

APOLLO

# Outlook for the US consumer

Torsten Slok, Jyoti Agarwal, and Rajvi Shah

**Apollo Global Management**

December 2023

Unless otherwise noted, information as of December 2023

Confidential and Proprietary – Not for distribution, in whole or in part, without the express written consent of Apollo Global Management, Inc.

It should not be assumed that investments made in the future will be profitable or will equal the performance of the investments shown in this document.

# Legal Disclaimer

Unless otherwise noted, information included herein is presented as of the dates indicated. Apollo Global Management, Inc. (together with its subsidiaries, "Apollo") makes no representation or warranty, expressed or implied, with respect to the accuracy, reasonableness, or completeness of any of the information contained herein, including, but not limited to, information obtained from third parties. Opinions, estimates and projections constitute the current judgment of the author as of the date indicated. They do not necessarily reflect the views and opinions of Apollo and are subject to change at any time without notice. Apollo does not have any responsibility to update the information to account for such changes. Hyperlinks to third-party websites in these materials are provided for reader convenience only. There can be no assurance that any trends discussed herein will continue.

The information contained herein is not intended to provide, and should not be relied upon for, accounting, legal or tax advice and does not constitute an investment recommendation or investment advice. Investors should make an independent investigation of the information contained herein, including consulting their tax, legal, accounting or other advisors about such information. Apollo does not act for you and is not responsible for providing you with the protections afforded to its clients.

Certain information contained herein may be "forward-looking" in nature. Due to various risks and uncertainties, actual events or results may differ materially from those reflected or contemplated in such forward-looking information. As such, undue reliance should not be placed on such information. Forward-looking statements may be identified by the use of terminology including, but not limited to, "may", "will", "should", "expect", "anticipate", "target", "project", "estimate", "intend", "continue" or "believe" or the negatives thereof or other variations thereon or comparable terminology.



## Table of contents:

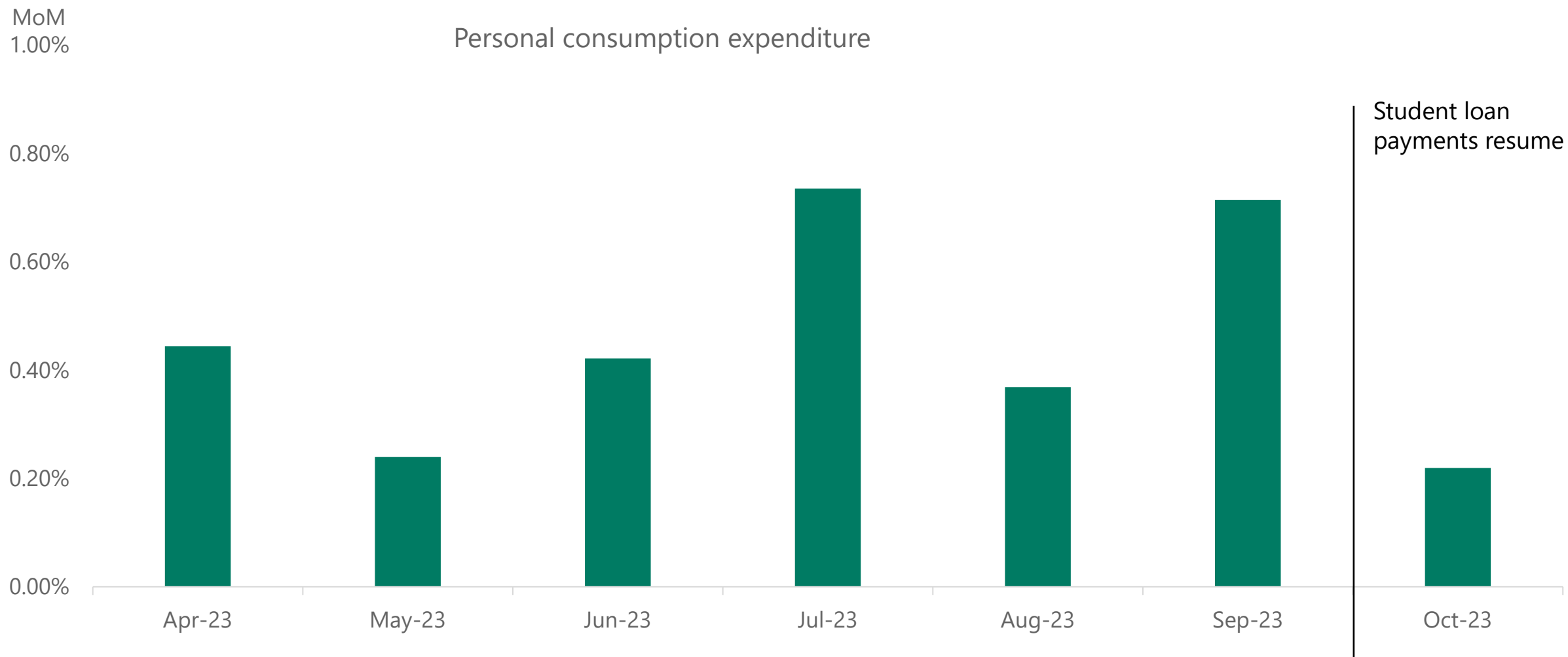
- Overview
- Leading indicators of consumer spending
- Health of the household sector balance sheet
- Outlook for spending on housing
- Outlook for spending on cars
- Outlook for spending on restaurants
- Outlook for spending on travel
- Outlook for spending on other consumer goods

