

U.S. Auto Industry Chartbook

BBVA Research USA

Houston, TX

Third Quarter 2015

Key messages

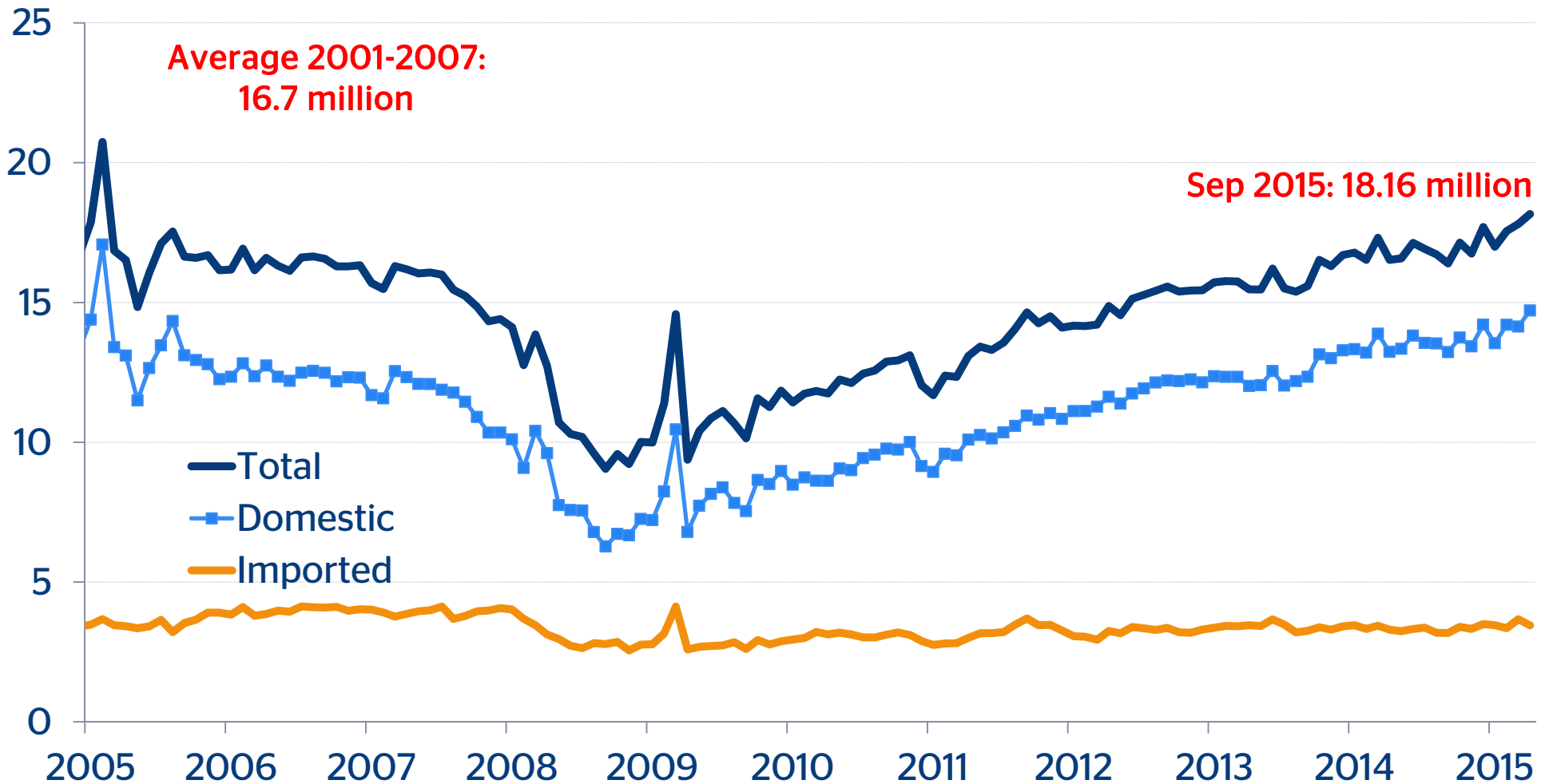
- Light motor vehicle sales reached 18.16 million in September, the highest level since July 2005
- Sales of light and heavy trucks follow an upward trend boosted by cheap fuel, employment growth and low interest rates
- Financial conditions are favorable, with rates still at historical lows and loan originations currently in pre-crisis levels
- Sustained economic growth and low energy prices will continue to support demand for light motor vehicle sales
- At 11.4, the average age of vehicle fleet could spur replacement in the short-term
- Demand for plug-in hybrids improved slightly in 3Q15, but remains constrained by the impact of low gasoline prices

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Sales

Sales

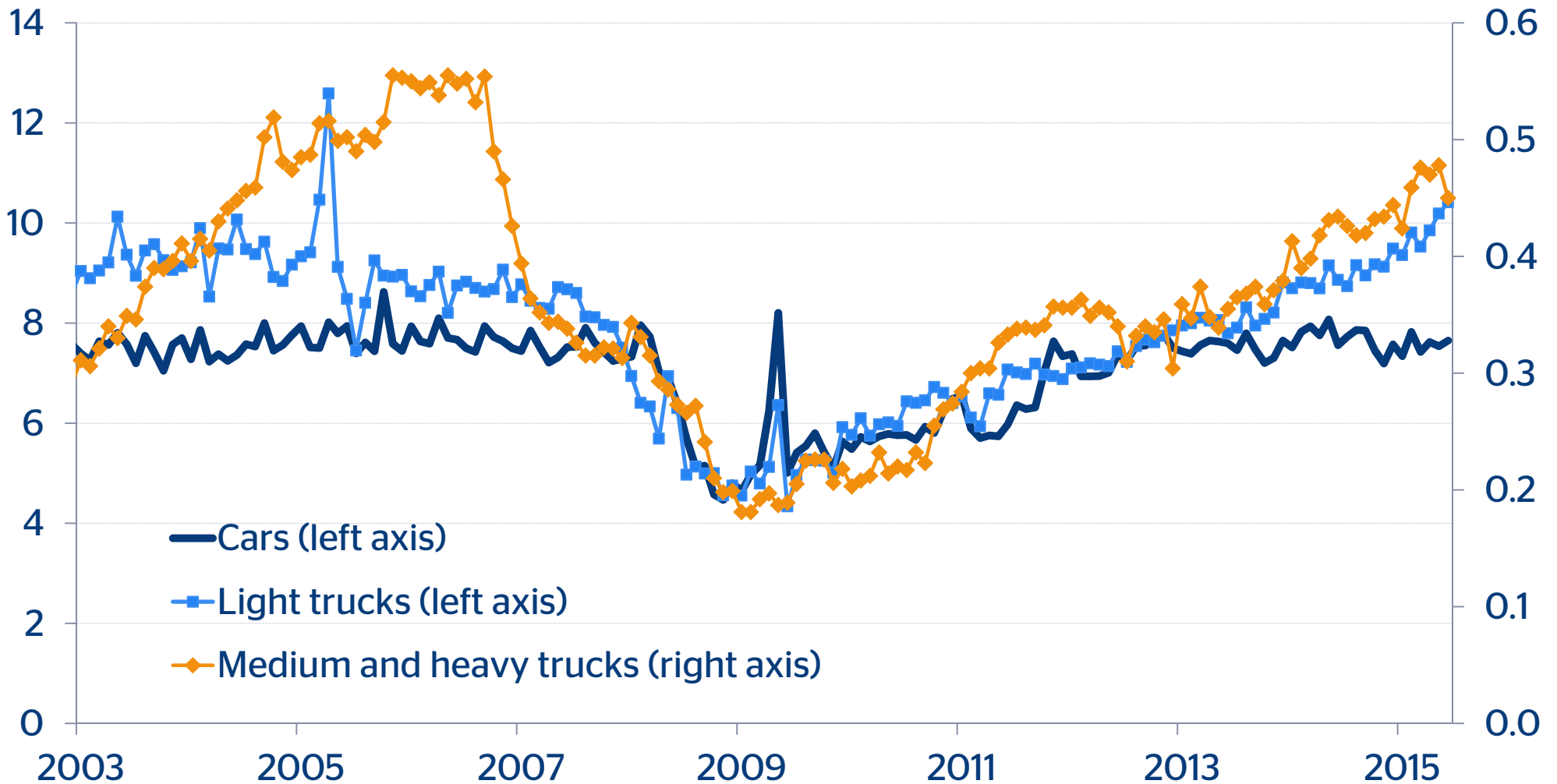
U.S. Total light weight vehicle sales (SAAR*, million units)



*SAAR = seasonally adjusted annual rate
 Source: BBVA Research & Haver Analytics

Sales

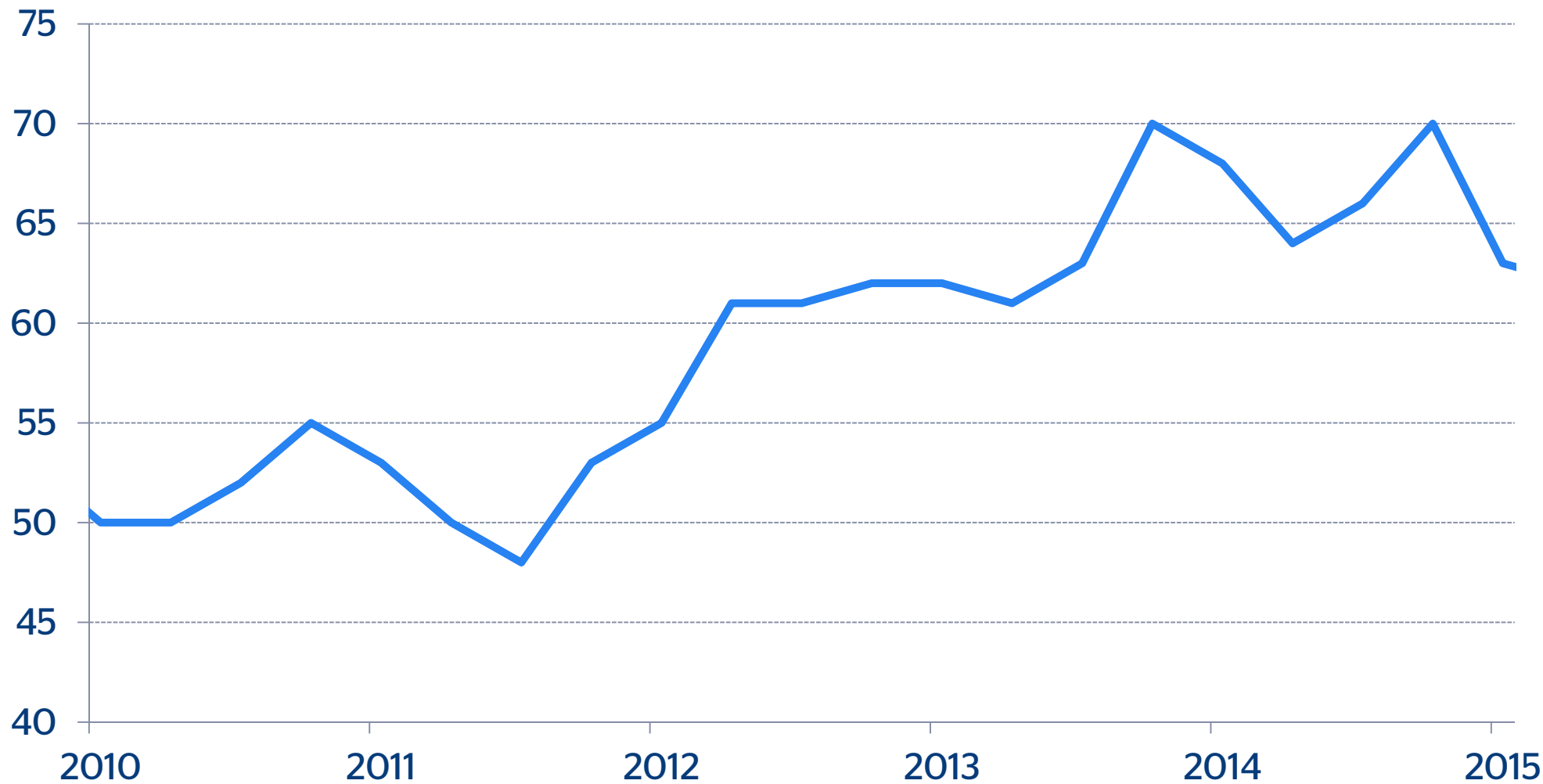
U.S. Total vehicle sales (SAAR, million units)



