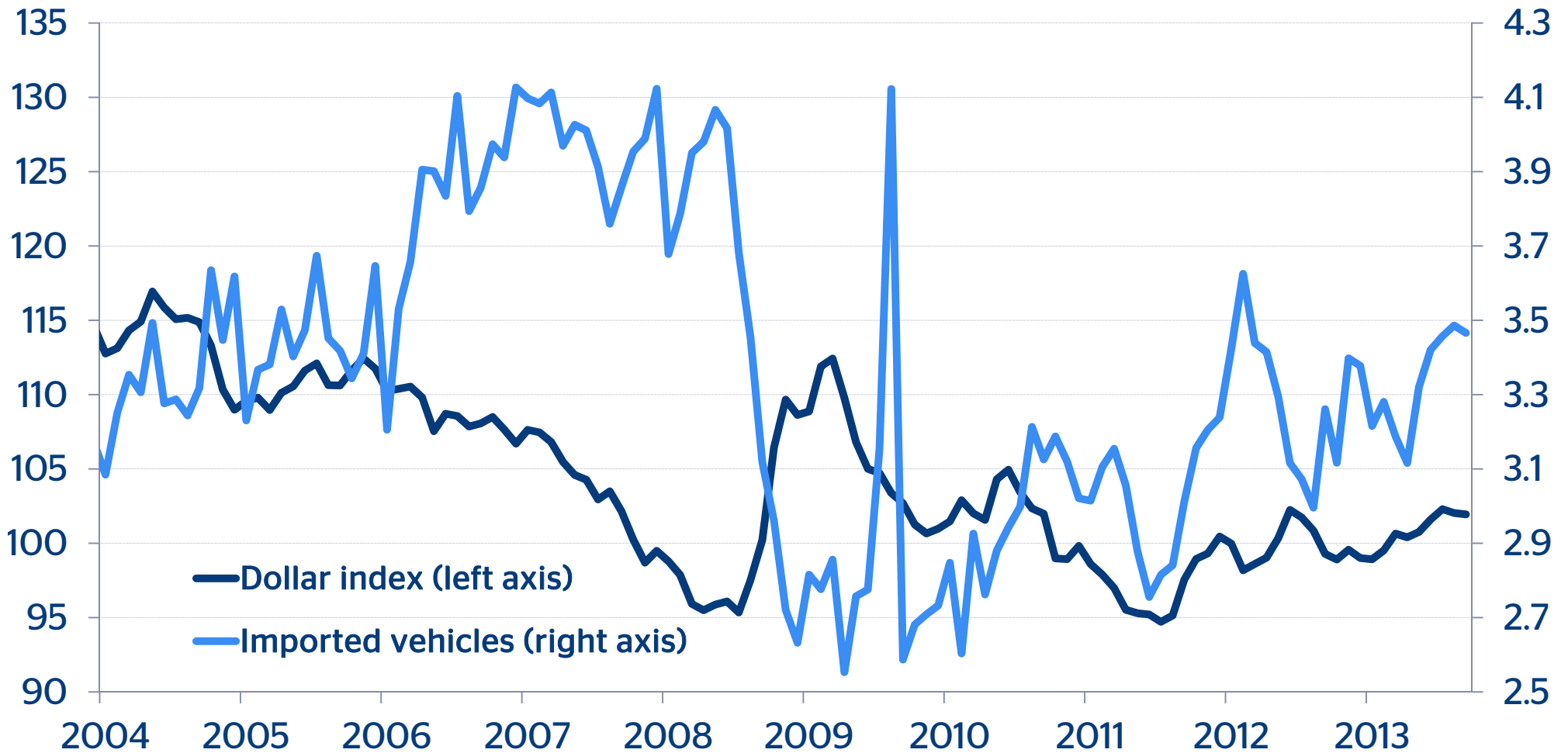
# Demand

**Total light weight vehicle sales (SAAR, million units)**



# Demand

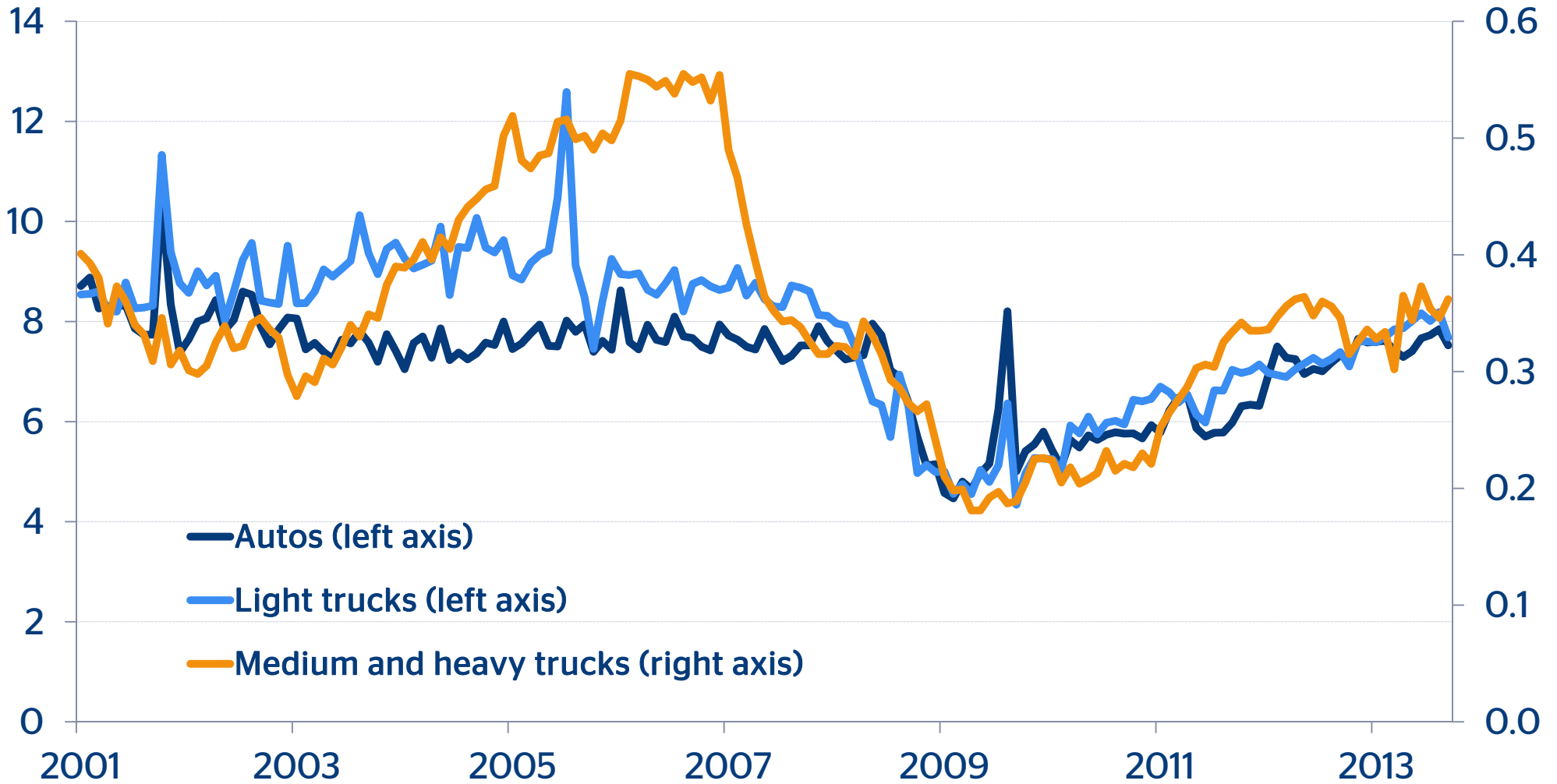
**Total light weight vehicle sales (SAAR, million units)**



Source: BBVA Research & Haver Analytics

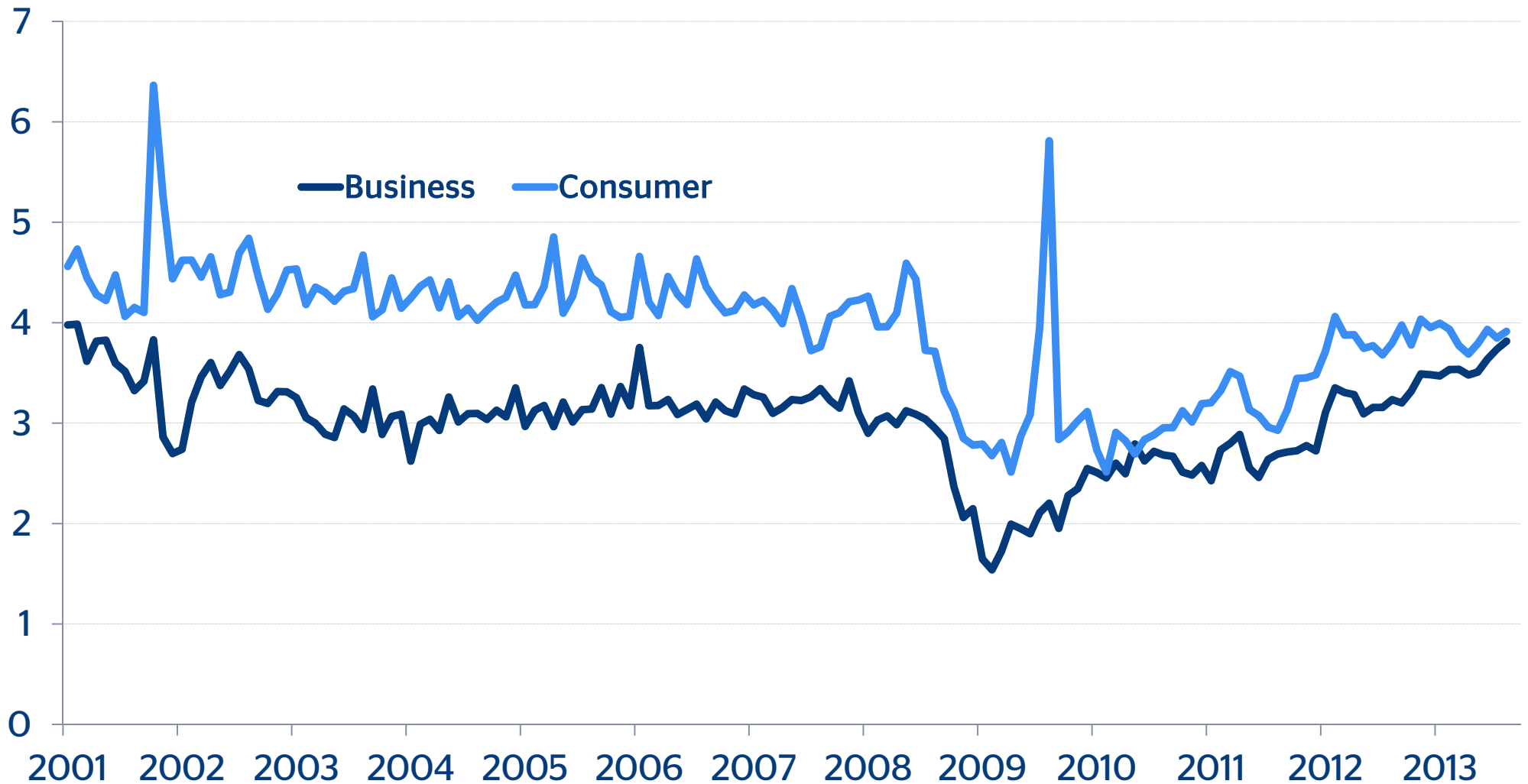
# Demand

**Total vehicle sales (SAAR, million units)**



# Demand

New auto sales by sector (SAAR, million units)