# Overview

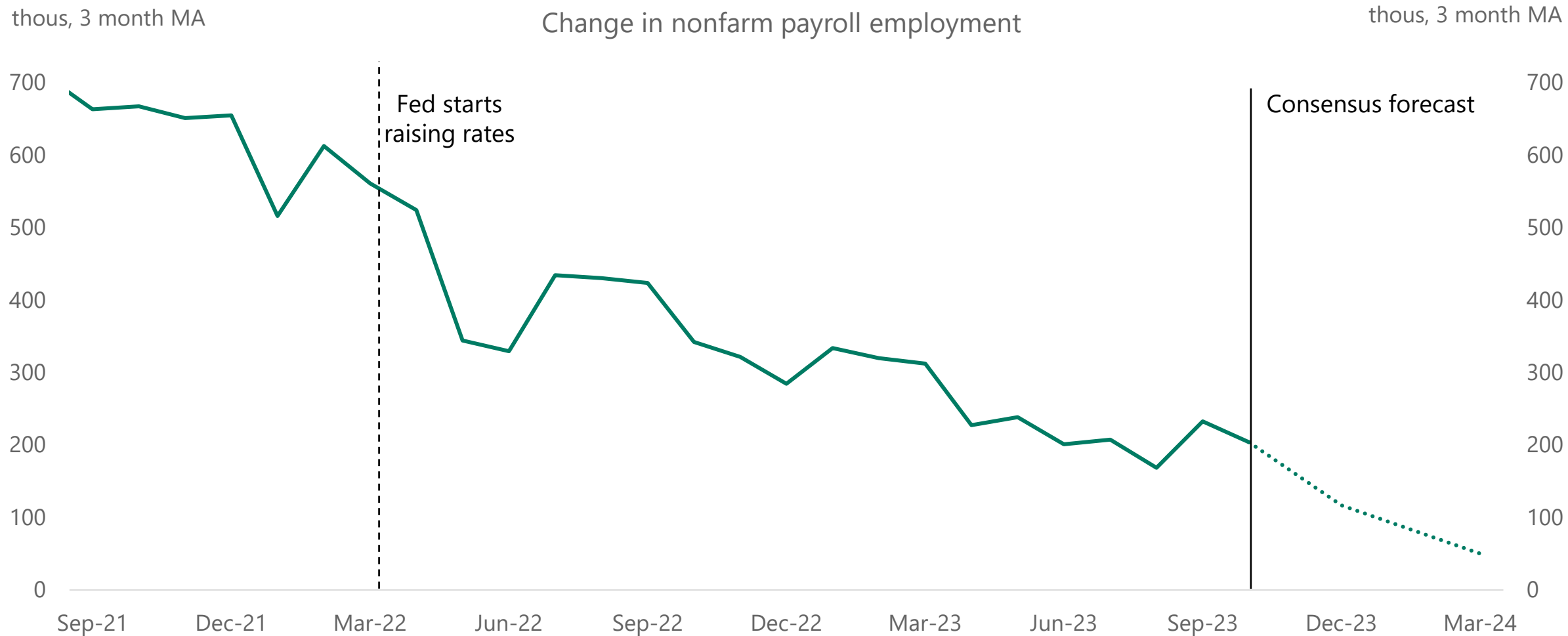
# October data shows weakness in retail sales after student loan payments restarted