*SAAR = seasonally adjusted annual rate
 Source: BBVA Research & Haver Analytics

Sales

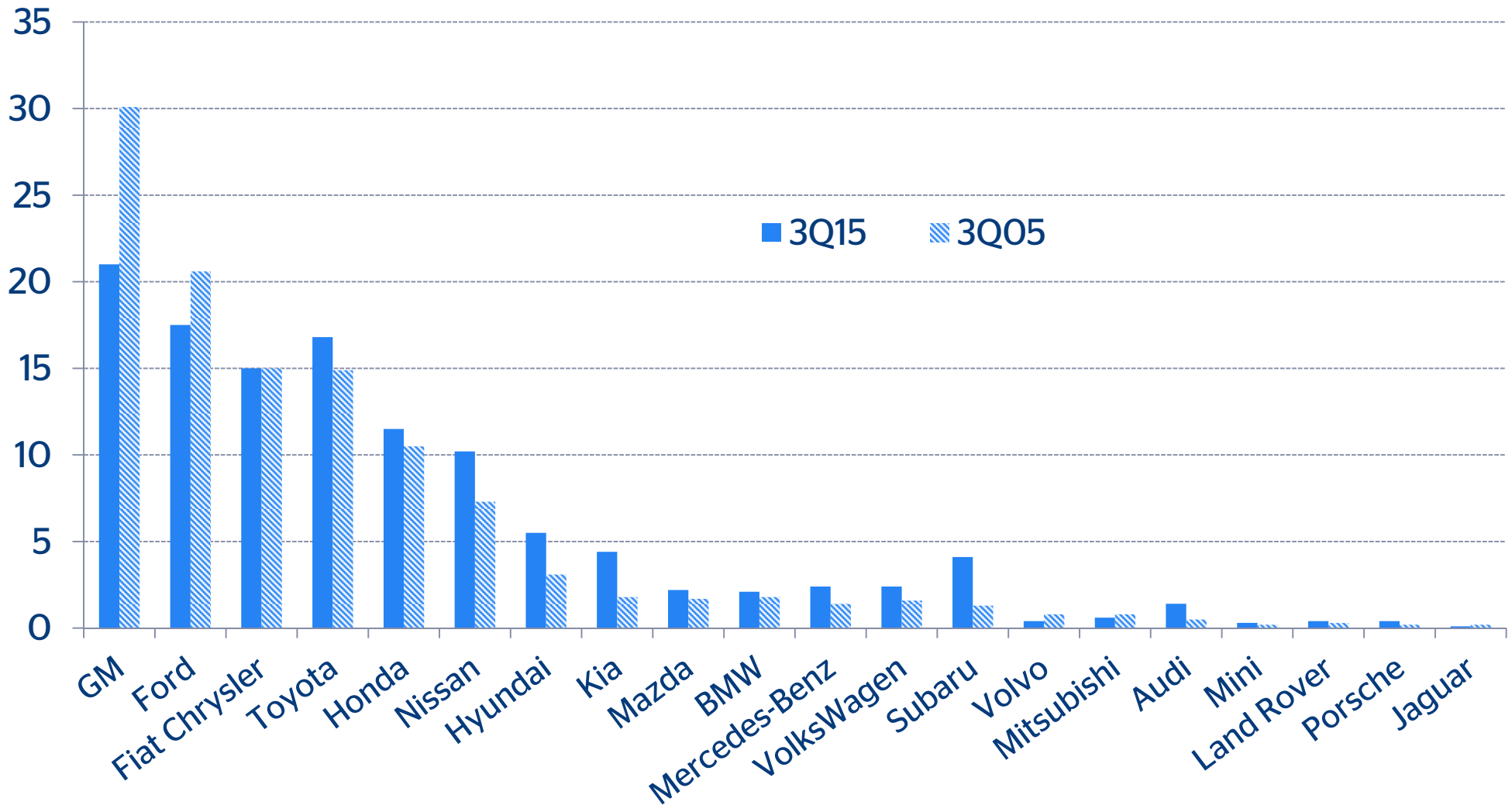
U.S. Vehicle days to turn (industry average)



Source: Bloomberg

Sales

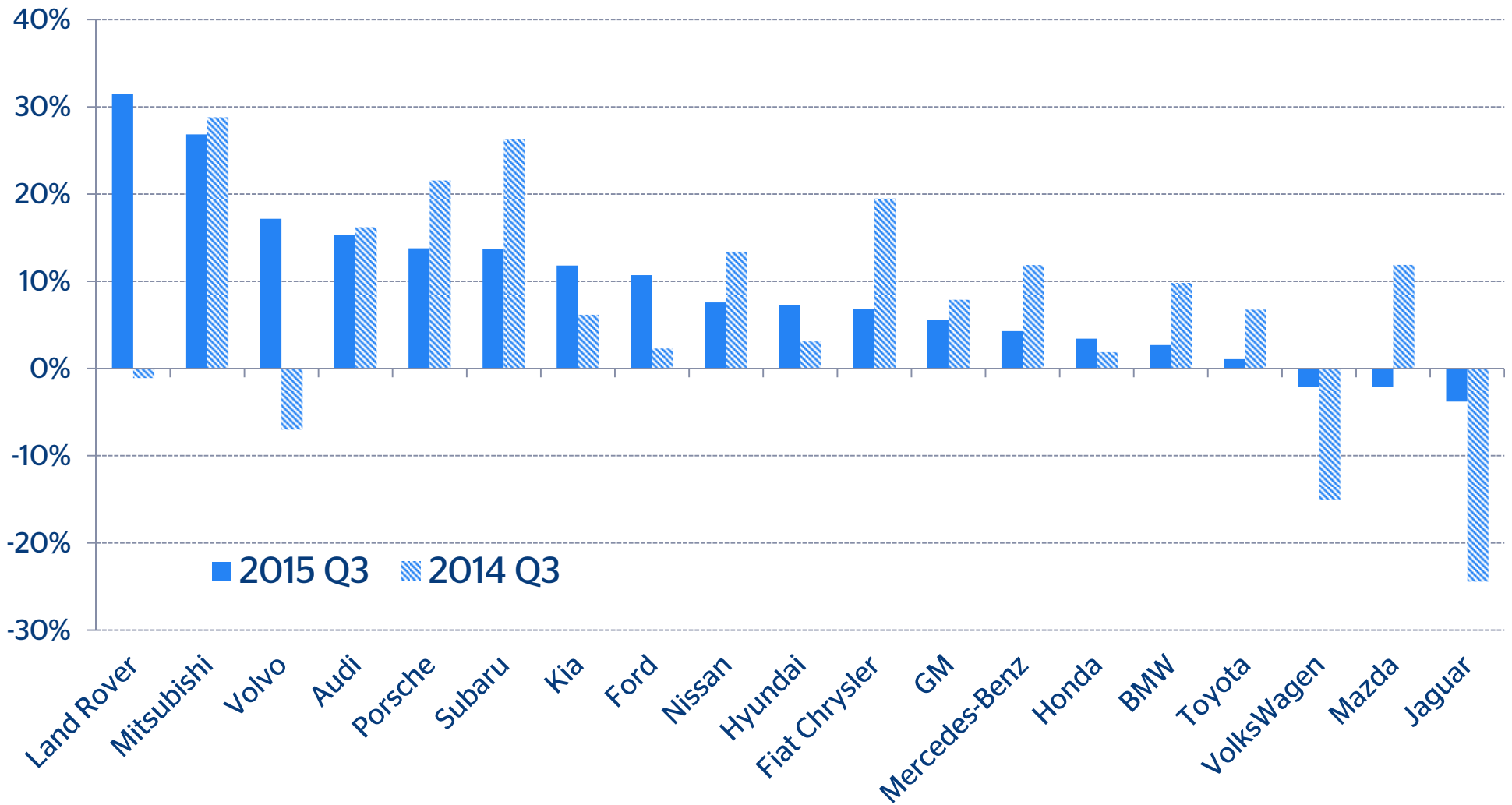
U.S. Market share by brand (%)