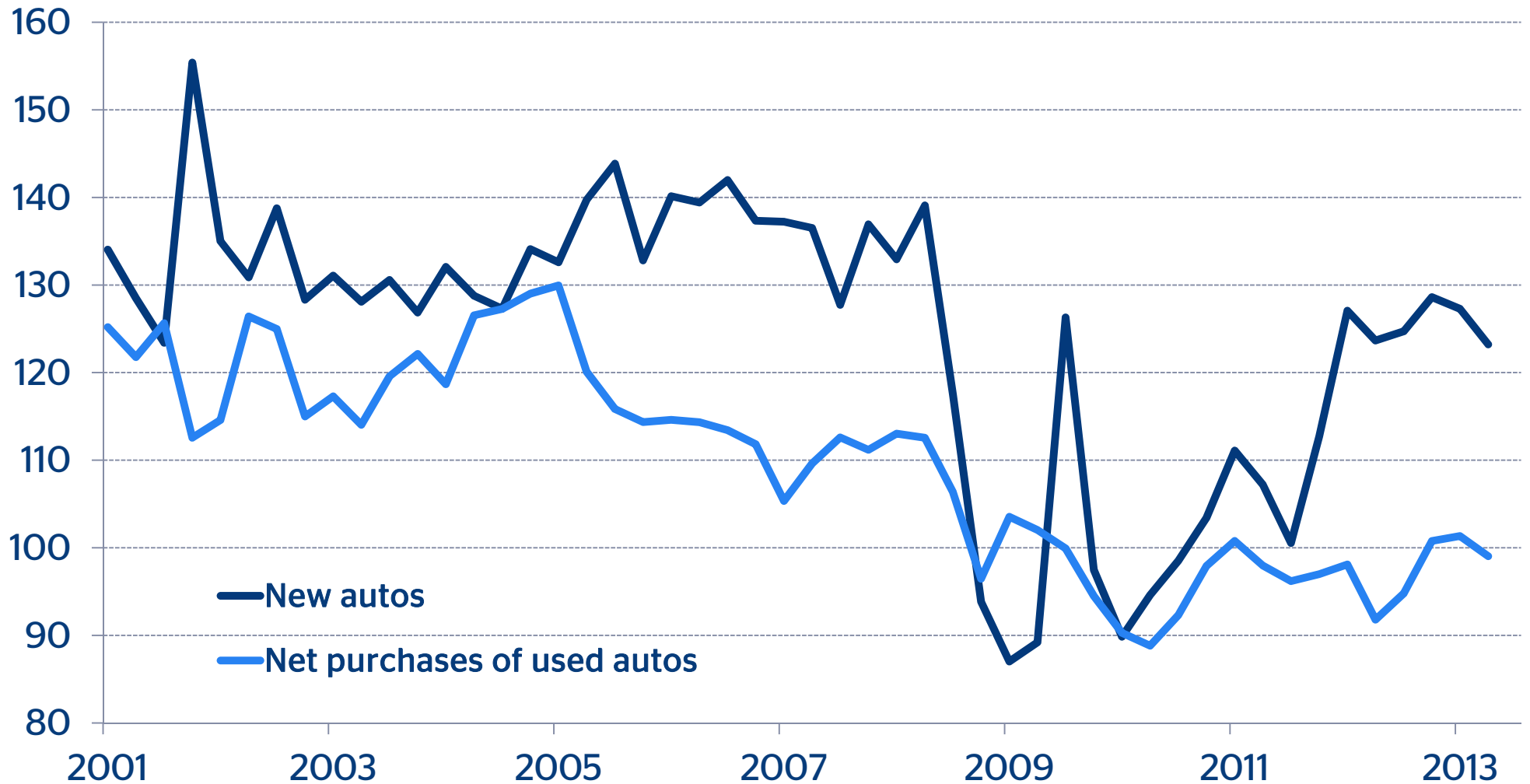


Source: Haver Analytics



# Demand

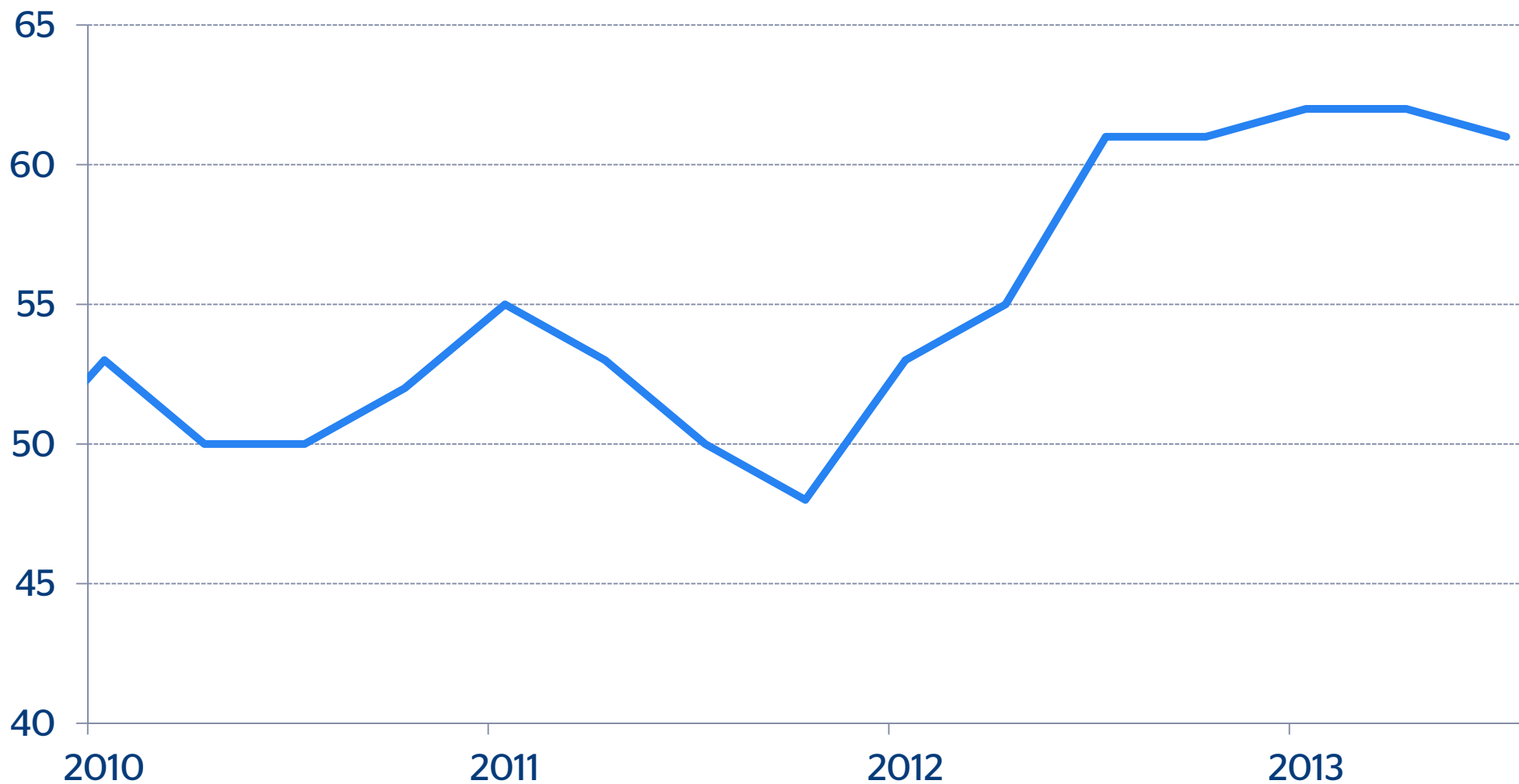
Personal consumer expenditures: quantity index (SA, 2009=100)



Source: Haver Analytics

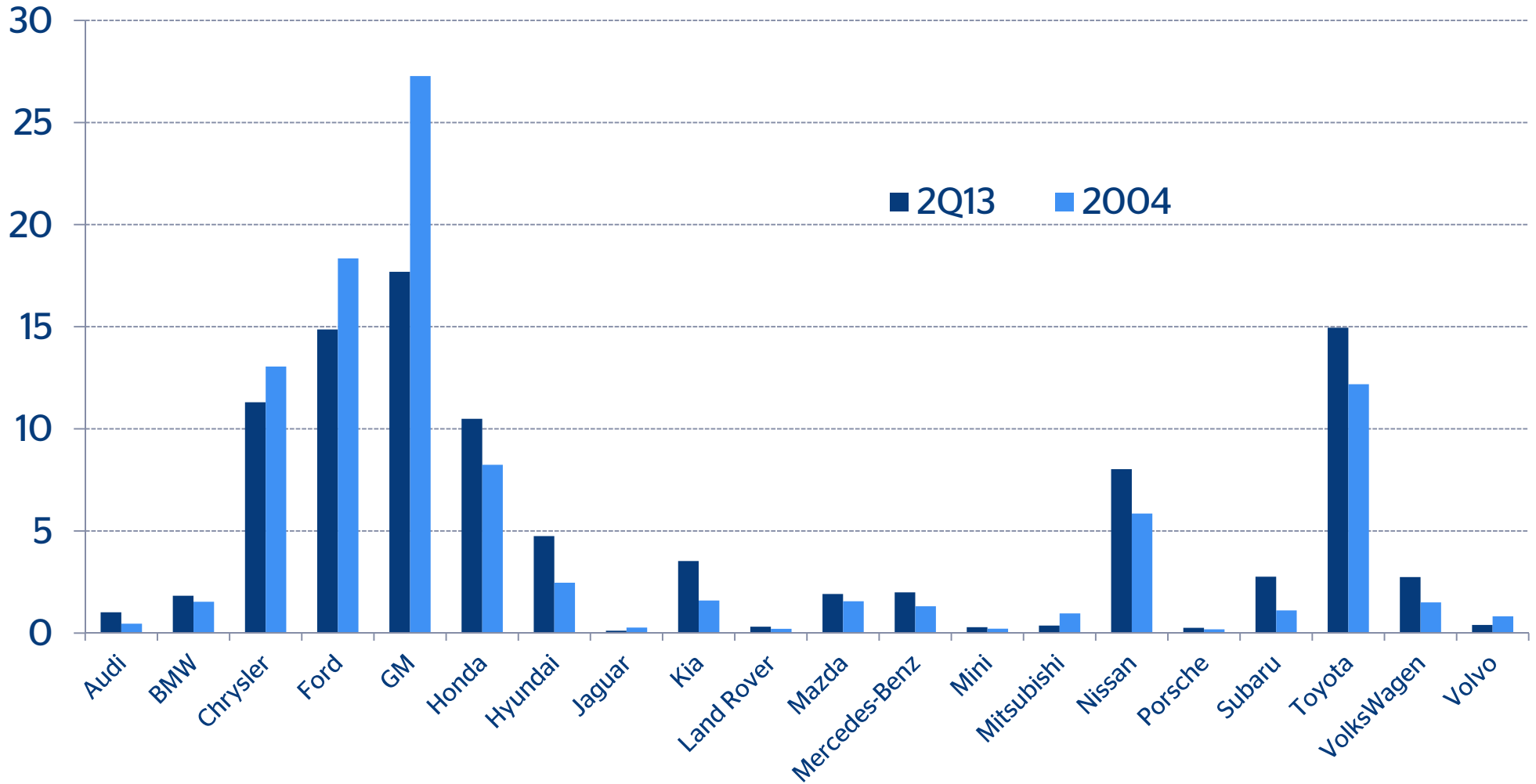
# Demand

U.S. vehicle days to turn (segment average)



# Demand

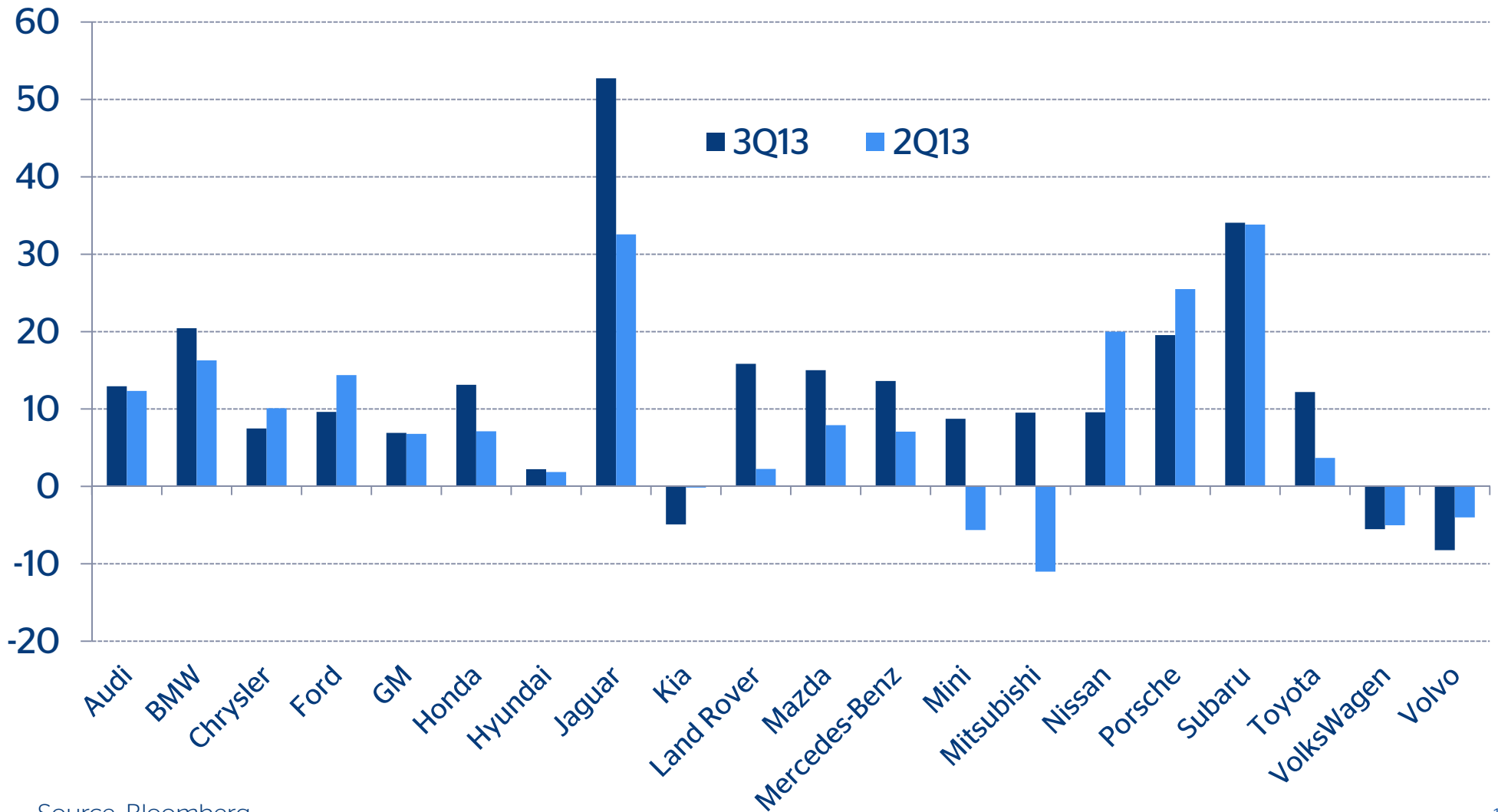
Market share by brand (%)