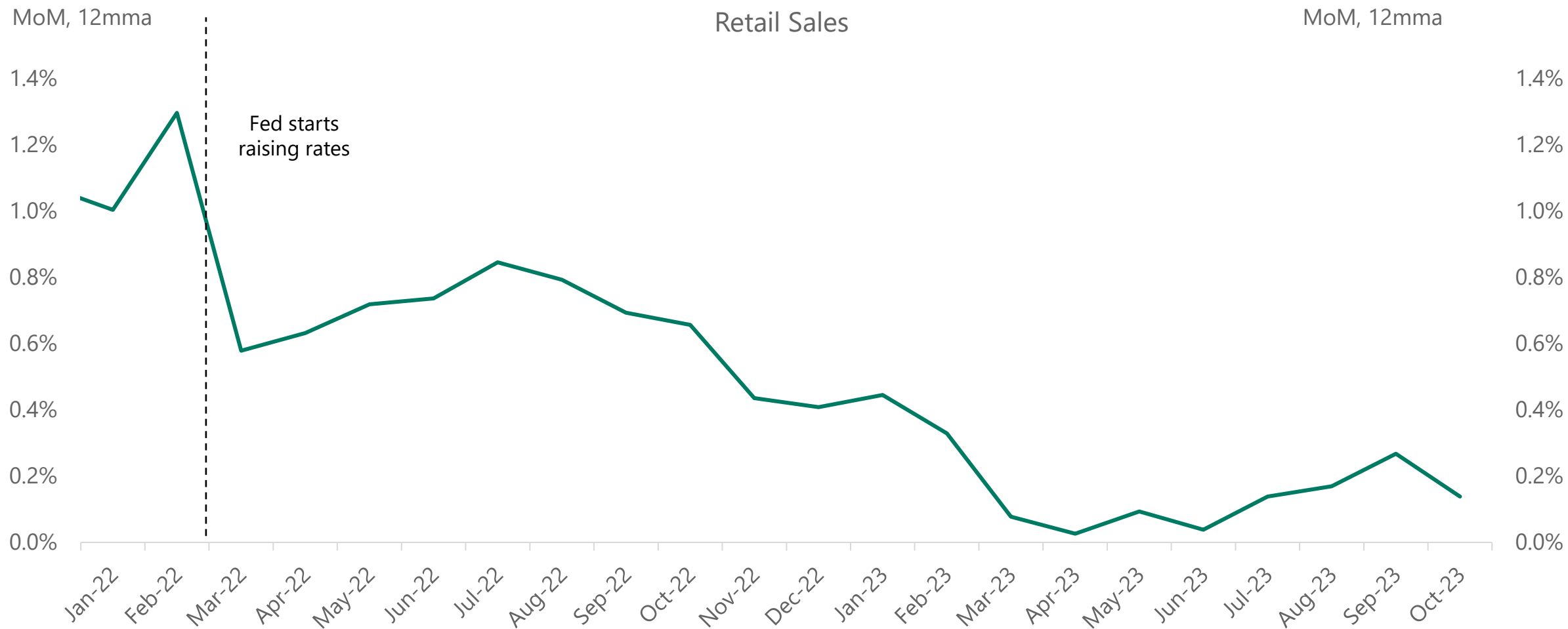
# Consumer spending slowed down in October after student loan payments restarted



# The pace of job growth continues to slow



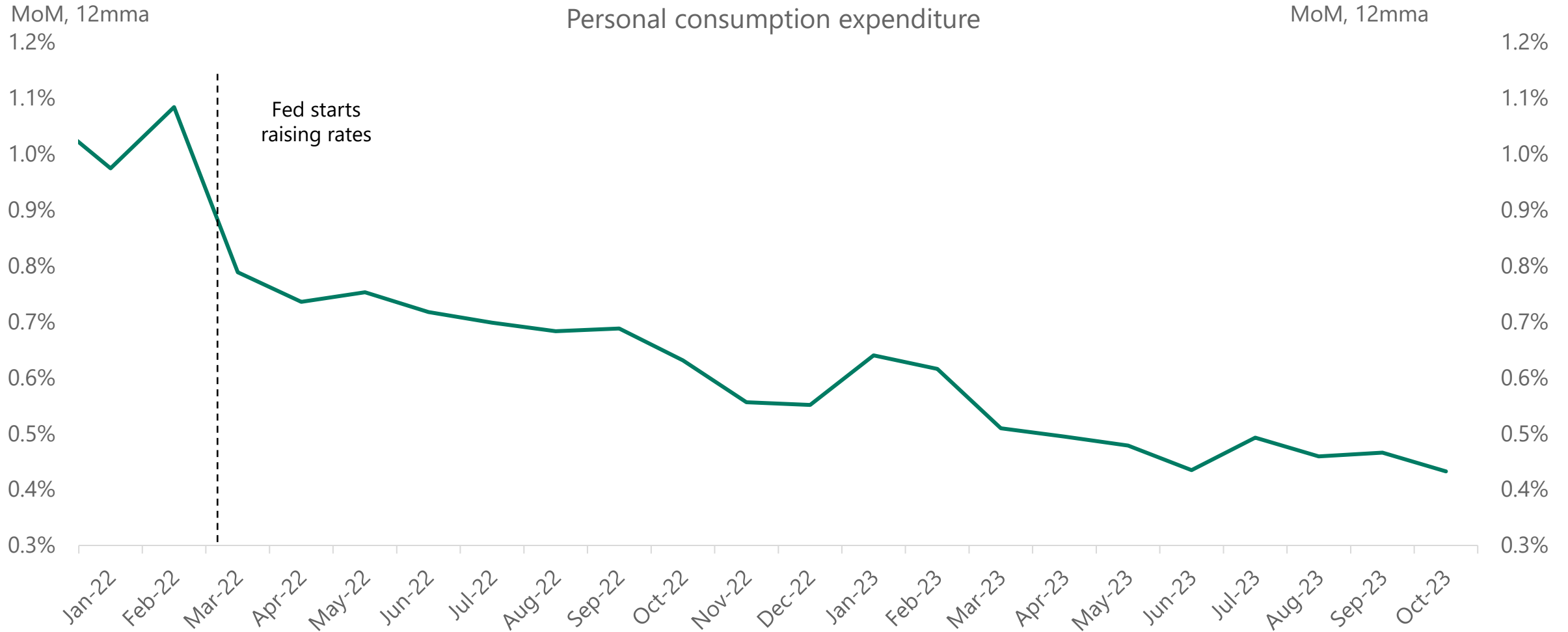
# Retail sales slowing down since the Fed started hiking rates