Source: Bloomberg

Sales

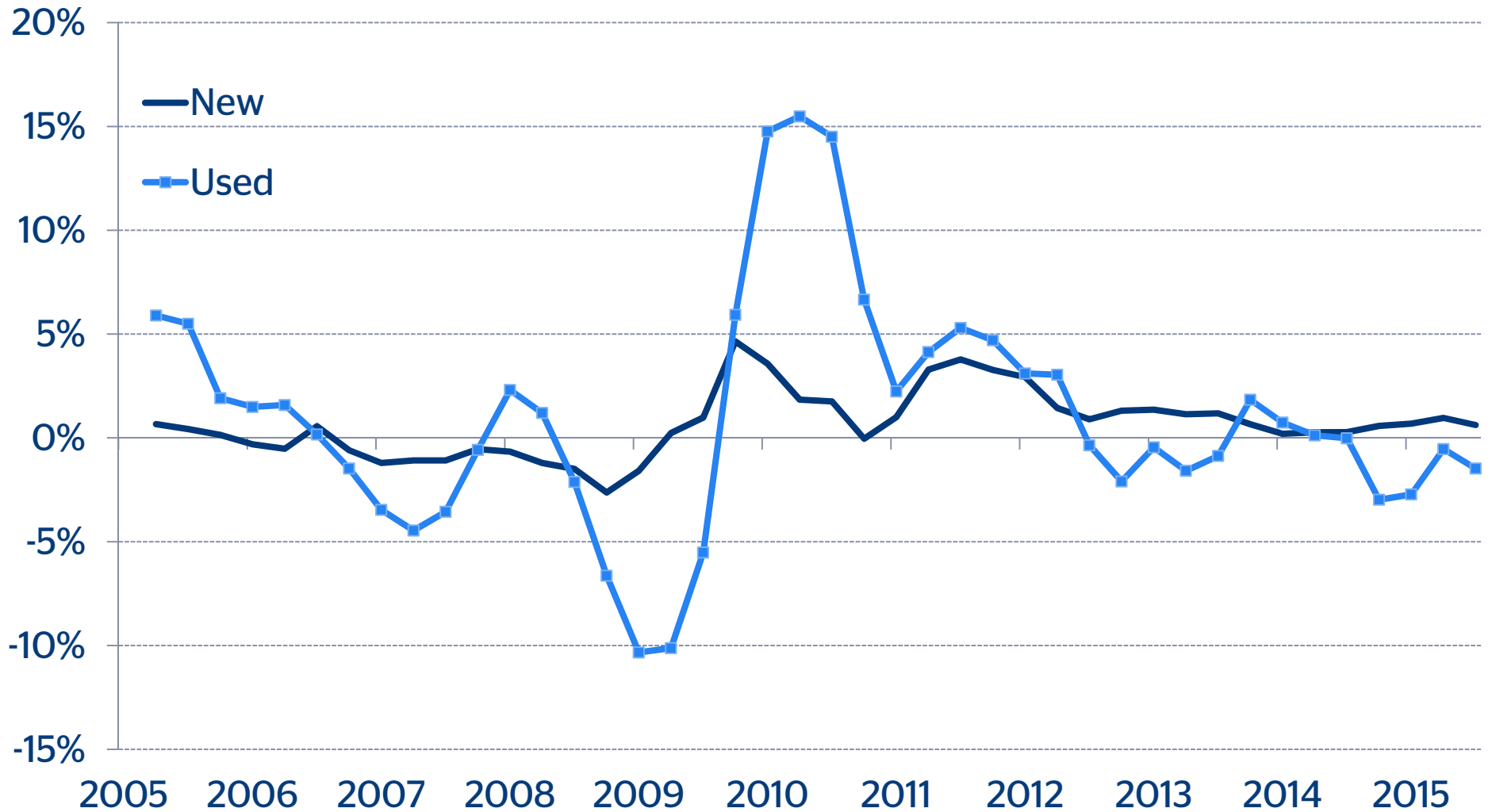
U.S. Quarterly unit sales (yoy % change)



Source: Bloomberg

Prices

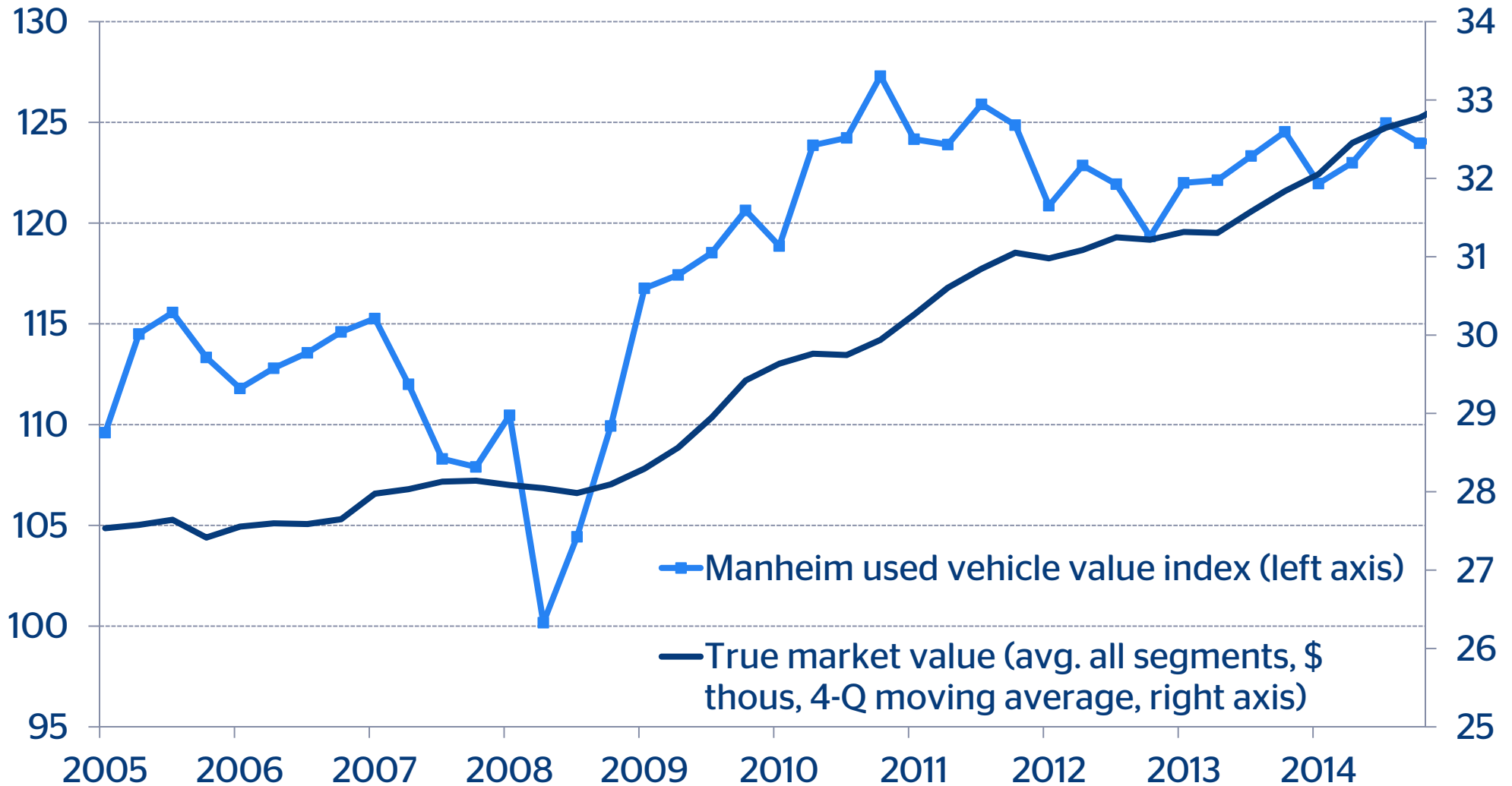
U.S. Consumer price index: cars and trucks (yoy % change)