Source: Bloomberg

# Demand

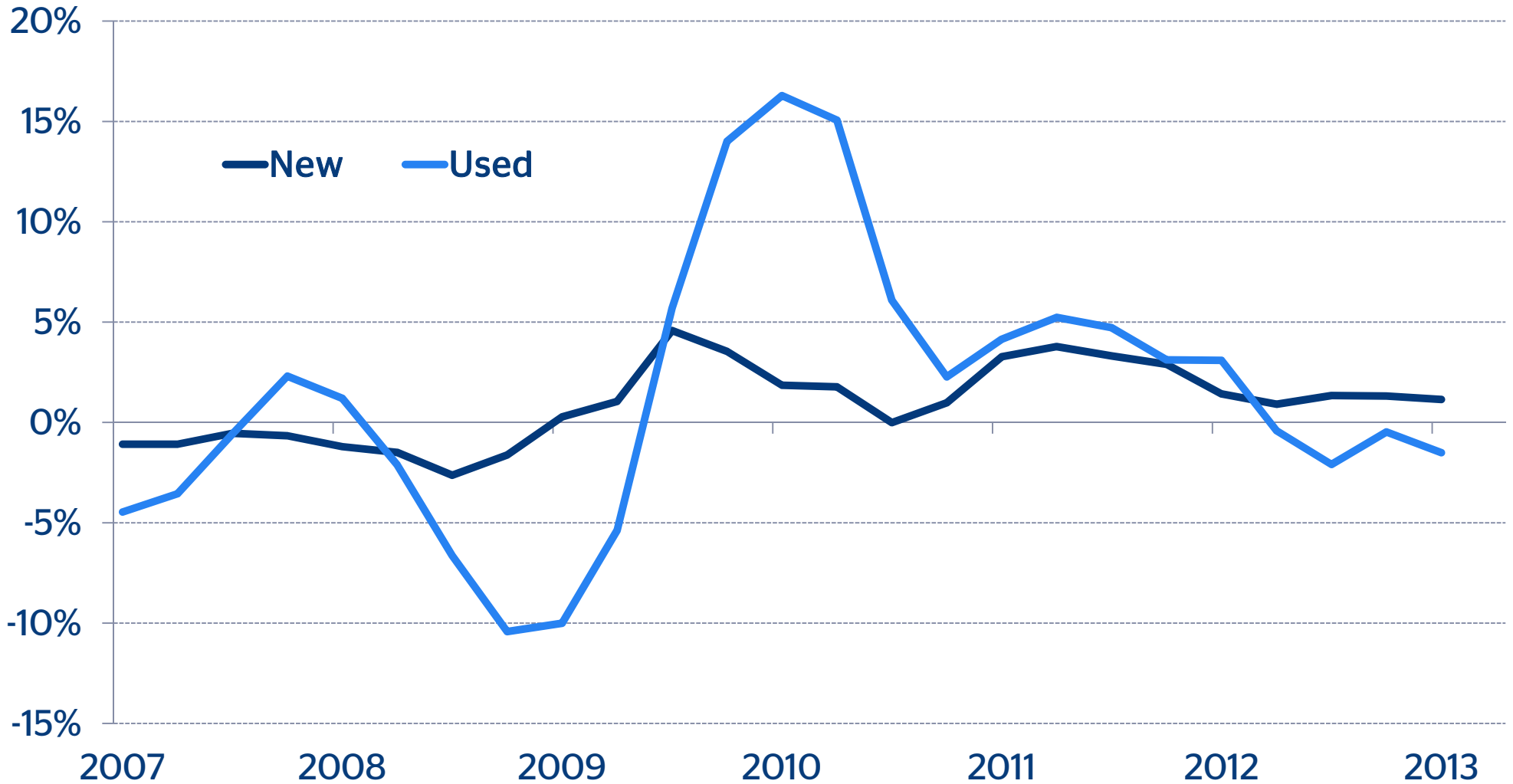
Quarterly unit sales (year-over-year % change)



Source: Bloomberg

# Prices

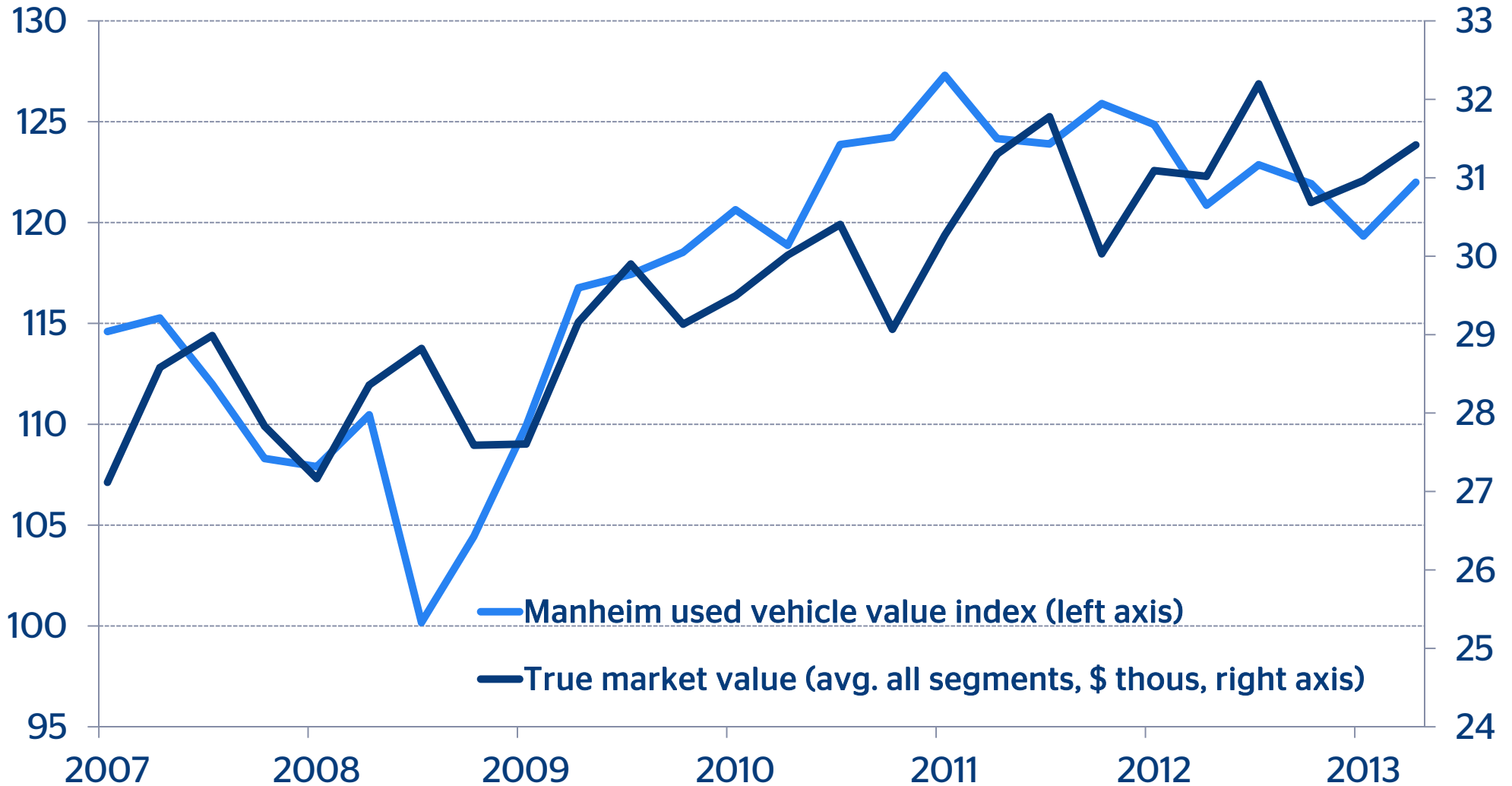
Consumer price index: cars and trucks (year-over-year change)



Source: Haver Analytics

# Prices

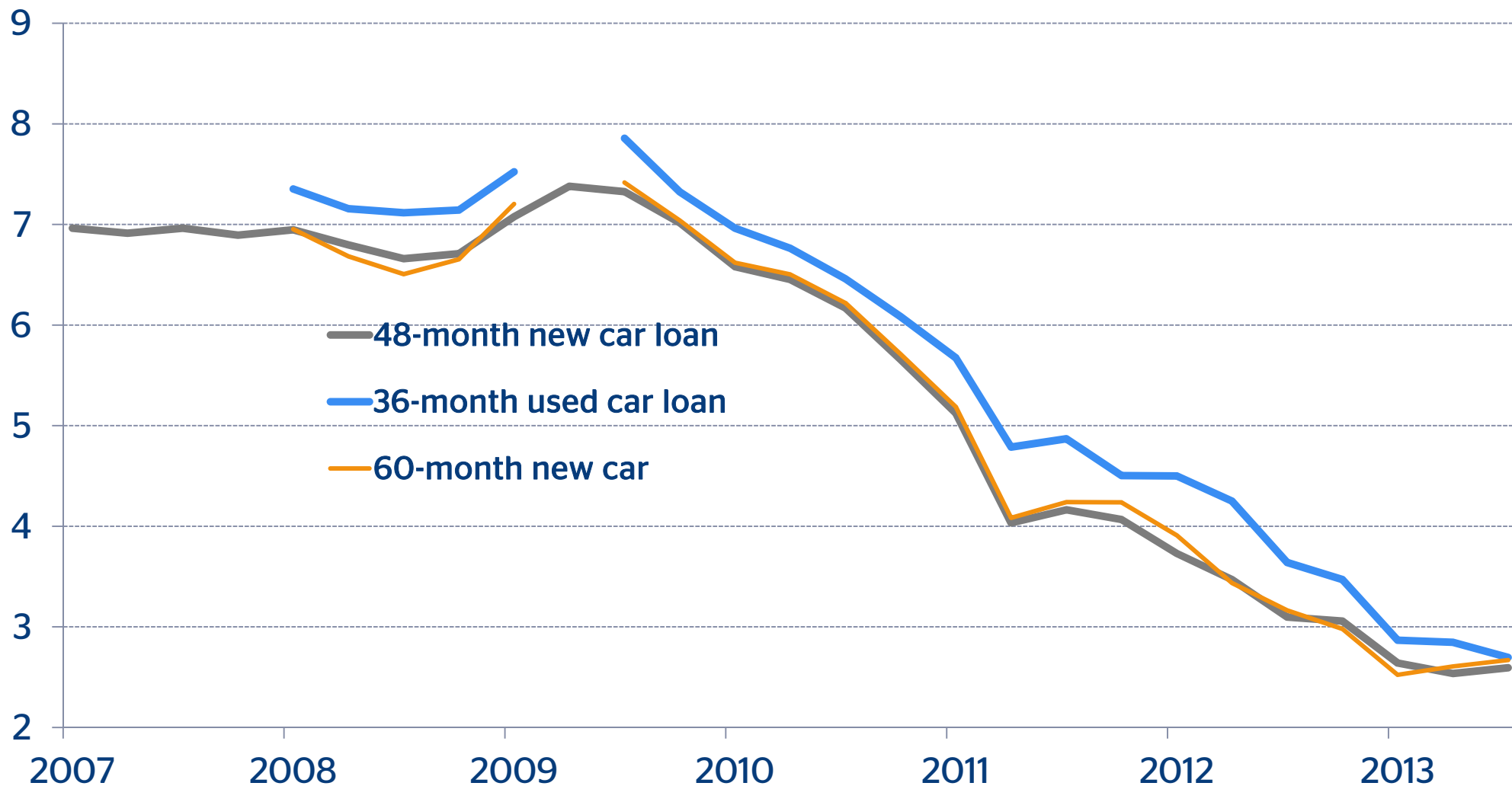
## Auto prices



Source: Haver Analytics & Bloomberg

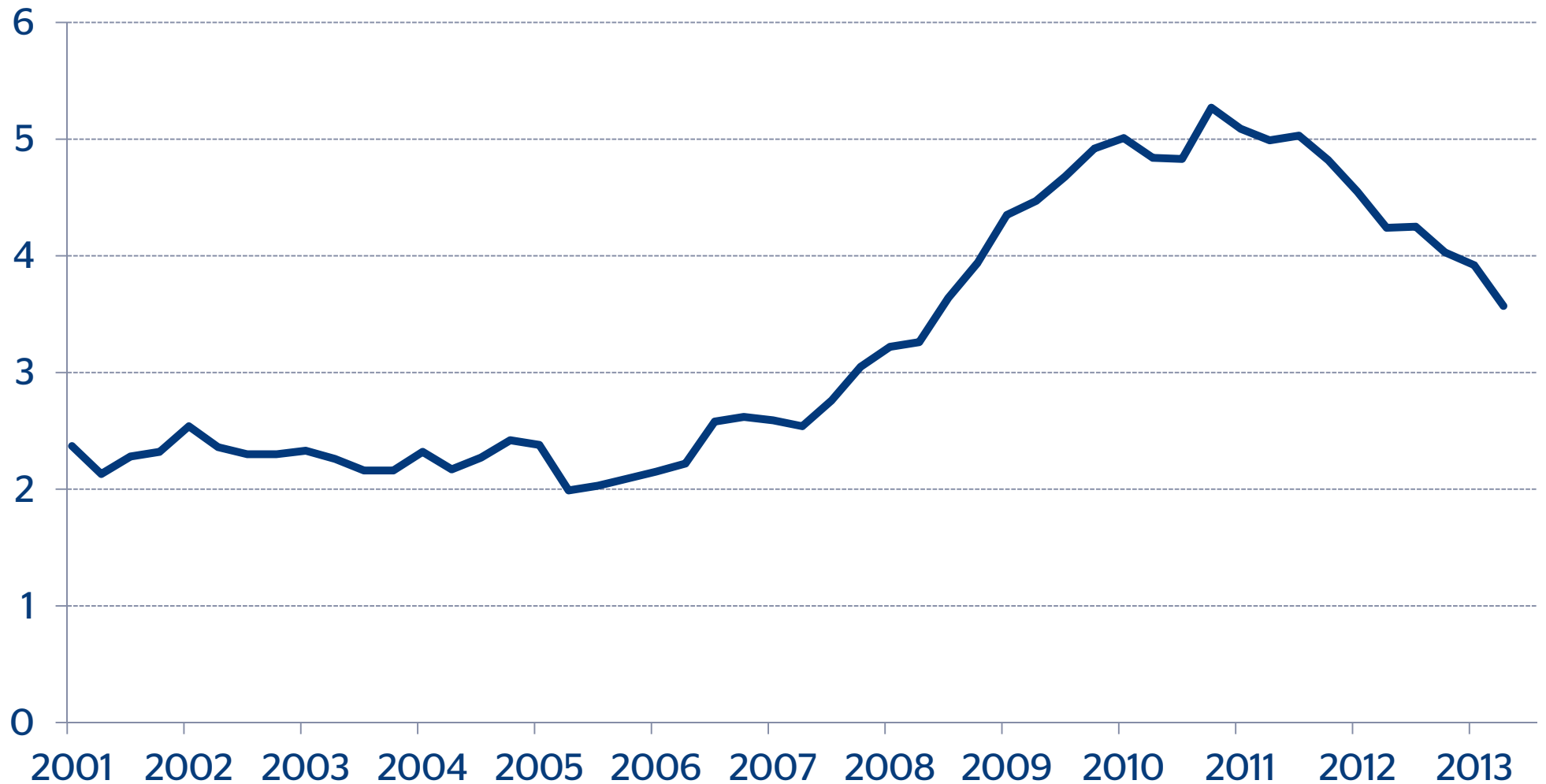
# Financing conditions

Car loan rates (%)