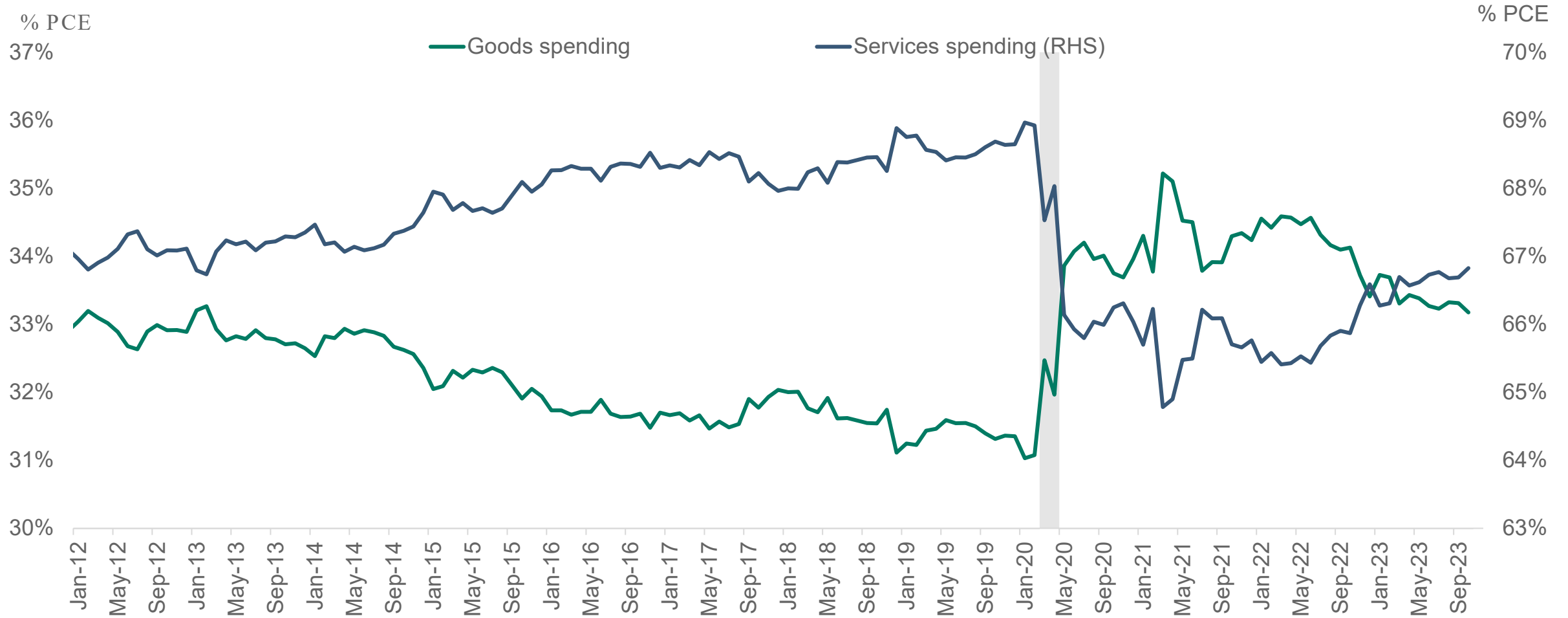
Source: Census Bureau, Haver Analytics, Apollo Chief Economist