Source: Haver Analytics

Prices

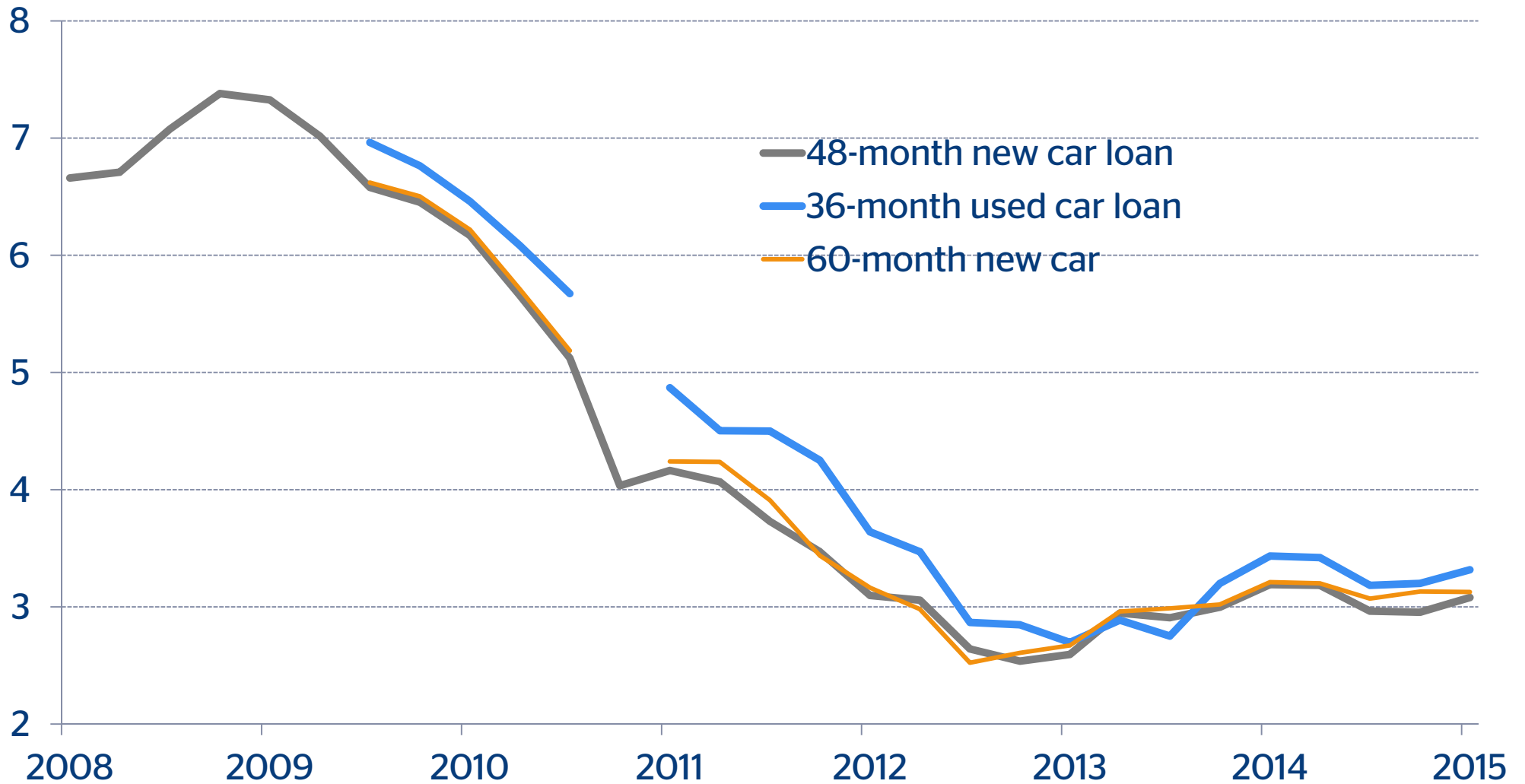
U.S. Auto prices



Source: Haver Analytics & Bloomberg

Financing conditions

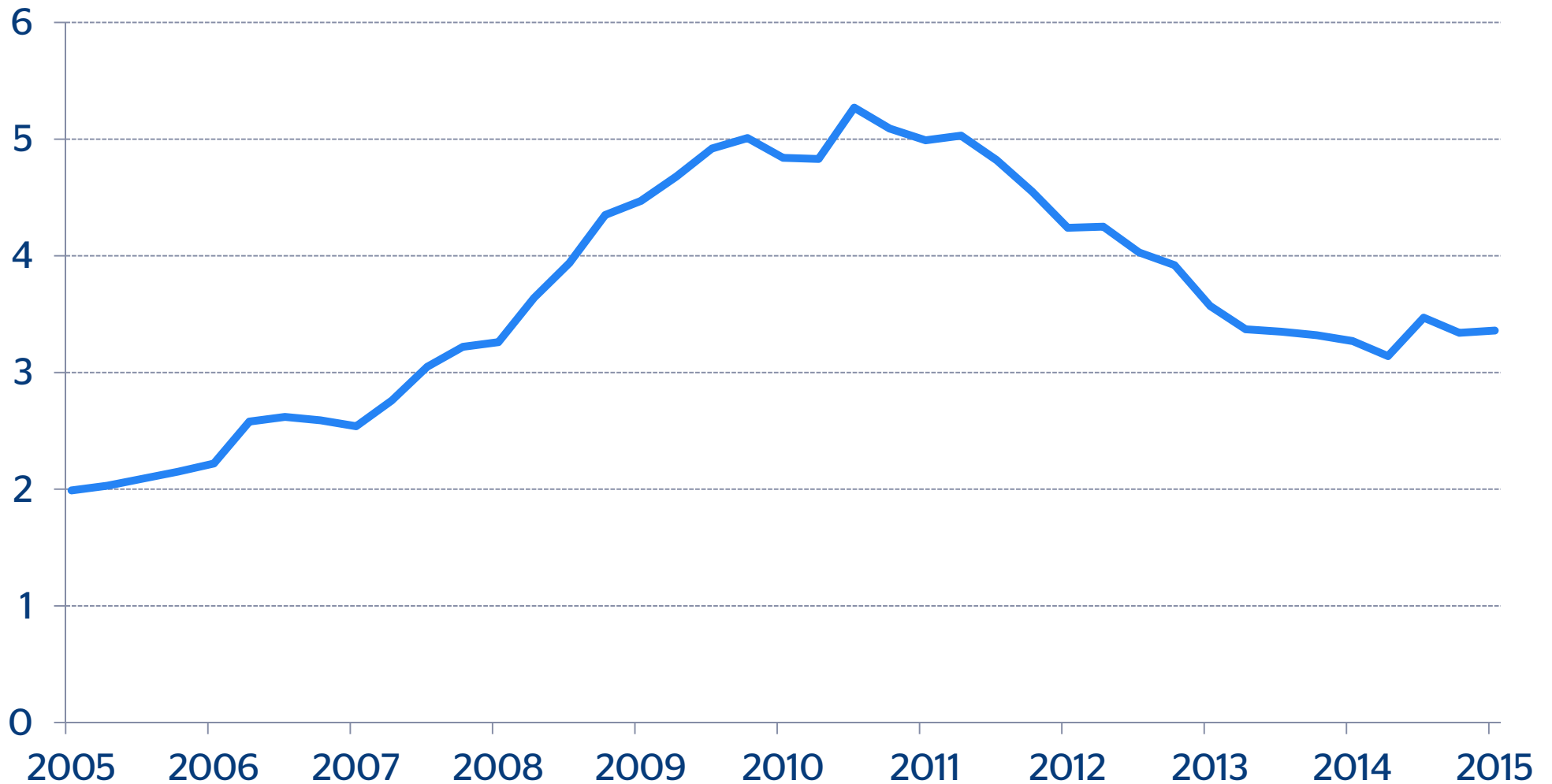
U.S. Car loan rates (%)