# Financing conditions

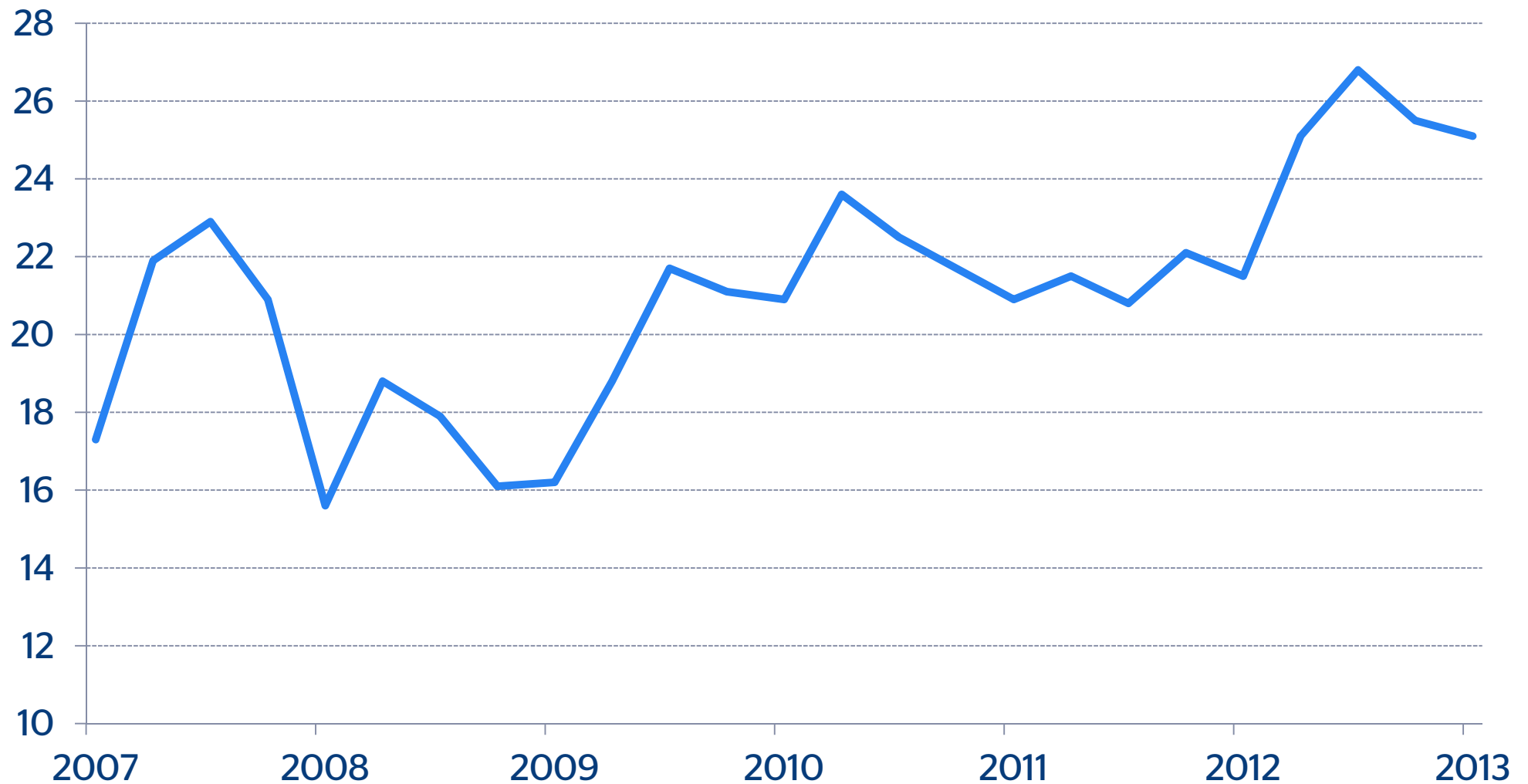
Auto loan 90+ days delinquent (percent of balance)





# Financing conditions

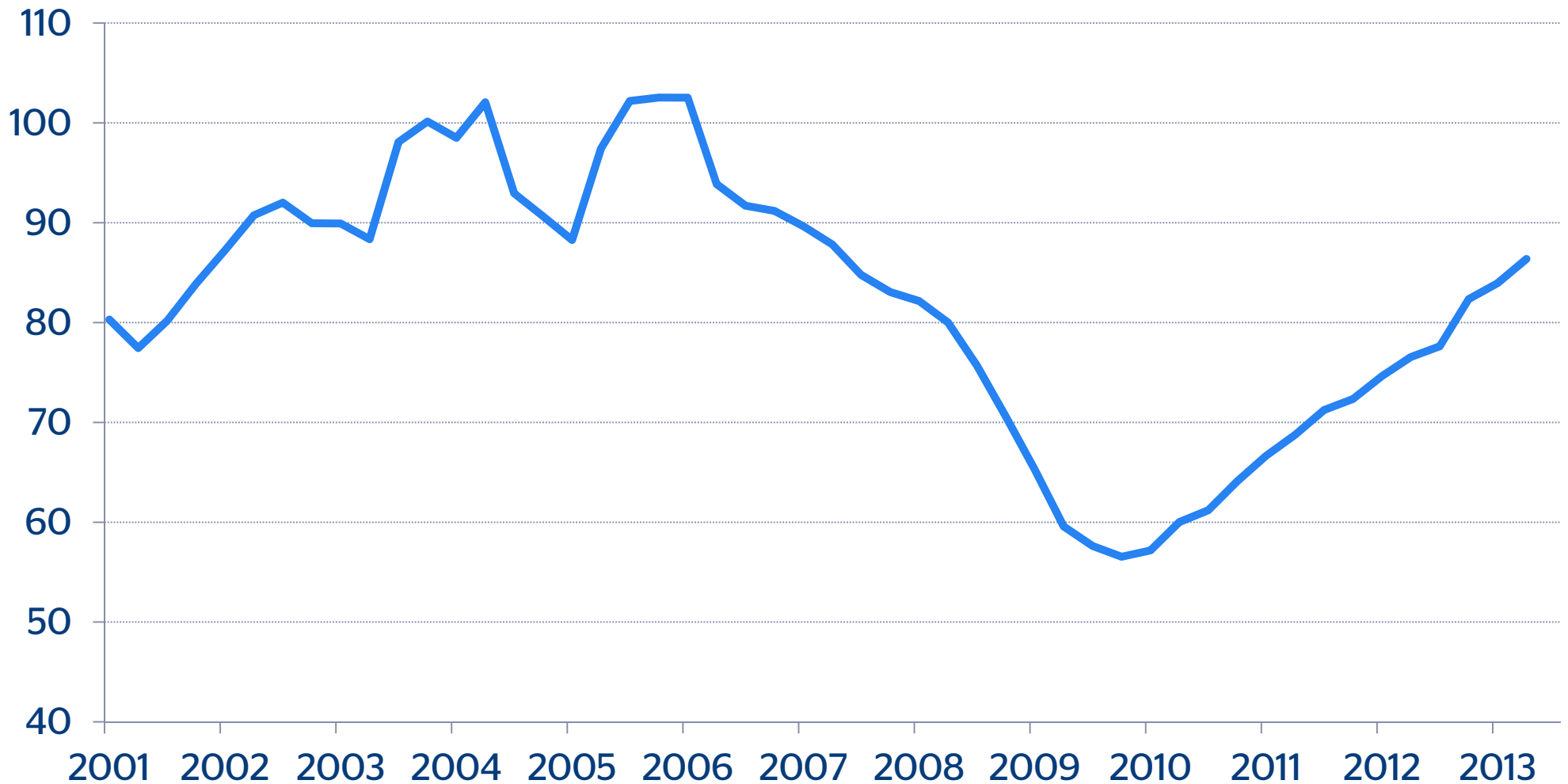
## Leasing penetration rate, %



Source: Bloomberg

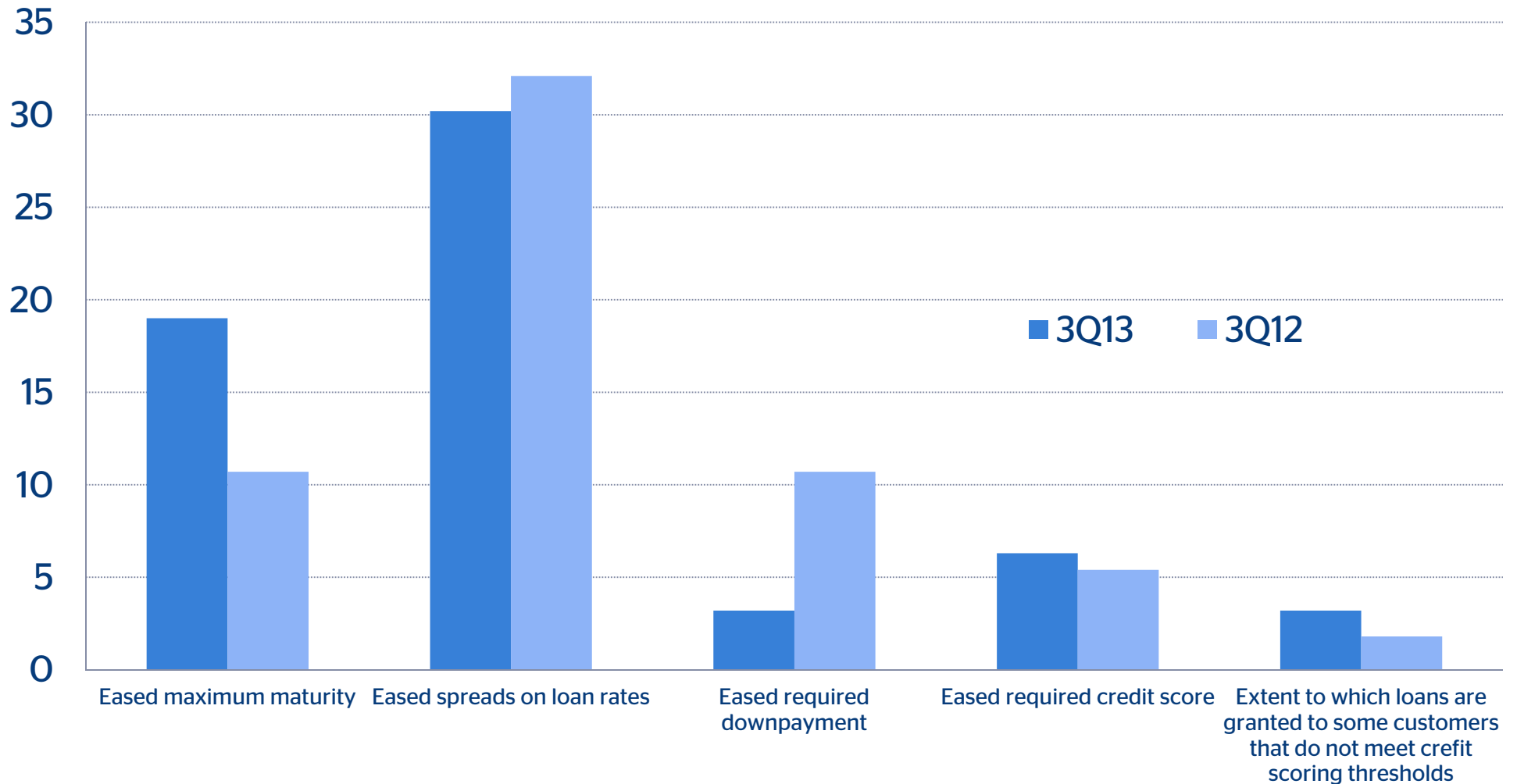
# Financing conditions

Newly originated installment auto loans (\$ billion, eop, 4-qtr moving average)



# Financing conditions

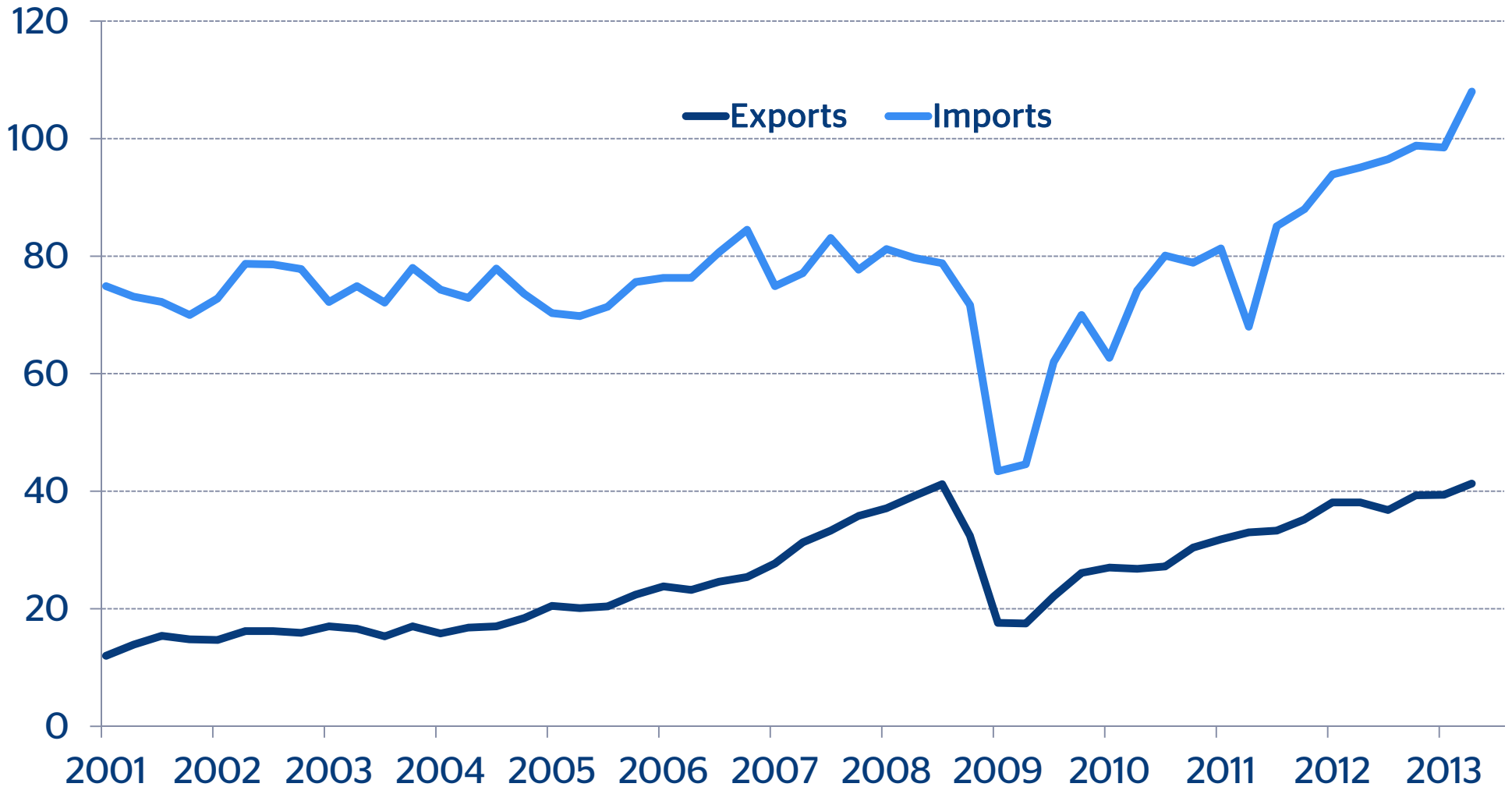
Terms and conditions on auto loans, percentage of respondents (%)