# Personal consumer spending has been slowing down since the Fed started hiking



# Share of consumer spending on services still below pre-pandemic levels



# Comparing the level of nominal retail spending today with February 2020 across sectors

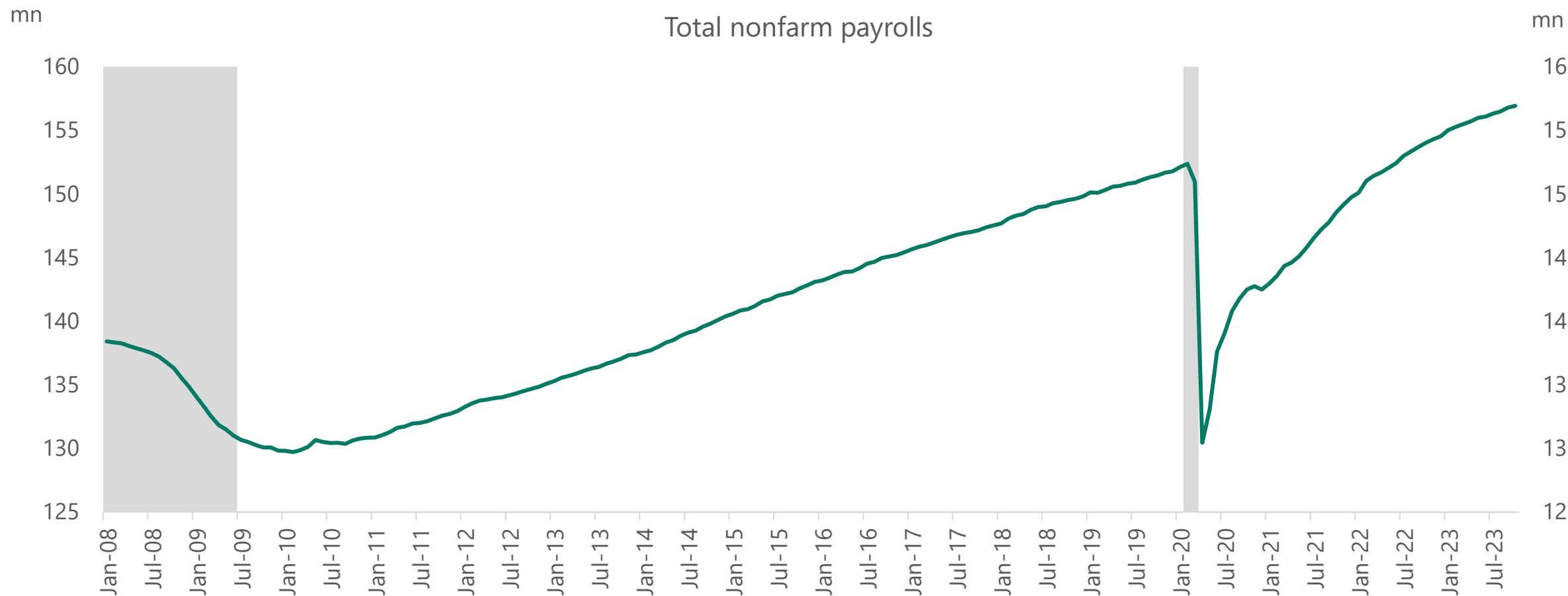
	Feb-2020	Mar-2020	Apr-2020	Jan-2021	Sep-2021	Sep-2022	Oct-2022	Jun-2023	Aug-2023	Sep-2023
<b>Total</b>	100	94	83	112	120	130	132	132	133	134
Department Stores excl Leased Departments	100	81	57	96	104	107	105	100	102	102
<b>Shoe Stores</b>	100	54	15	101	100	105	104	103	104	103
Women's Clothing Stores	100	46	15	90	108	107	106	100	103	104
Furniture & Home Furnishing Stores	100	78	39	115	115	114	118	110	107	106
Furniture & Home Furn & Electronics/Appliance Stores	100	80	42	108	112	111	113	108	107	106
Electronics & Appliance Stores	100	82	46	99	107	107	106	106	106	107
<b>Clothing Stores</b>	100	47	11	86	105	111	112	112	116	115
Clothing & Accessory Stores	100	50	13	91	110	115	114	114	116	115
General Merchandise Stores	100	103	92	107	110	119	119	119	121	121
Beer, Wine & Liquor Stores	100	115	106	120	118	121	123	122	122	123
Health & Personal Care Stores	100	105	89	103	110	115	115	122	124	124
Warehouse Clubs & Super Stores	100	106	98	109	111	122	122	123	124	125
Pharmacies & Drug Stores	100	112	100	105	113	116	116	123	125	125
Other General Merchandise Stores	100	108	99	110	111	121	122	123	125	125
Building Materials & Supply Dealers	100	100	98	118	121	132	134	126	127	126
Sporting Goods, Hobby, Book & Music Stores	100	82	55	126	125	129	131	127	127	127
Food & Beverage Stores	100	126	109	110	117	125	127	126	127	127
<b>Grocery Stores</b>	100	128	110	109	117	126	127	126	128	128
All Other Gen Merchandise Stores	100	116	107	113	112	121	121	125	127	129