Source: Haver Analytics

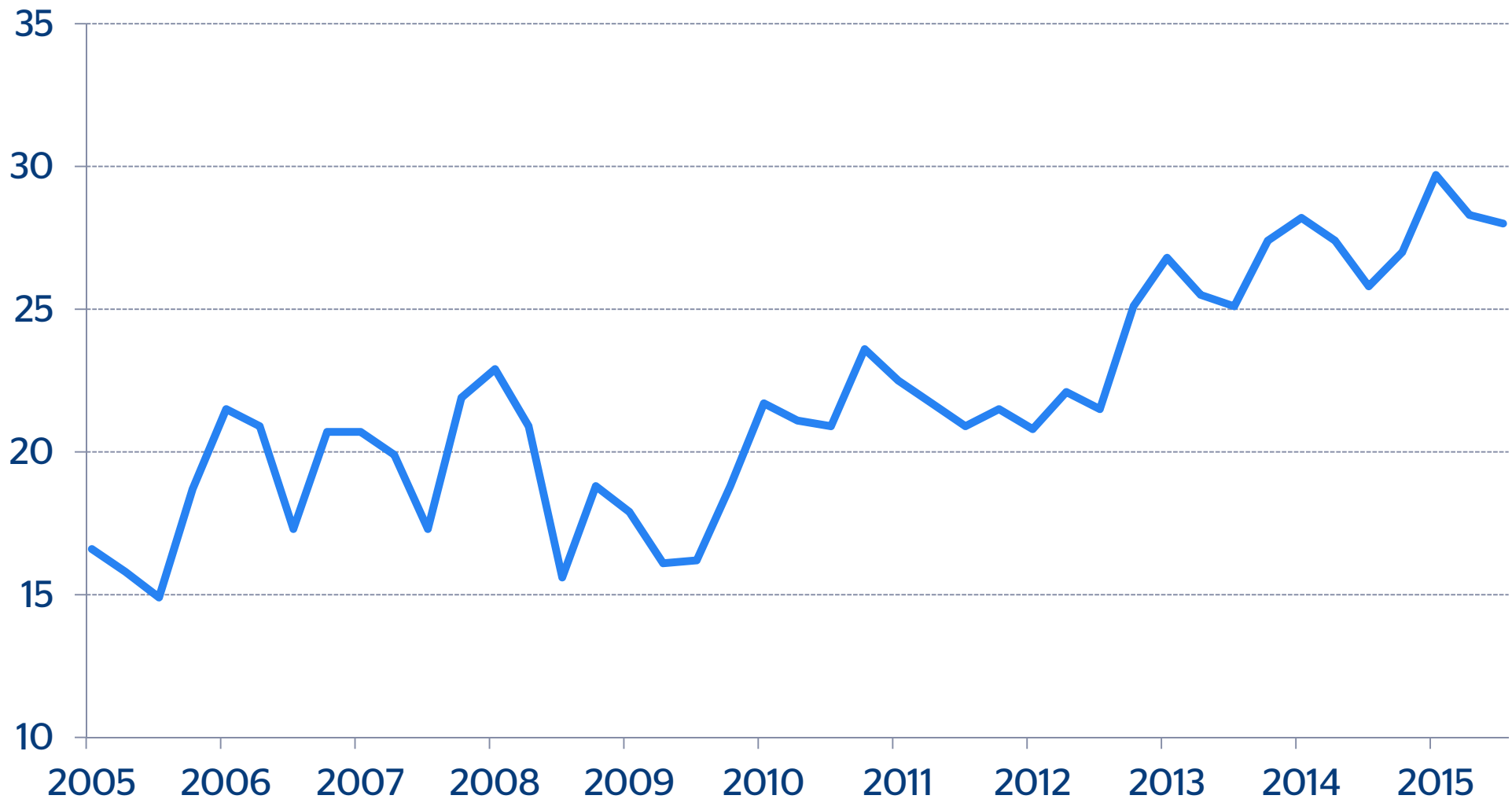
Financing conditions

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



Financing conditions

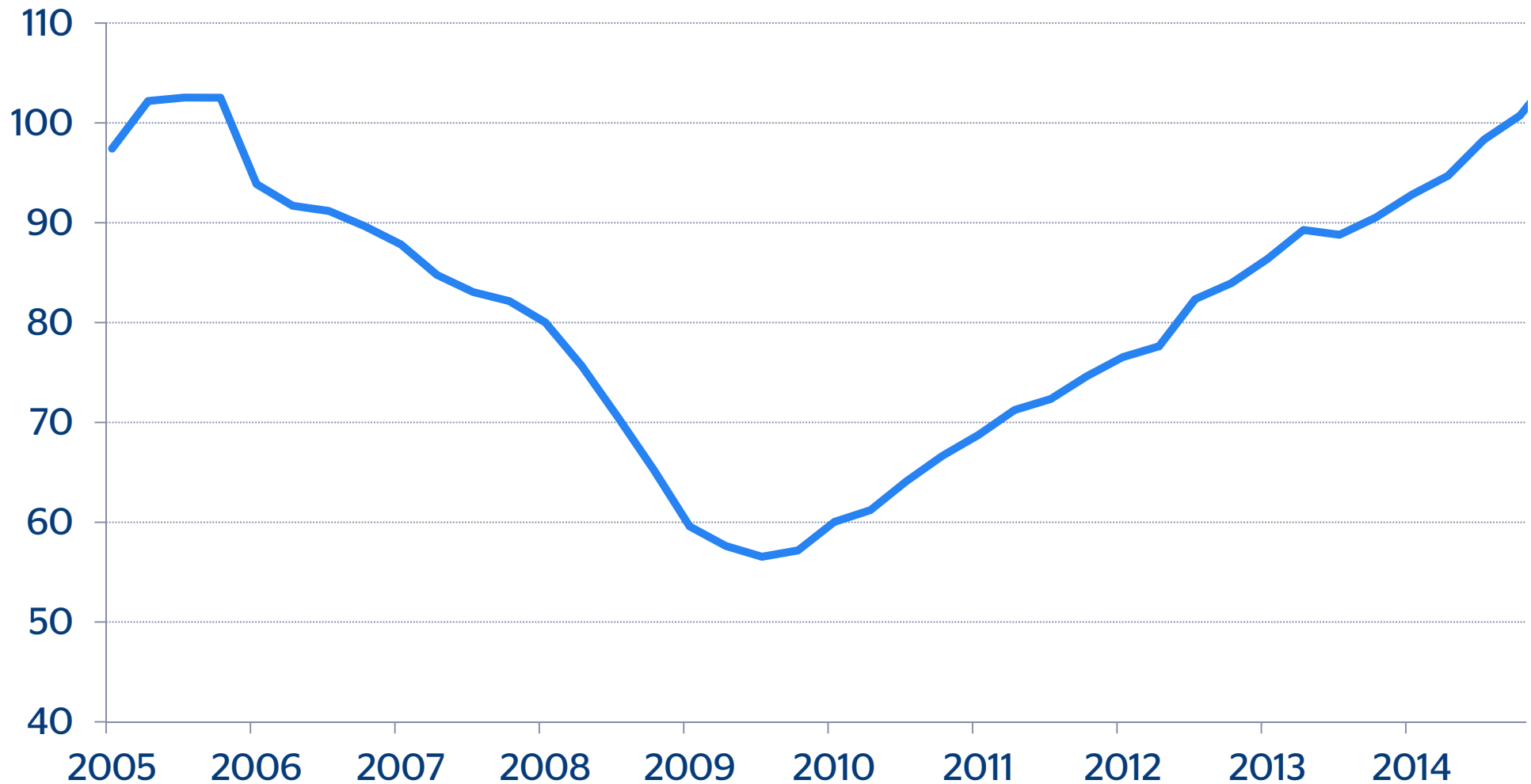
U.S. Leasing penetration rate, %



Source: Bloomberg

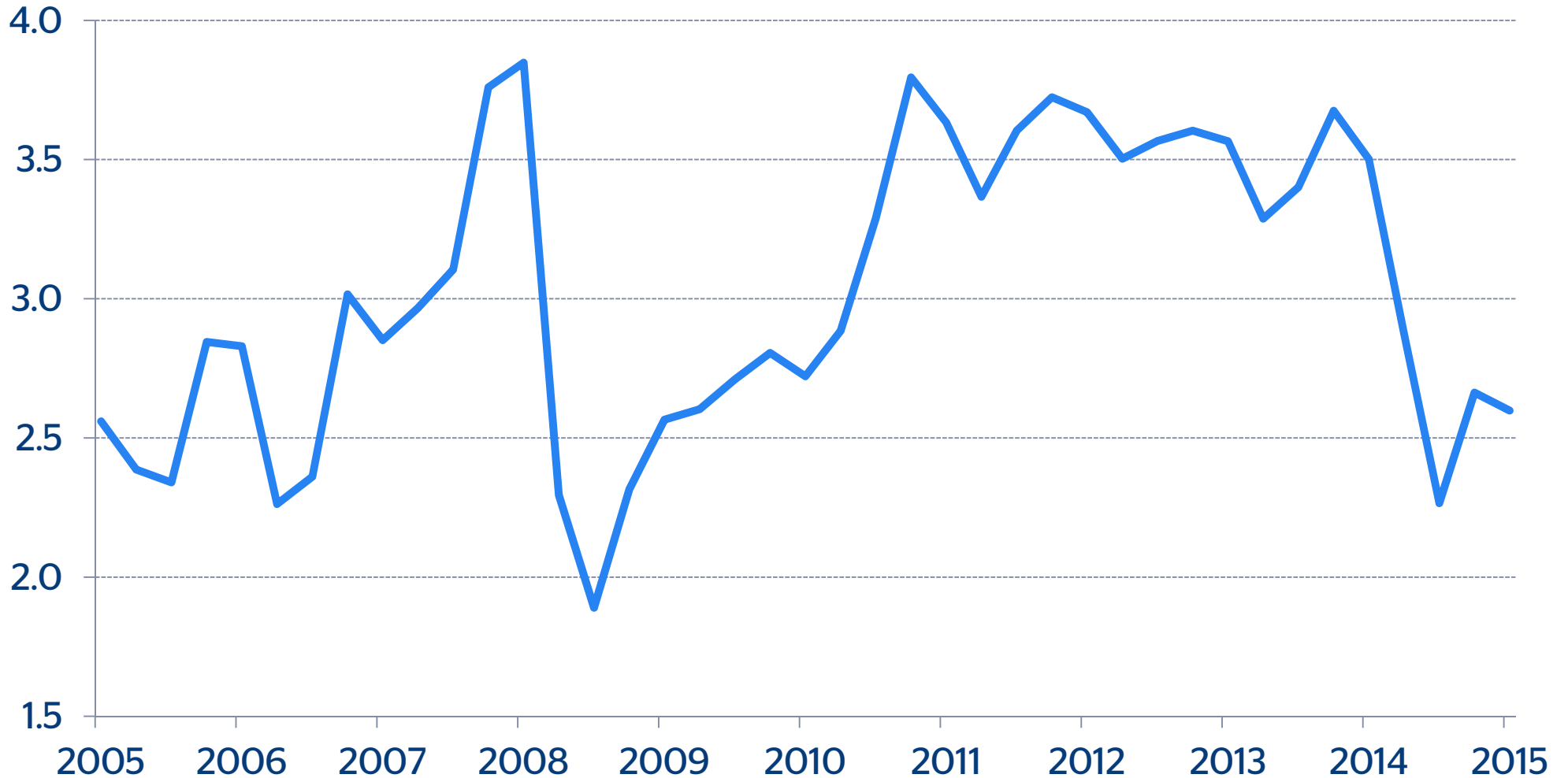
Financing conditions

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



Gasoline

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