Source: Federal Reserve Senior Loan Officer Opinion Survey

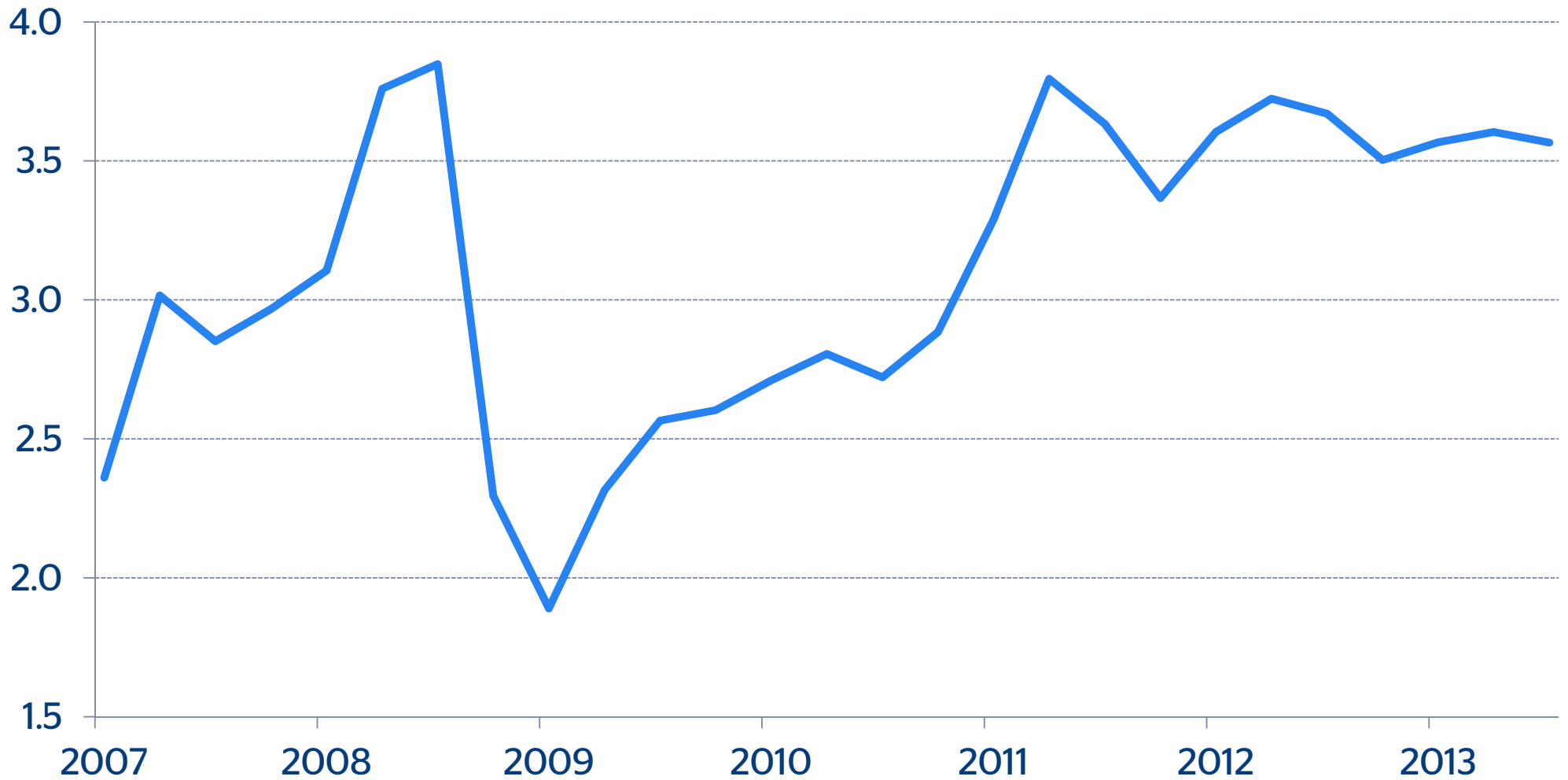
# International trade

Exports and imports of autos (SAAR, \$ billion, chained 2009 dollars)



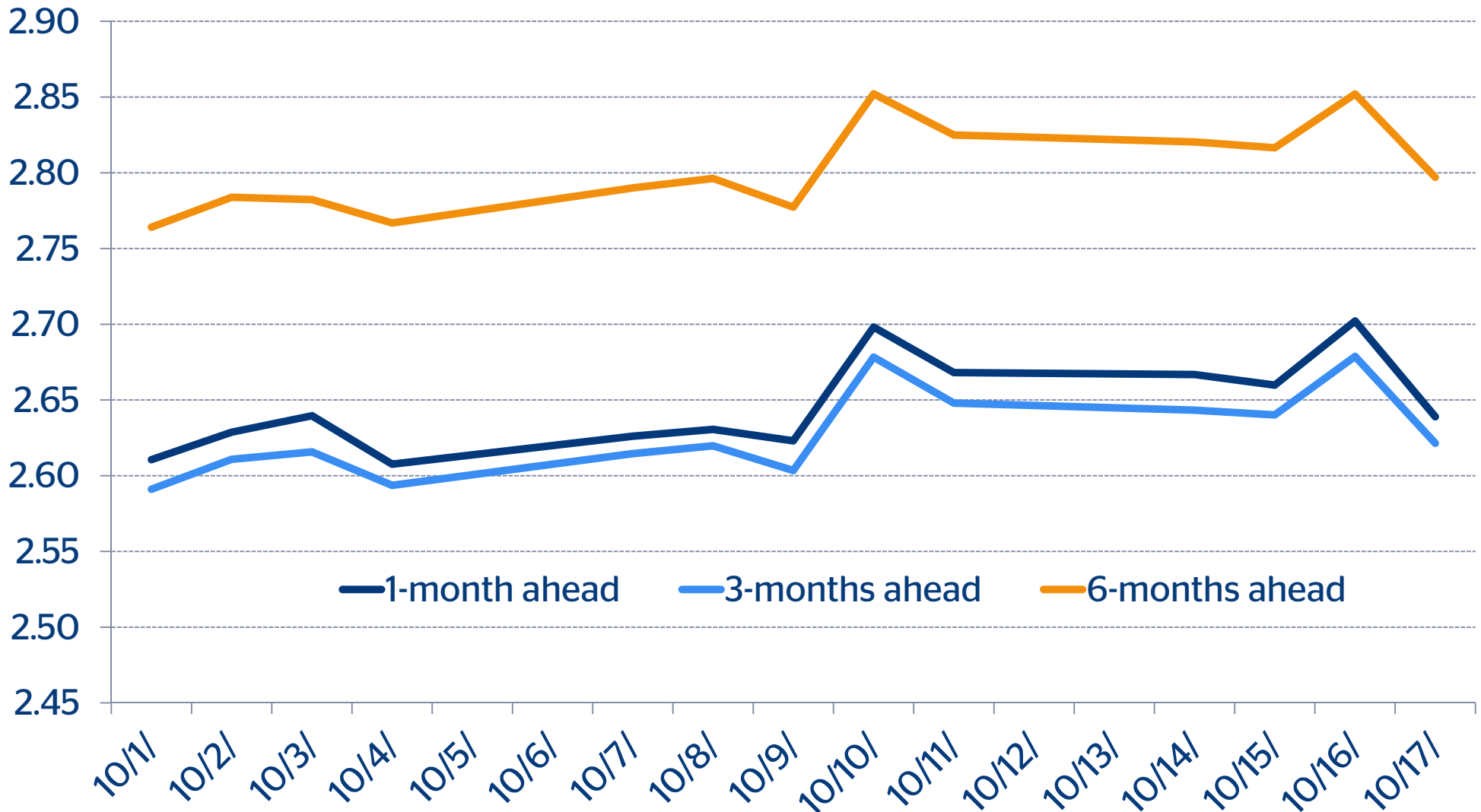
# Gasoline

Spot price (\$/gallon)



# Gasoline

Future prices (\$/gallon)