# Comparing the level of nominal retail spending today with February 2020 across sectors

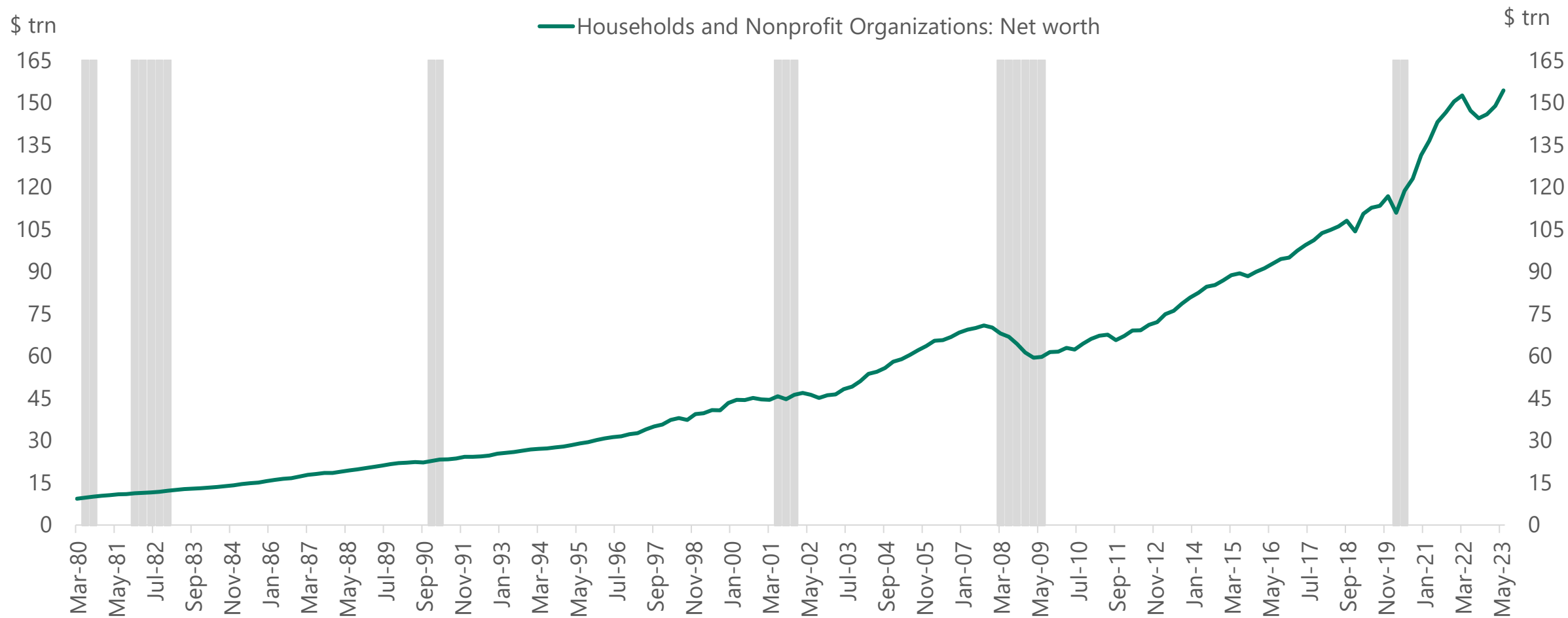
	<b>Feb-2020</b>	<b>Mar-2020</b>	<b>Apr-2020</b>	<b>Jan-2021</b>	<b>Sep-2021</b>	<b>Sep-2022</b>	<b>Oct-2022</b>	<b>Jun-2023</b>	<b>Aug-2023</b>	<b>Sep-2023</b>
Total	100	94	83	112	120	130	132	132	133	134
Building Materials, Garden Equipment & Supply Dealers	100	100	99	120	122	135	137	129	130	129
<b>Motor Vehicle Dealers</b>	100	72	61	111	117	122	125	129	129	130
Motor Vehicle & Parts Dealers	100	74	63	111	118	123	126	130	130	131
Retail Sales & Food Services	100	91	78	108	118	129	131	131	133	134
Miscellaneous Stores Retailers	100	85	62	104	120	131	131	135	128	135
Food Services & Drinking Places	100	70	45	85	109	122	125	131	133	135
Retail Sales & Food Services Excl Motor Vehicles & Parts Dealers	100	95	81	108	119	131	132	132	134	135
Total Excl Motor Vehicle & Parts Dealers	100	100	88	112	120	132	134	132	134	135
Gasoline Stations	100	84	65	97	120	142	148	127	136	137
Fuel Dealers	100	92	89	103	118	152	169	129	137	141
Automotive Parts, Acc & Tire Stores	100	91	86	108	121	136	134	143	144	145
<b>Nonstore Retailers/Online</b>	100	106	119	137	143	163	165	172	175	177
<b>Electronic Shopping &amp; Mail Order Houses</b>	100	108	124	141	147	167	168	178	180	183