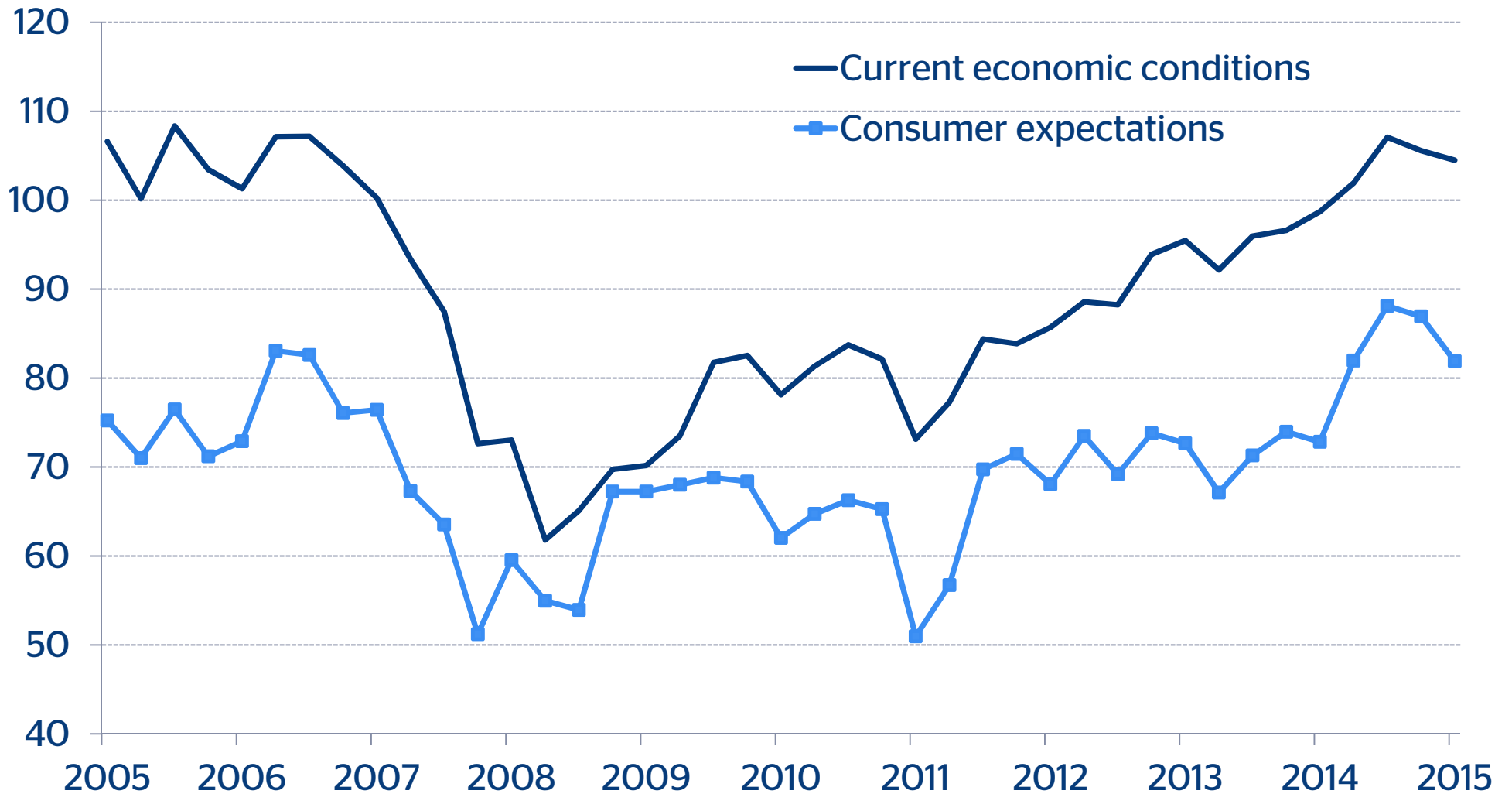


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Consumers

Consumers

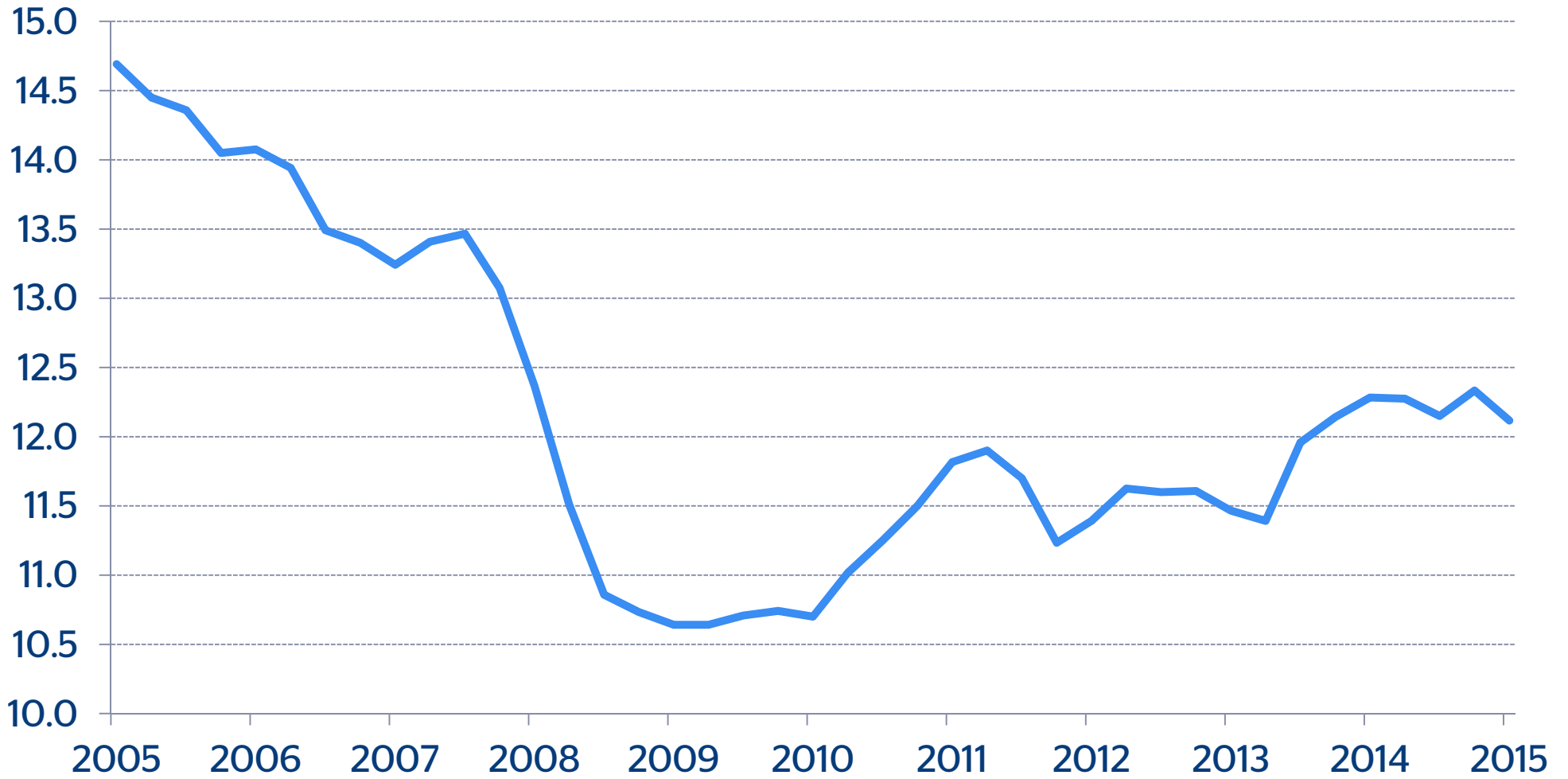
U.S. Consumer sentiment index



Source: Haver Analytics

Consumers

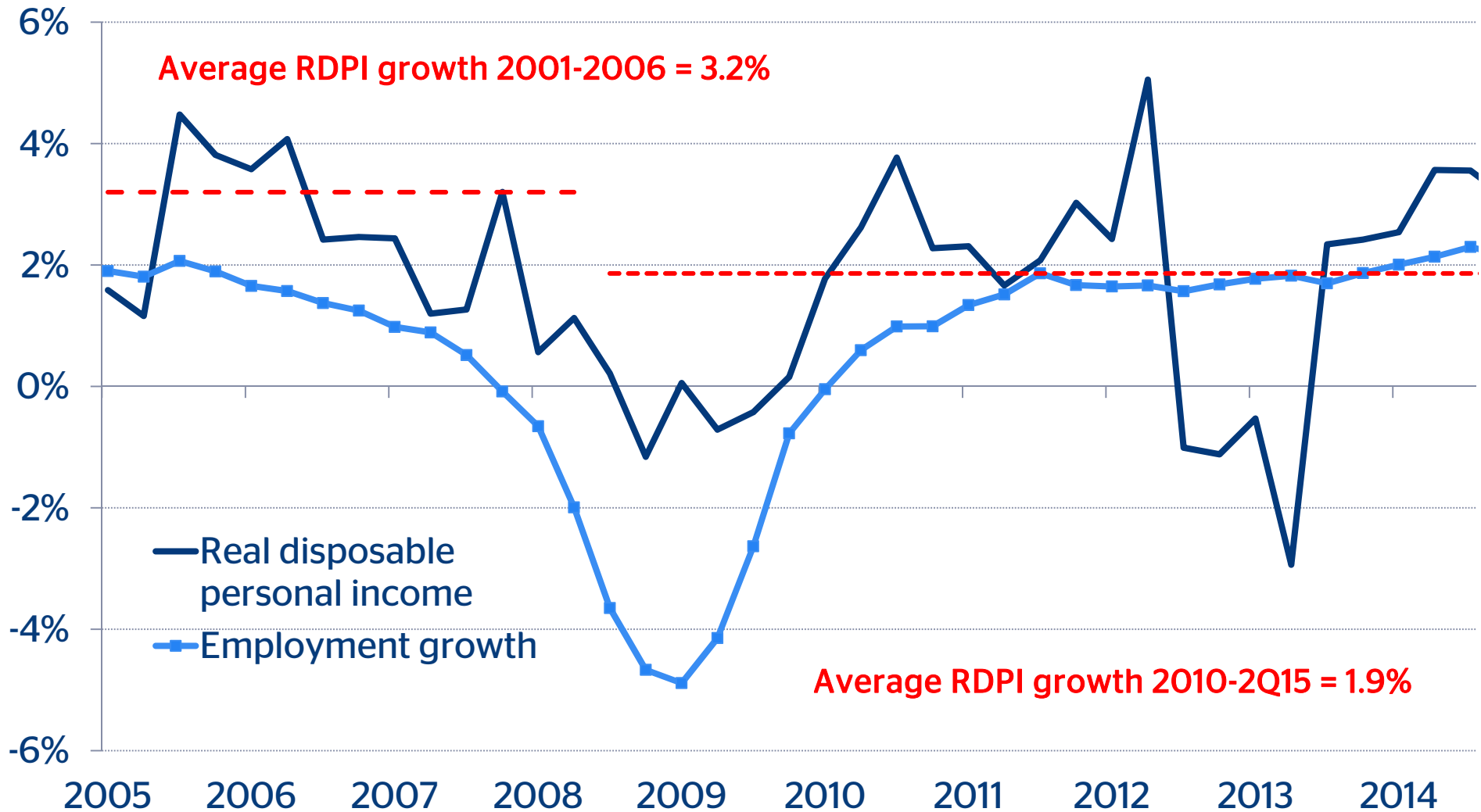
U.S. Plans to buy a car within 6 months, % of respondents



Source: Haver Analytics

Consumers

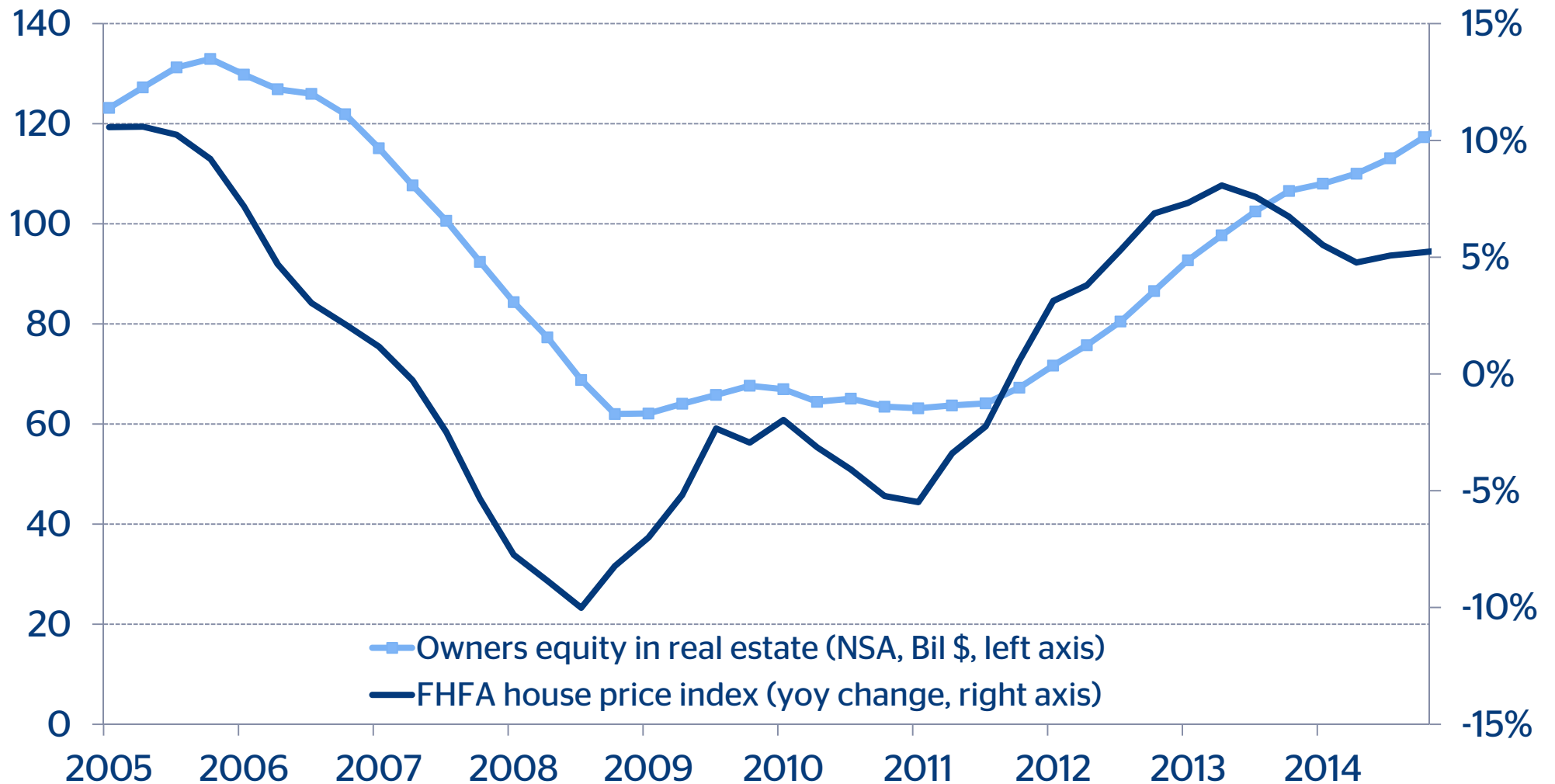
U.S. Employment and real disposable personal income growth (yoy % change)