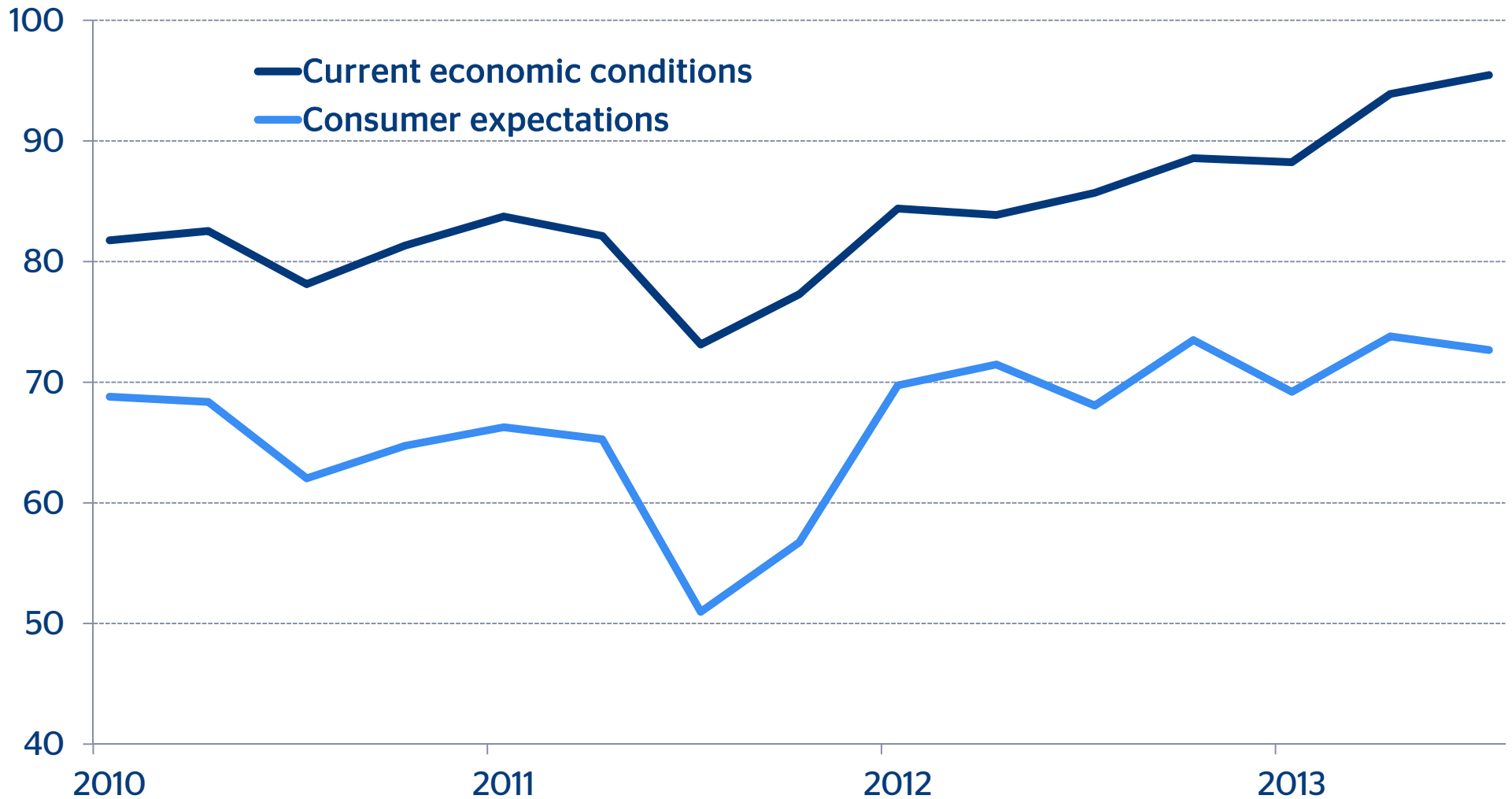


# 2

# Consumers

# Consumers

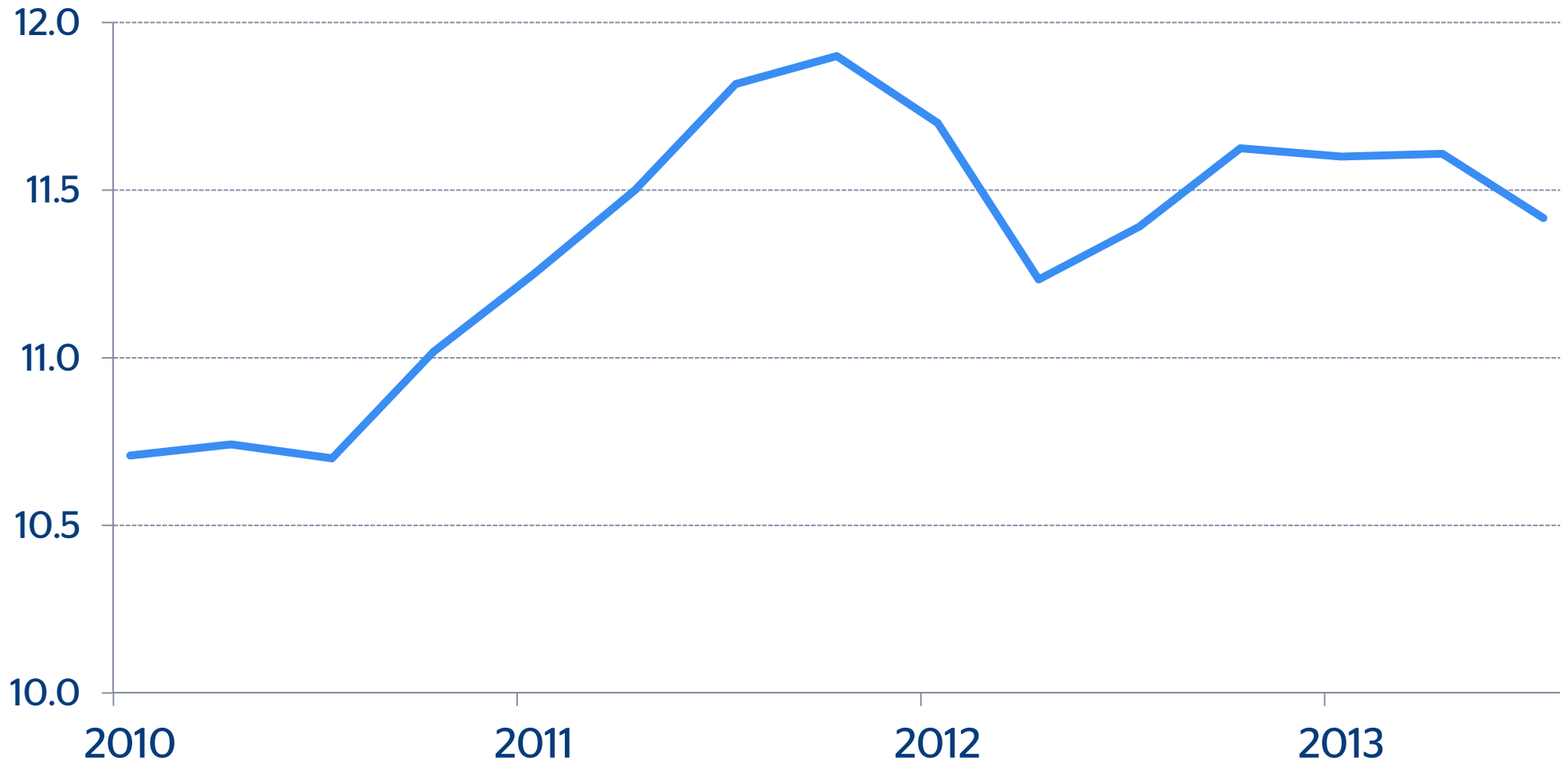
## Consumer sentiment index





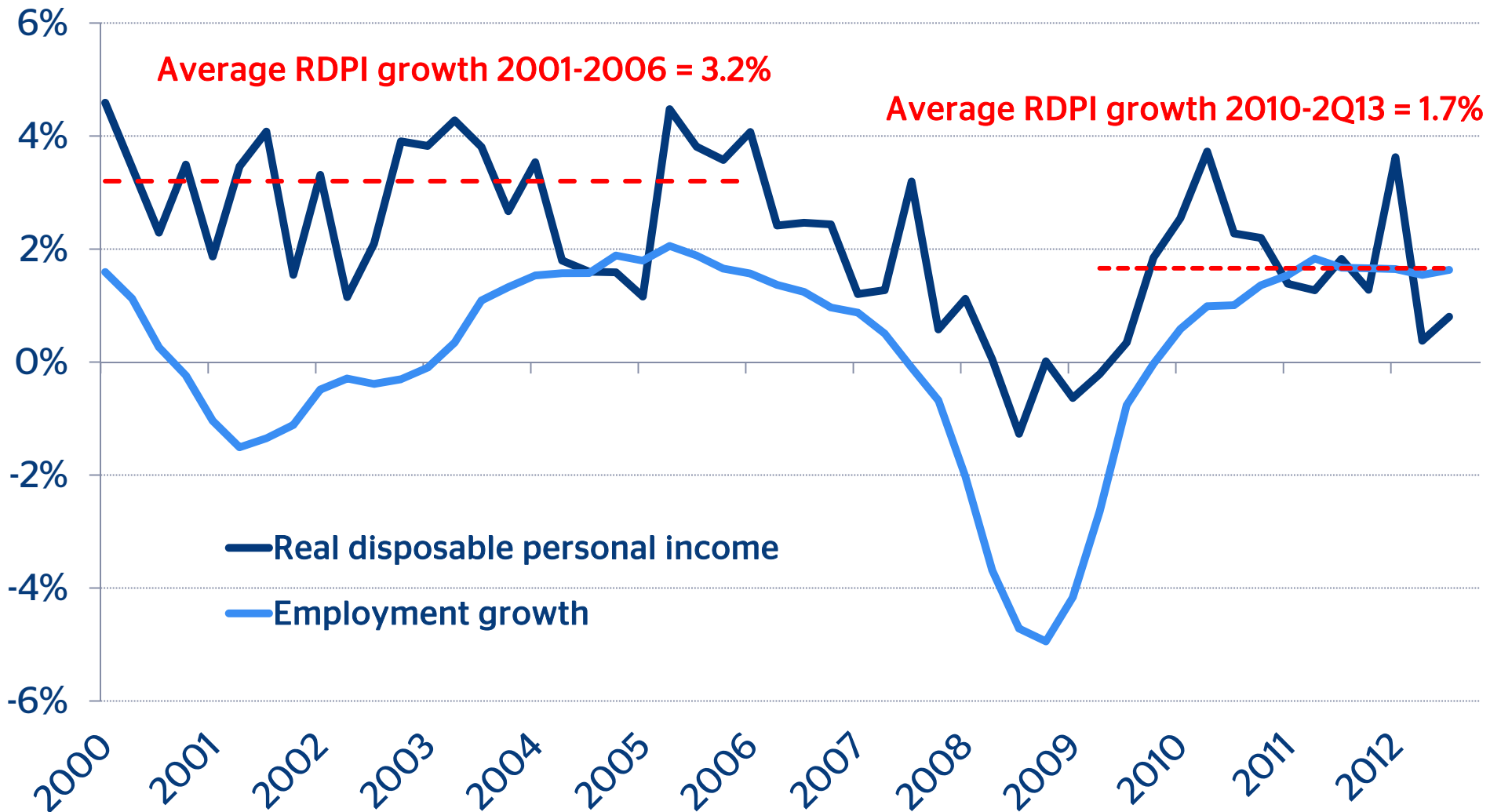
# Consumers

Plan to buy a car within 6 months, % of respondents



# Consumers

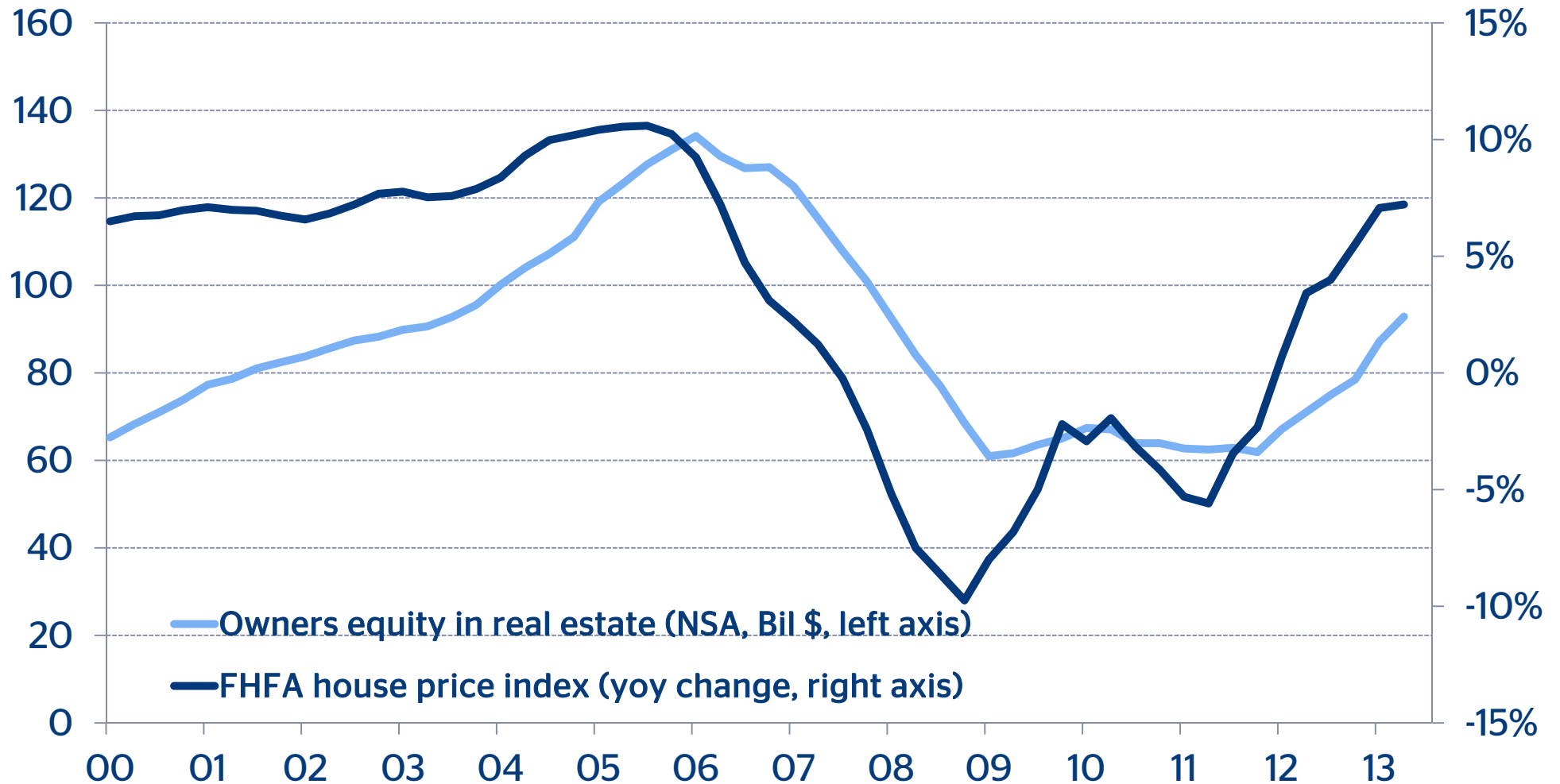
Employment and real disposable personal income growth (yoy change)