# Macro factors driving consumer spending

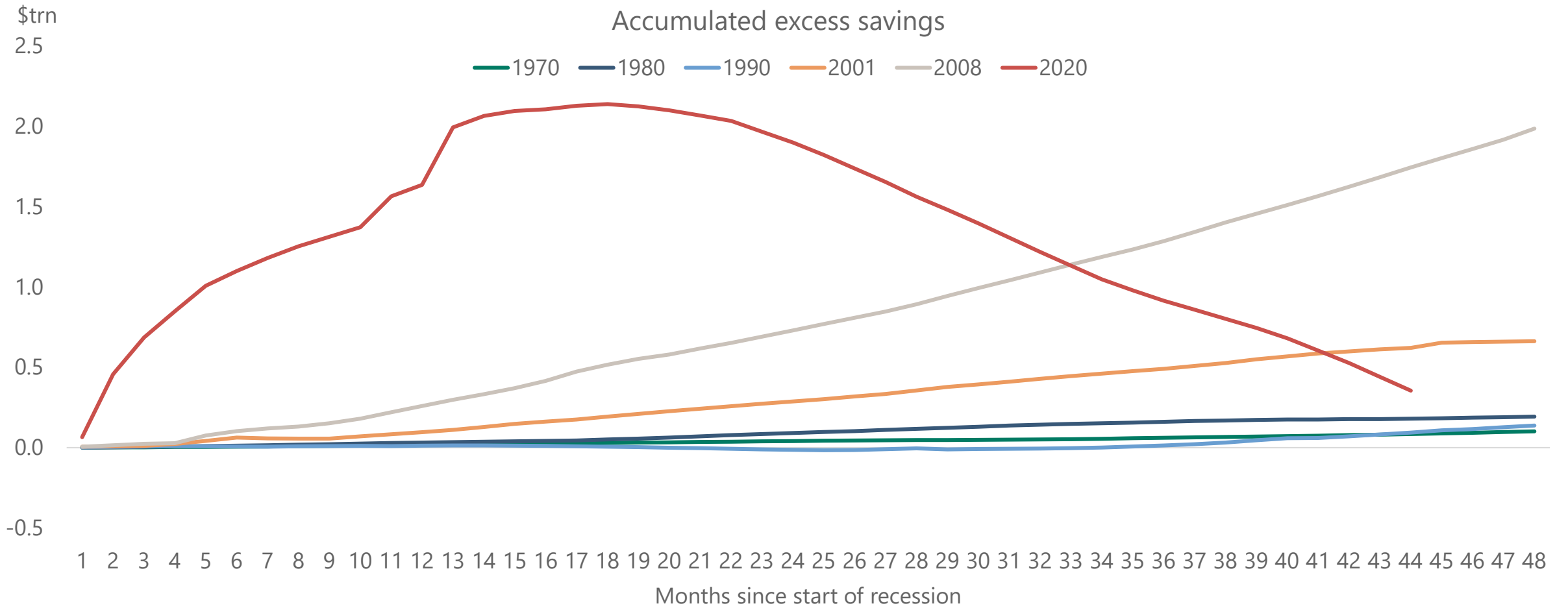
# Total employment is now 4.5 mn jobs above February 2020 levels