Source: BBVA Research and Haver Analytics

Household equity

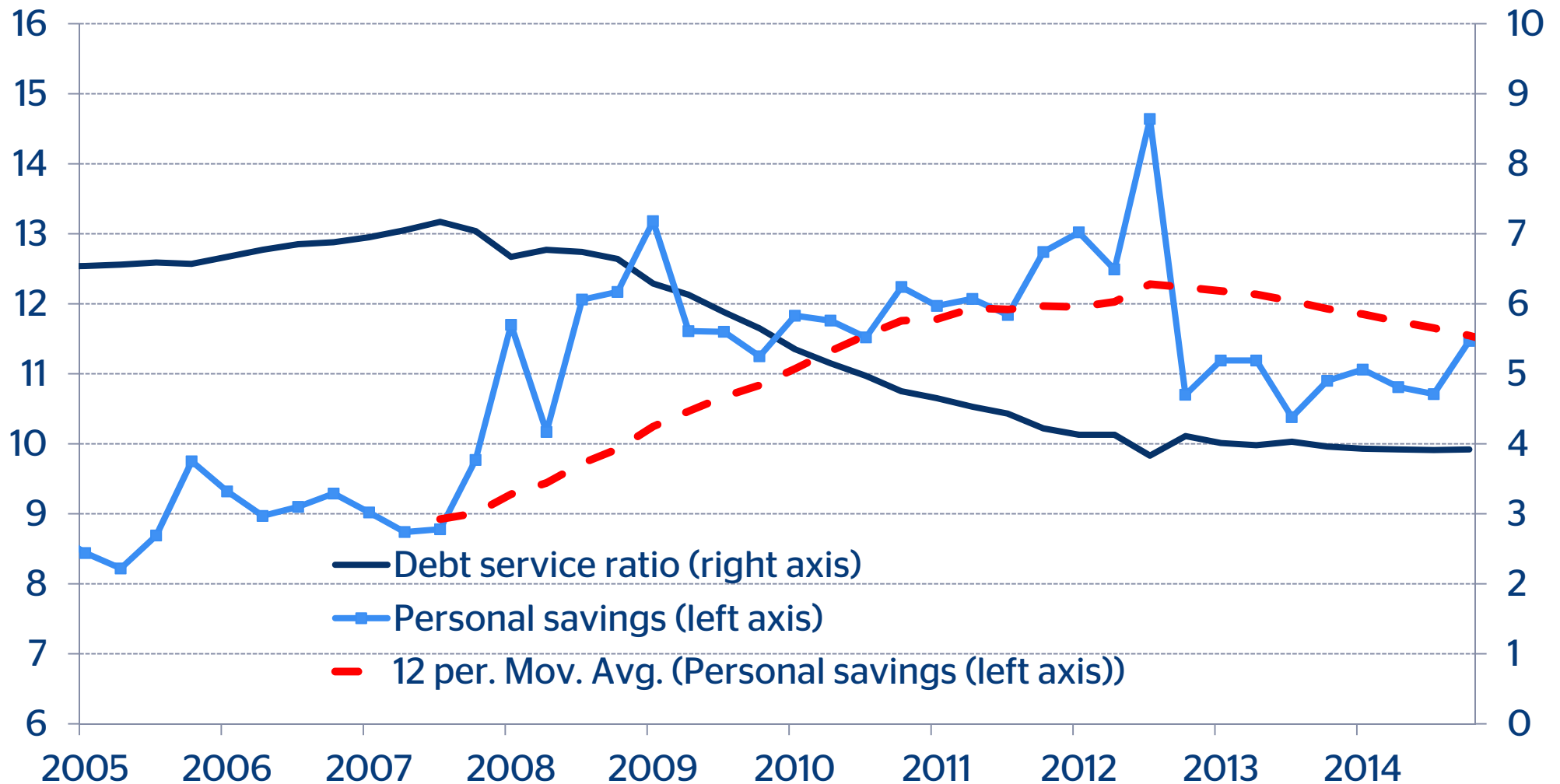
U.S. Household equity and home prices



Source: Haver Analytics

Savings and deleveraging

U.S. Debt-to-income ratio and savings rate



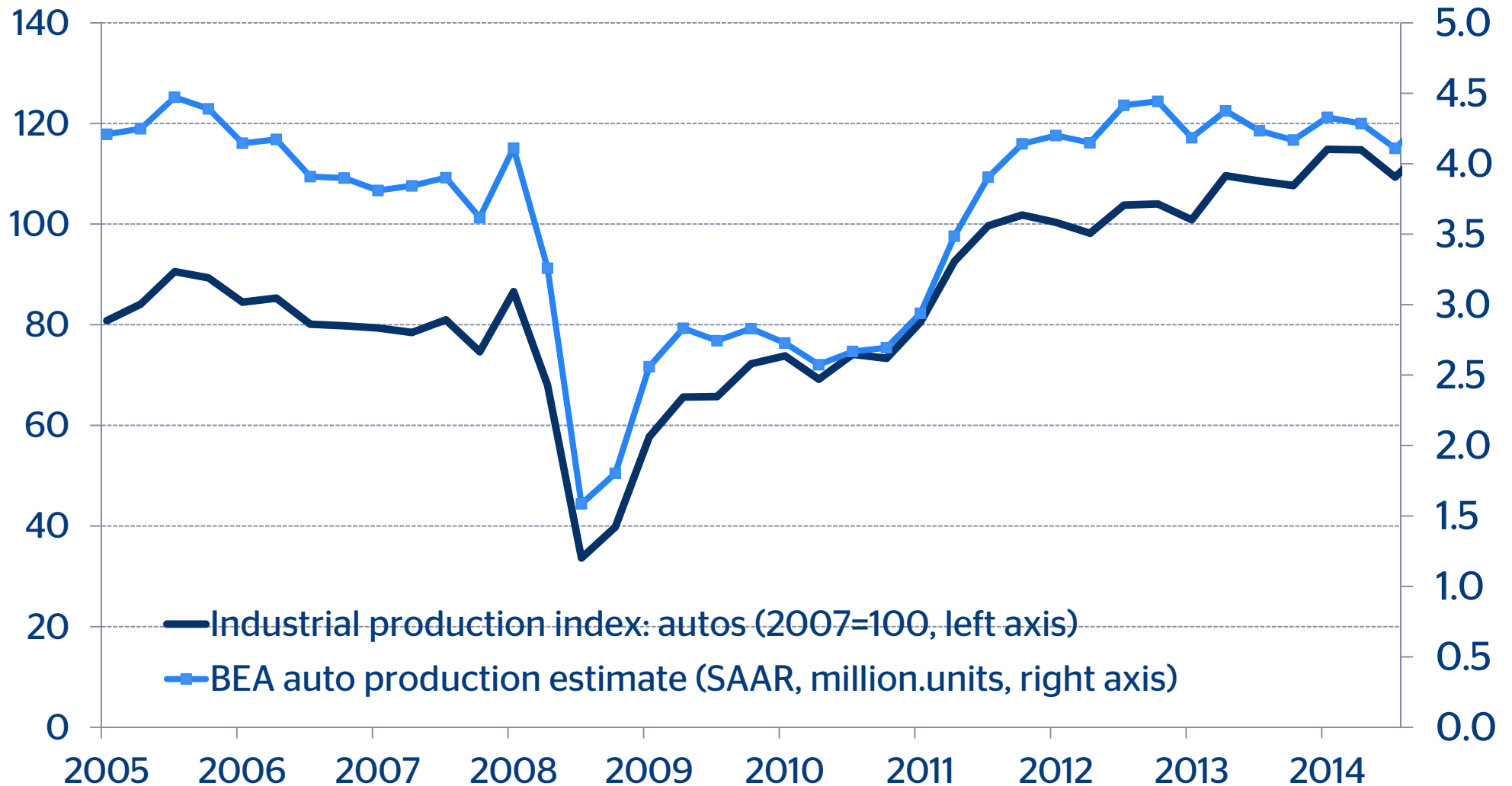
Source: Haver Analytics

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Production

Production

U.S. Auto production



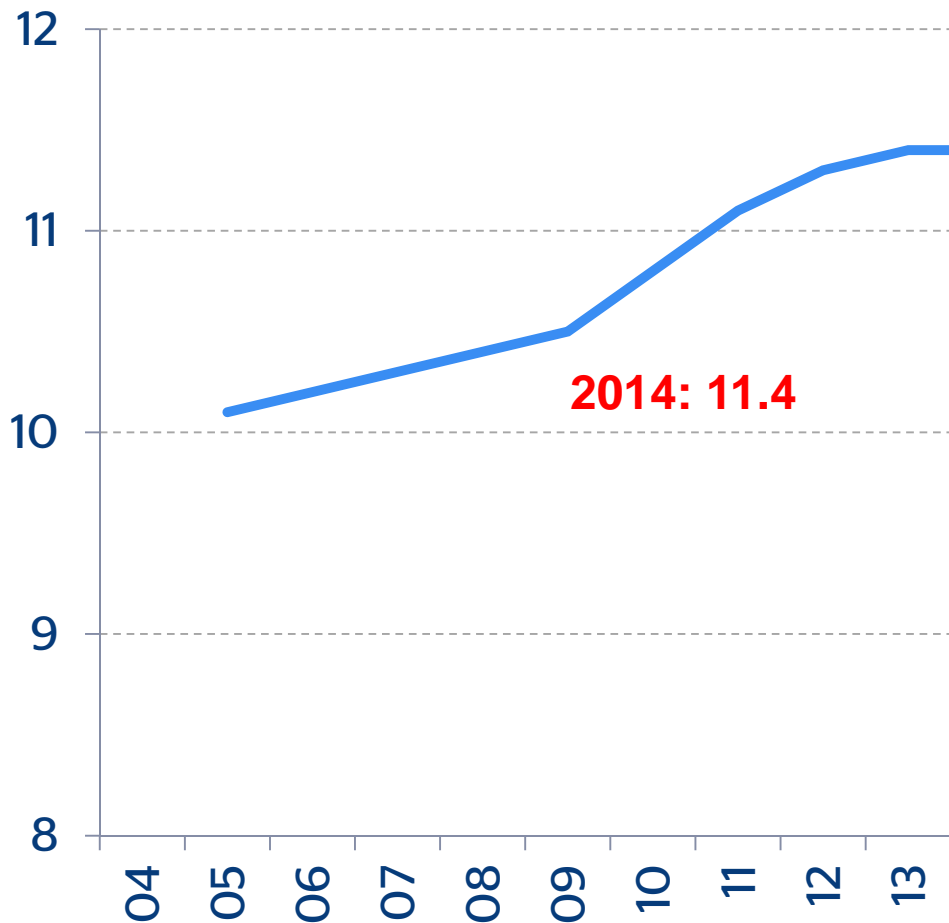
SAAR = seasonally adjusted annual rate, BEA = U.S. Bureau of Economic Analysis
 Source: BBVA Research & Haver Analytics

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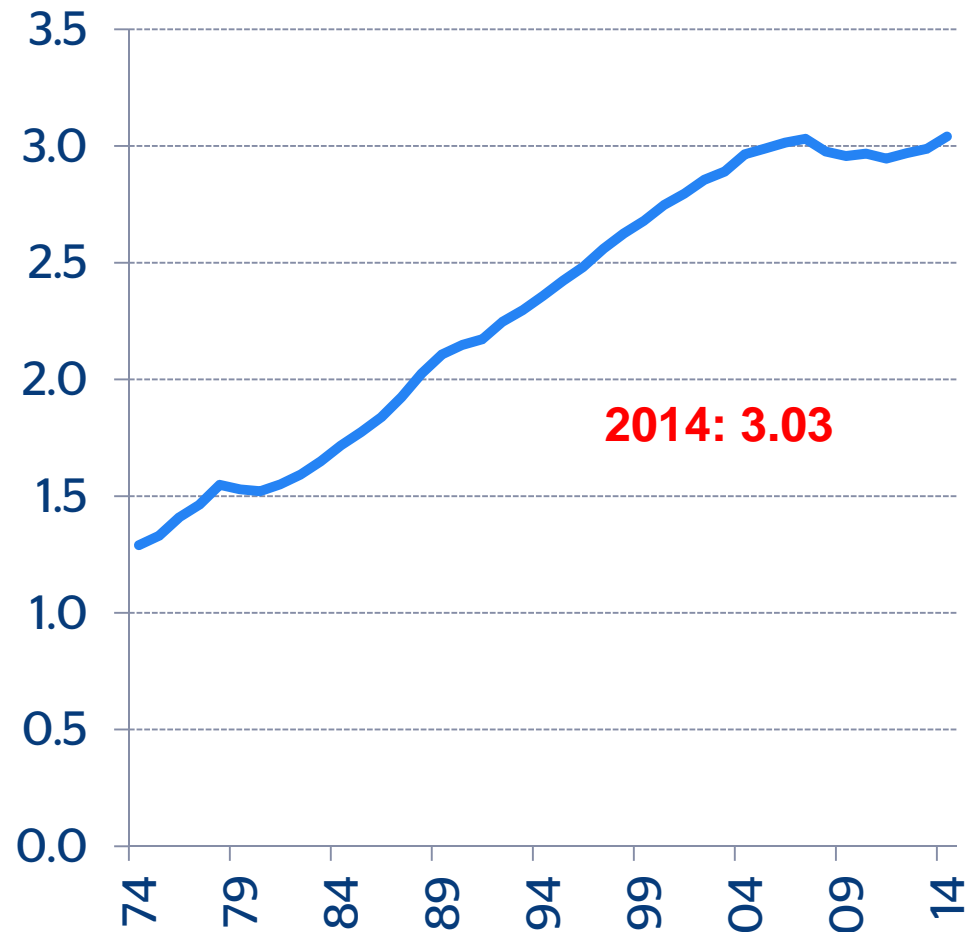
Structural