Source: BBVA Research and Haver Analytics

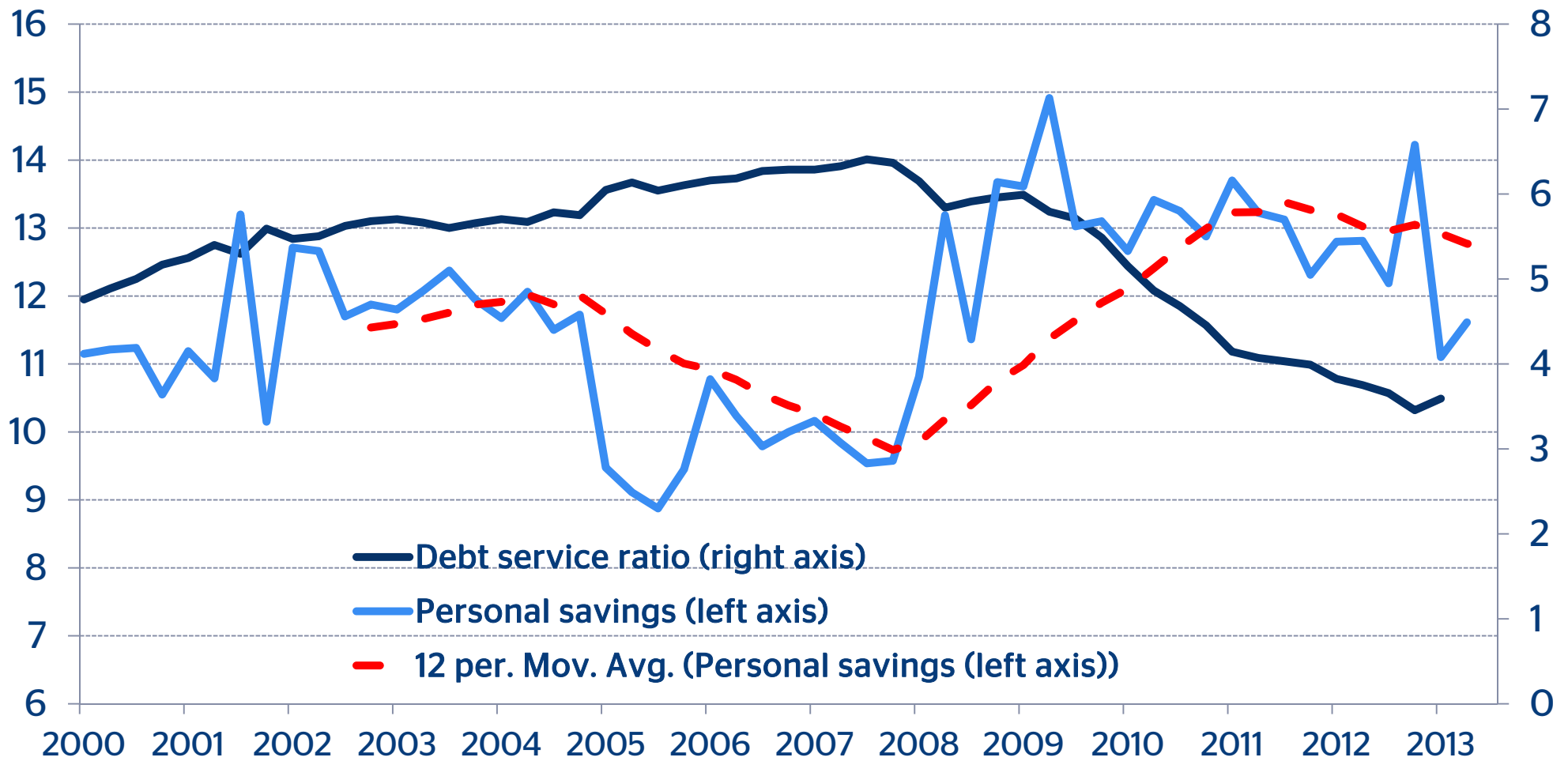
# Household equity

## Household equity and home prices



# Savings and deleverage

## Debt-to-income ratio and savings rate

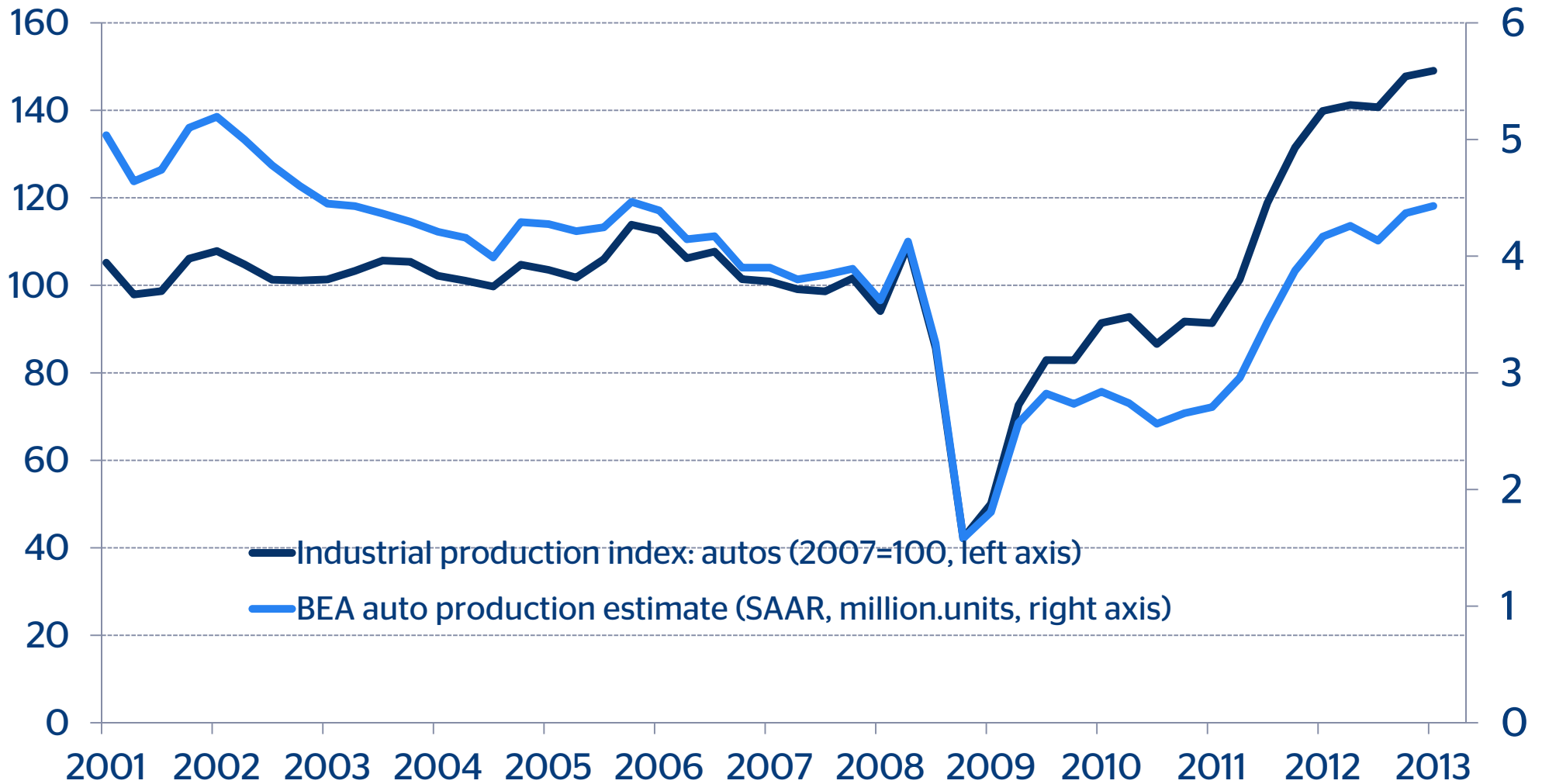


# 3

# Production

# Production

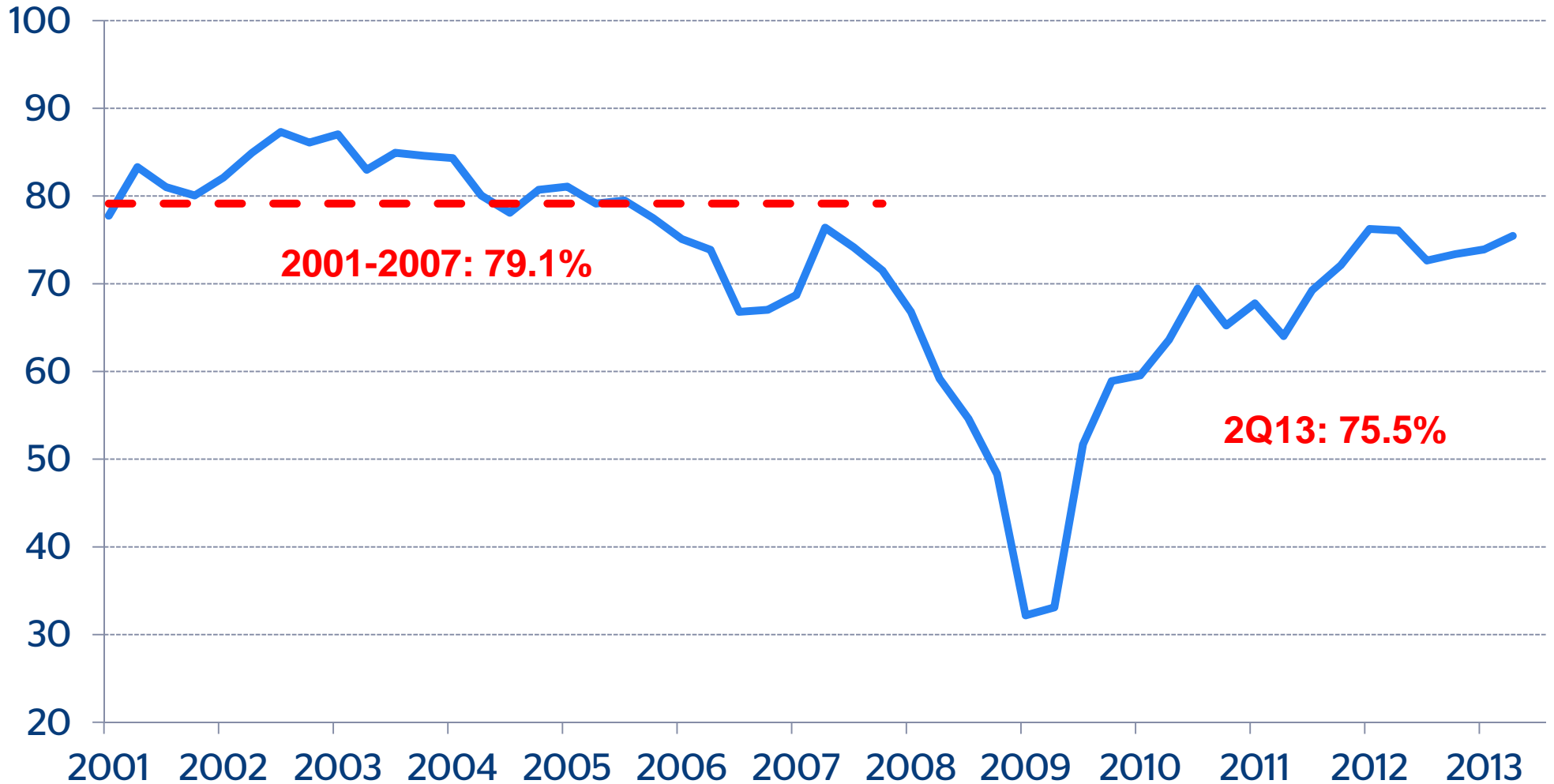
## Auto production



Source: Haver Analytics

# Capacity utilization

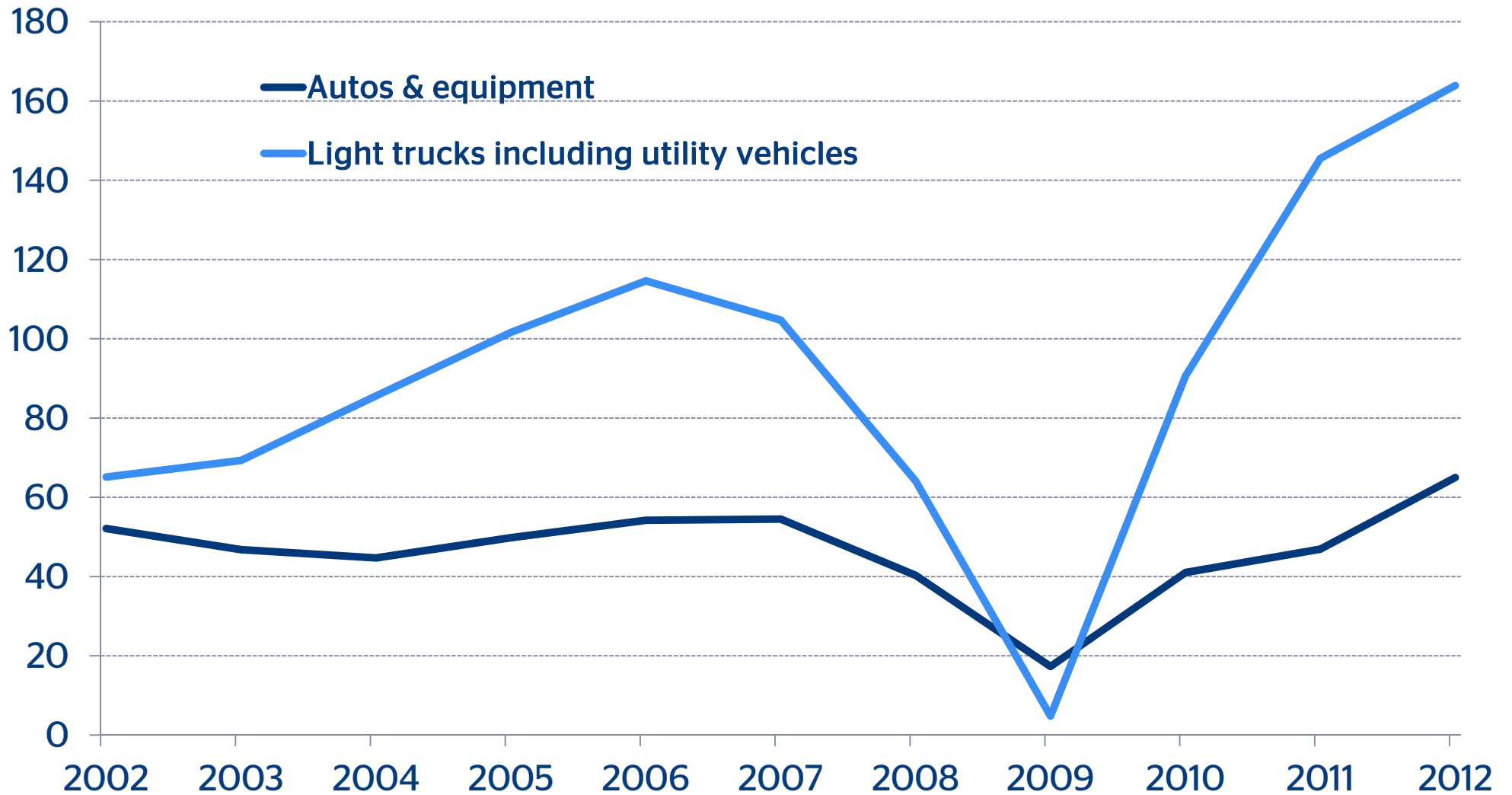
Industrial production: automobile and light duty motor vehicles  
(SA, % of capacity)



Source: Haver Analytics

# Investment

Private fixed investment: autos & equipment (billions of chained 2009 dollars)