Fundamentals

U.S. Mean age of passenger cars in operation
Years

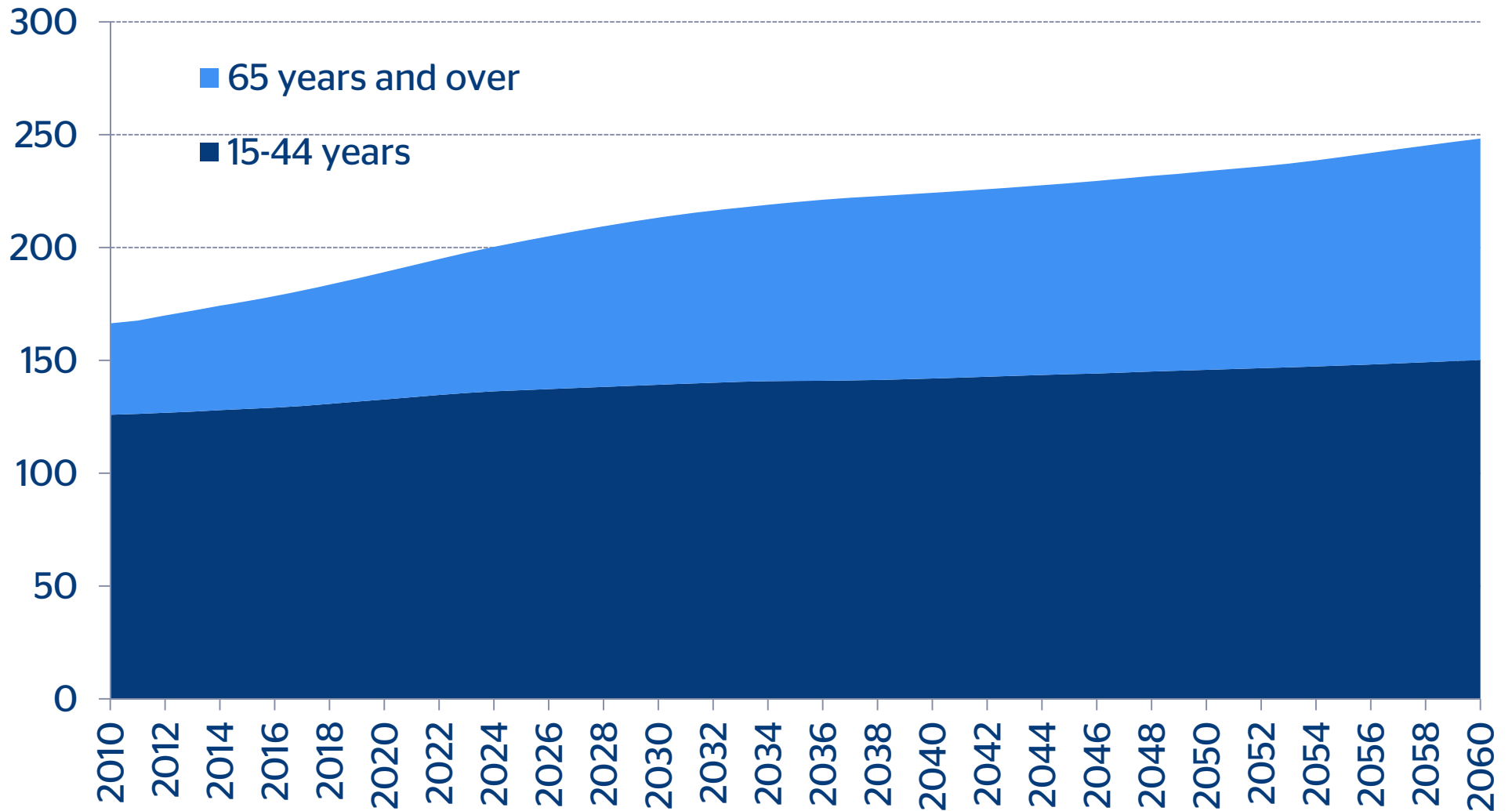


U.S. Vehicle miles of travel
Trillions



Demographics

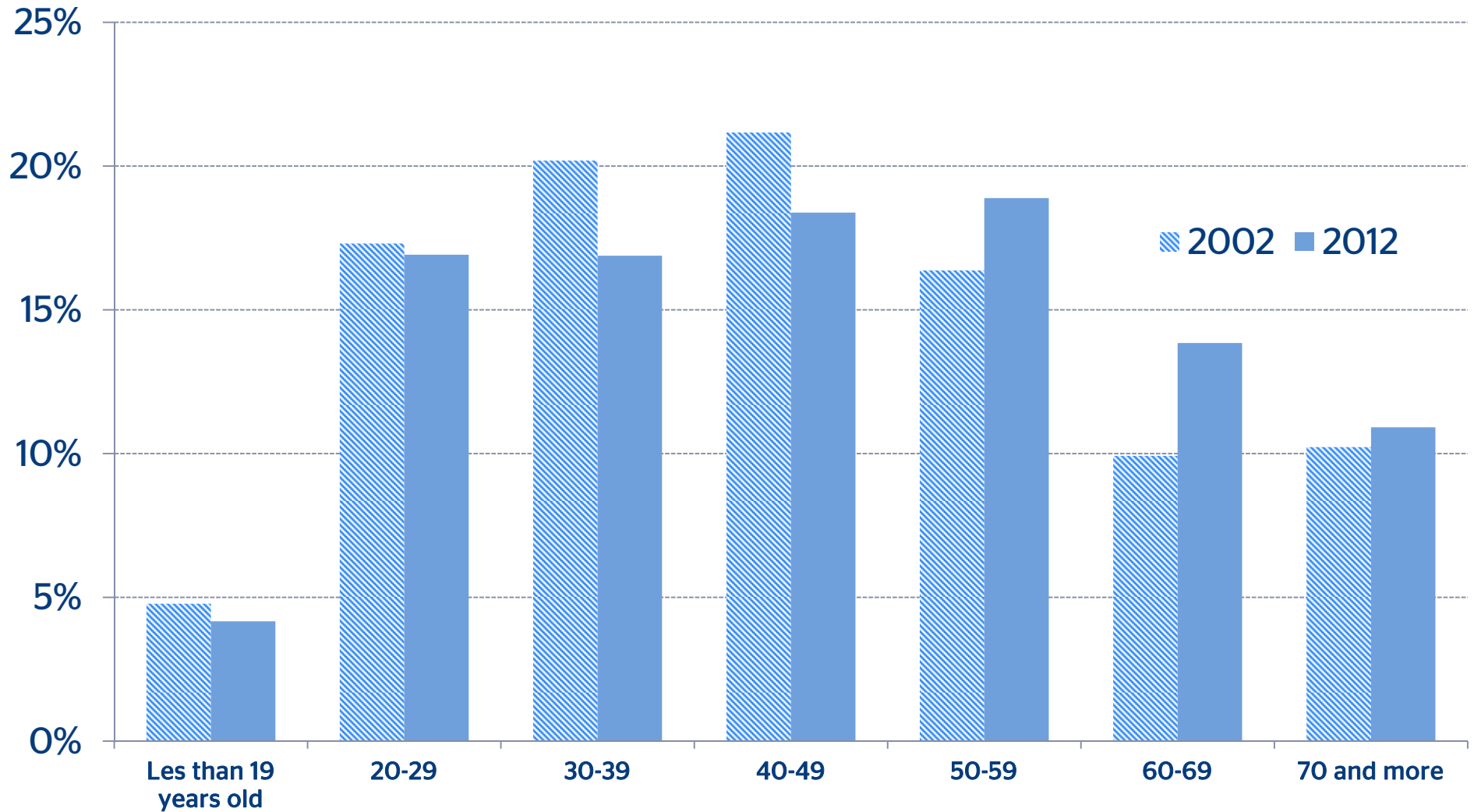
U.S. Population projections by age (millions)



Source: Haver Analytics

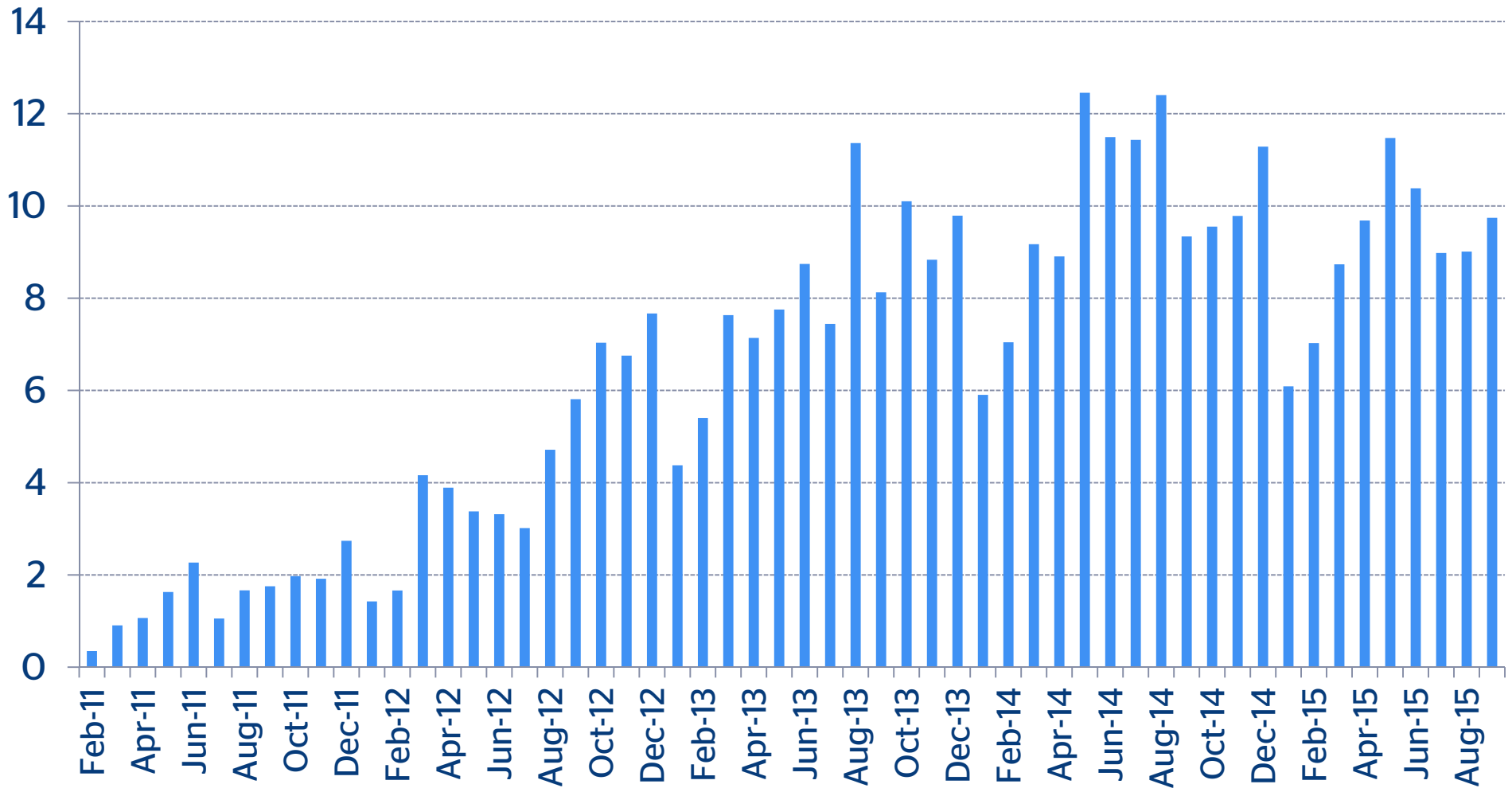
Demographics

U.S. Licensed drivers by age



Alternative vehicles

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



Source: Electric Drive Transportation Association

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Forecasts

Forecasts

Average	2012	2013	2014	2015	2016
Auto sales (millions units)	14.5	15.6	16.5	17.4	17.2
GDP growth (% change)	2.3	2.2	2.4	2.5	2.8*
Unemployment rate (% avg.)	8.1	7.4	6.2	5.3	4.9
Fed funds (%, eop)	0.25	0.25	0.25	0.50	1.00
5-year Treasuries (%, avg)	0.76	1.17	1.64	1.51	1.79

* Currently under revision
Source: BBVA Research

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Third Quarter 3Q15