Source: Haver Analytics

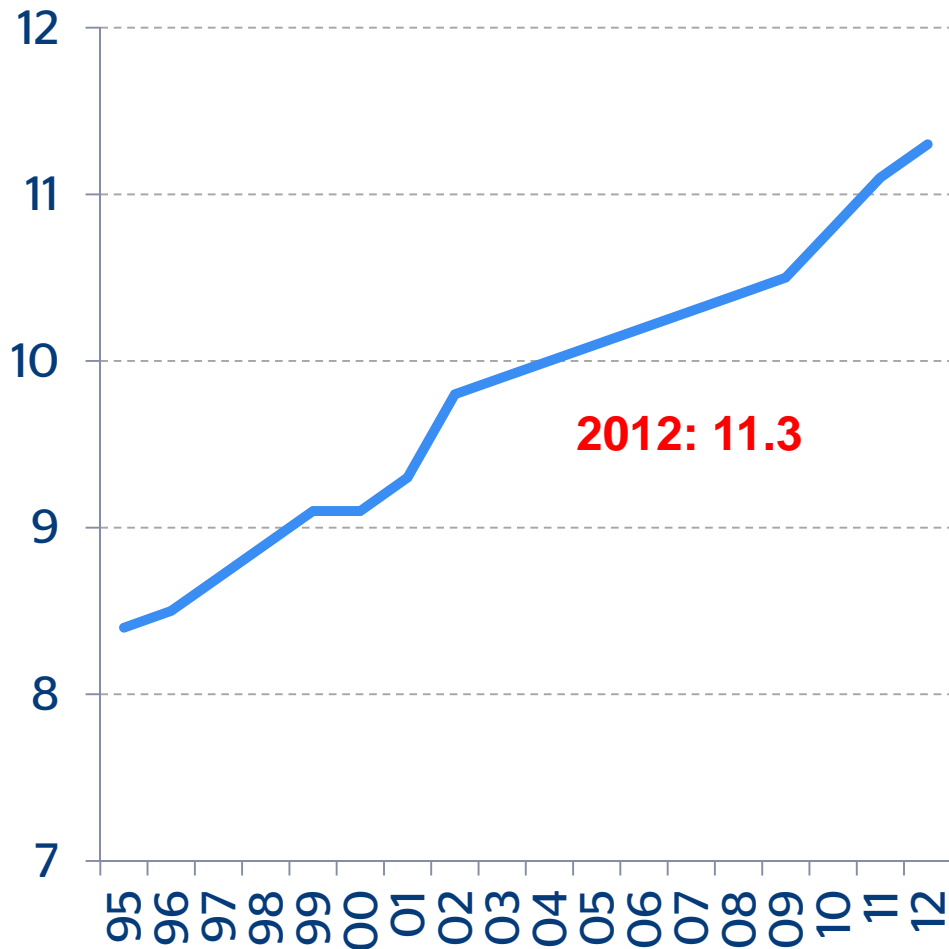


# 4

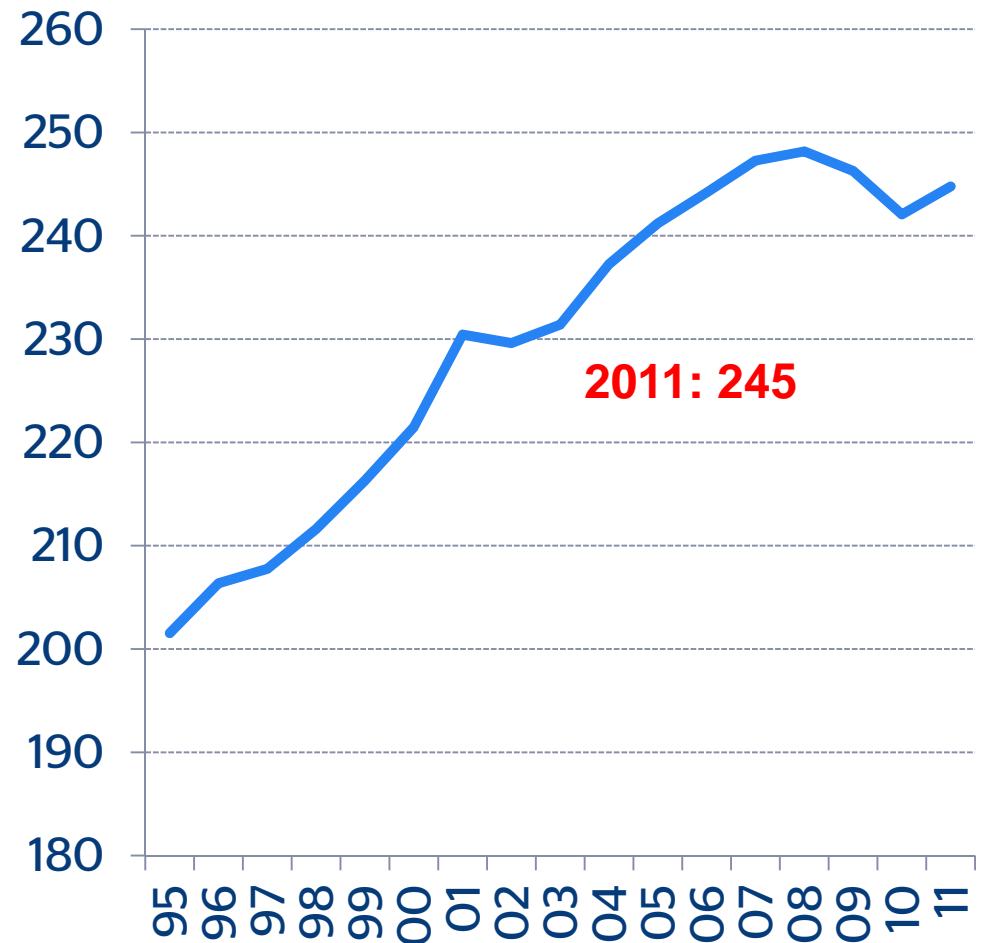
# Structural

# Fundamentals

**Mean age of passenger cars in operation**  
Years

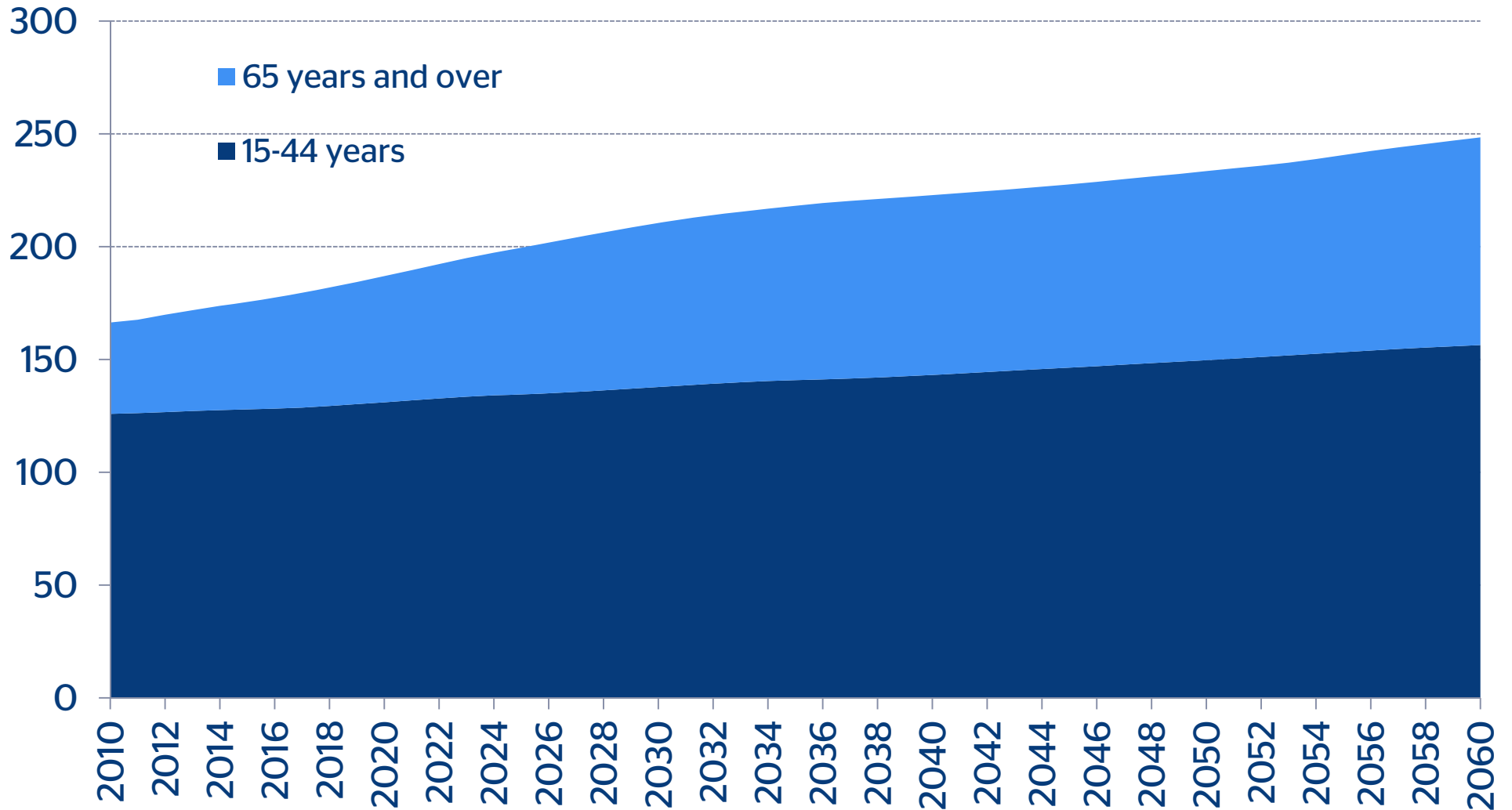


**Vehicle registrations**  
Millions



# Demographics

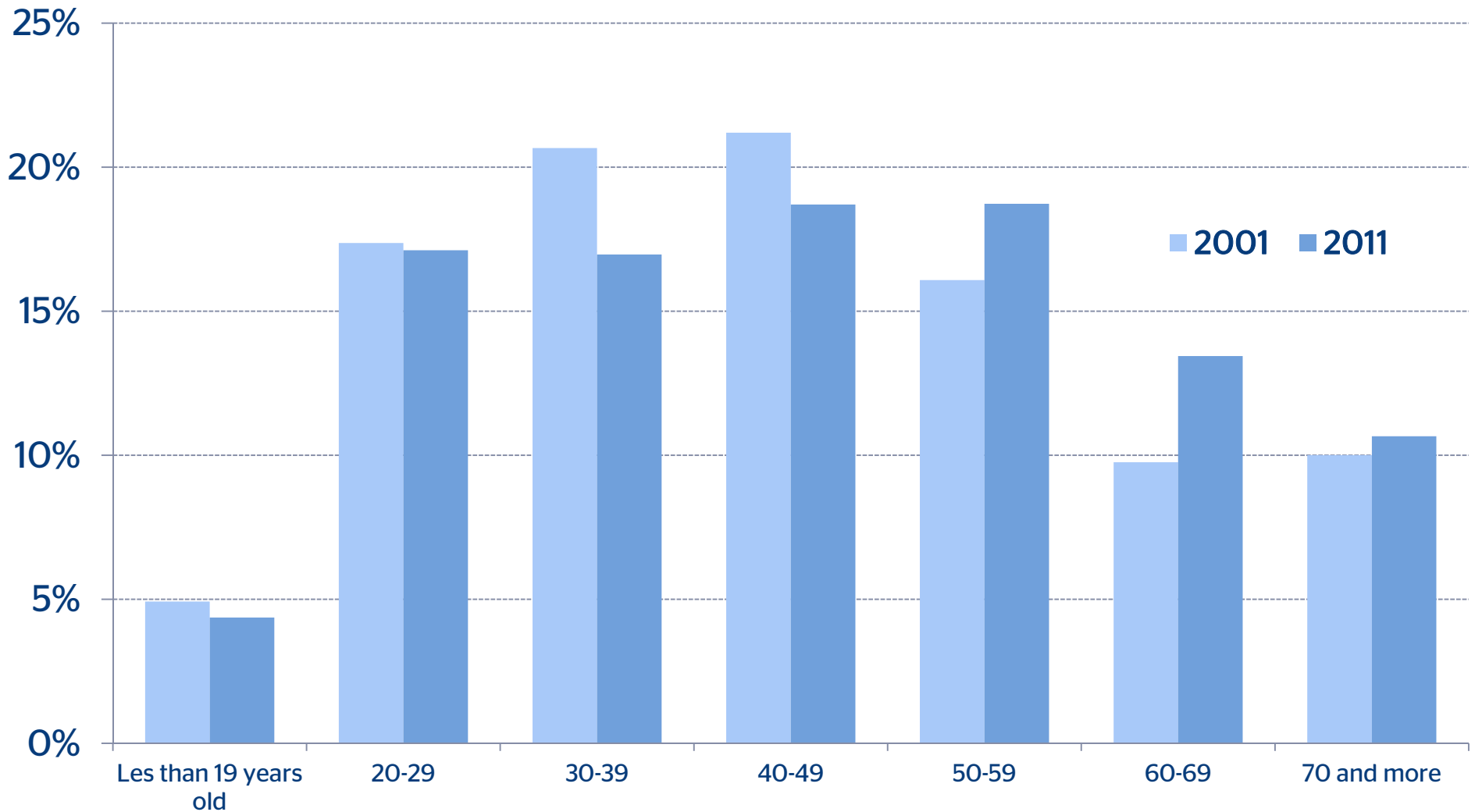
Population projections by age (millions)



Source: Haver Analytics

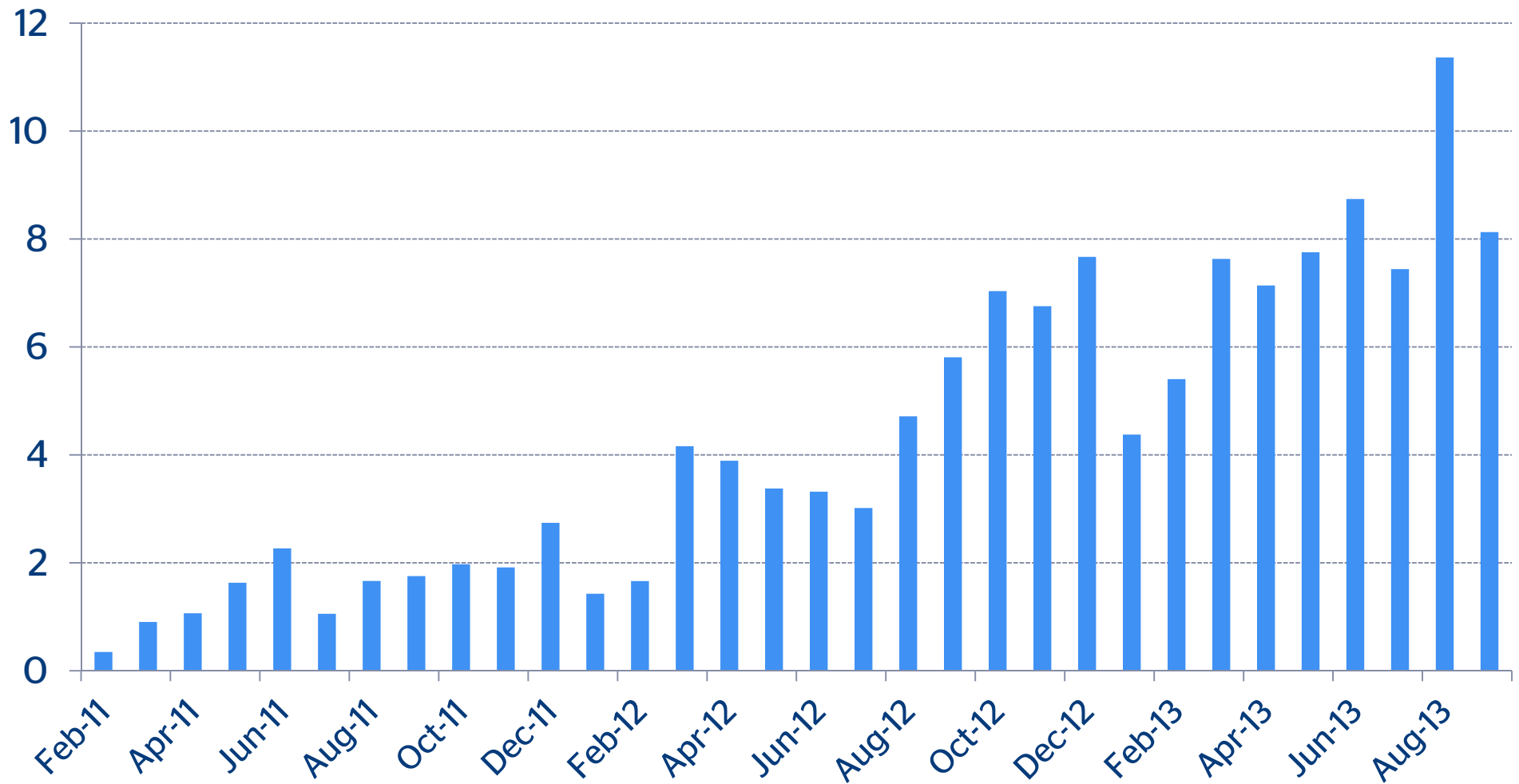
# Demographics

## U.S. licensed drivers by age



# Electric cars

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



Source: Electric Drive Transportation Association

# 5

## Forecasts

# Forecasts

Average	2012	2013	2014	2015
<b>Auto sales</b> (millions units)	<b>14.4</b>	<b>15.6</b>	<b>16.3</b>	<b>16.7</b>
<b>GDP growth</b> (% change)	<b>2.8</b>	<b>1.6</b>	<b>2.3</b>	<b>2.5</b>
<b>Unemployment rate</b> (%)	<b>8.1</b>	<b>7.5</b>	<b>7.0</b>	<b>6.4</b>
<b>Fed funds</b> (%)	<b>0.14</b>	<b>0.19</b>	<b>0.25</b>	<b>0.33</b>
<b>3-year Treasuries</b> (%)	<b>0.38</b>	<b>0.62</b>	<b>1.07</b>	<b>1.78</b>

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