# Net worth of the US household sector is near record highs



# US households running out of excess savings

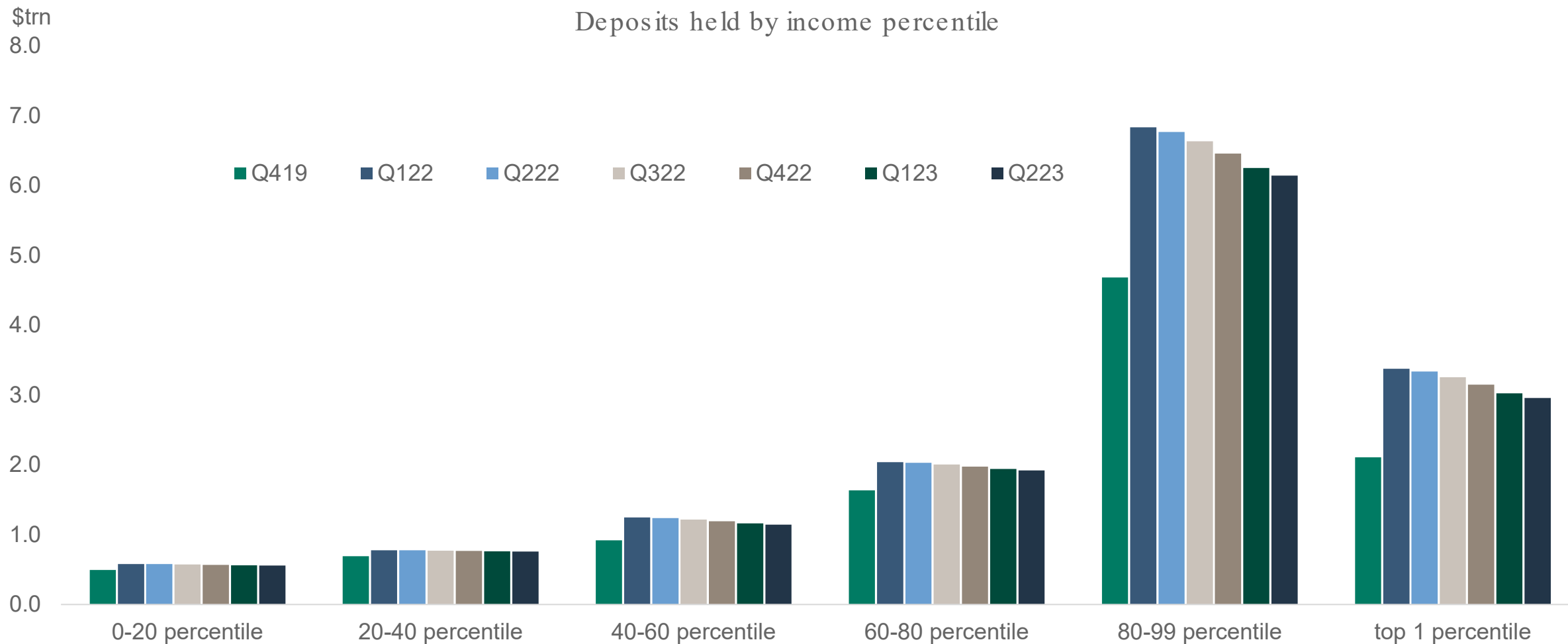


Source: BEA, Haver Analytics, Apollo Chief Economist.

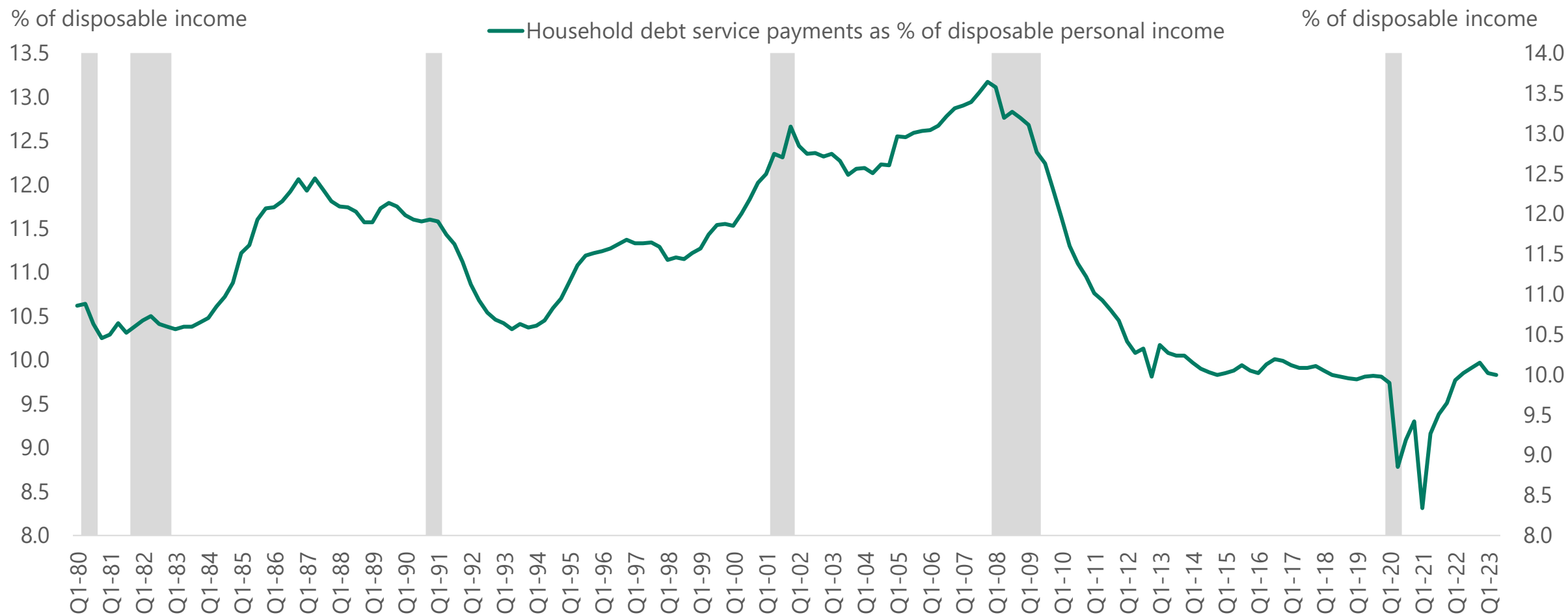
Note: Excess savings are calculated as the accumulated difference between actual personal savings and the trend implied by data for the 48 months leading up to the first month of each recession, as defined by the NBER.



# Household savings across income groups

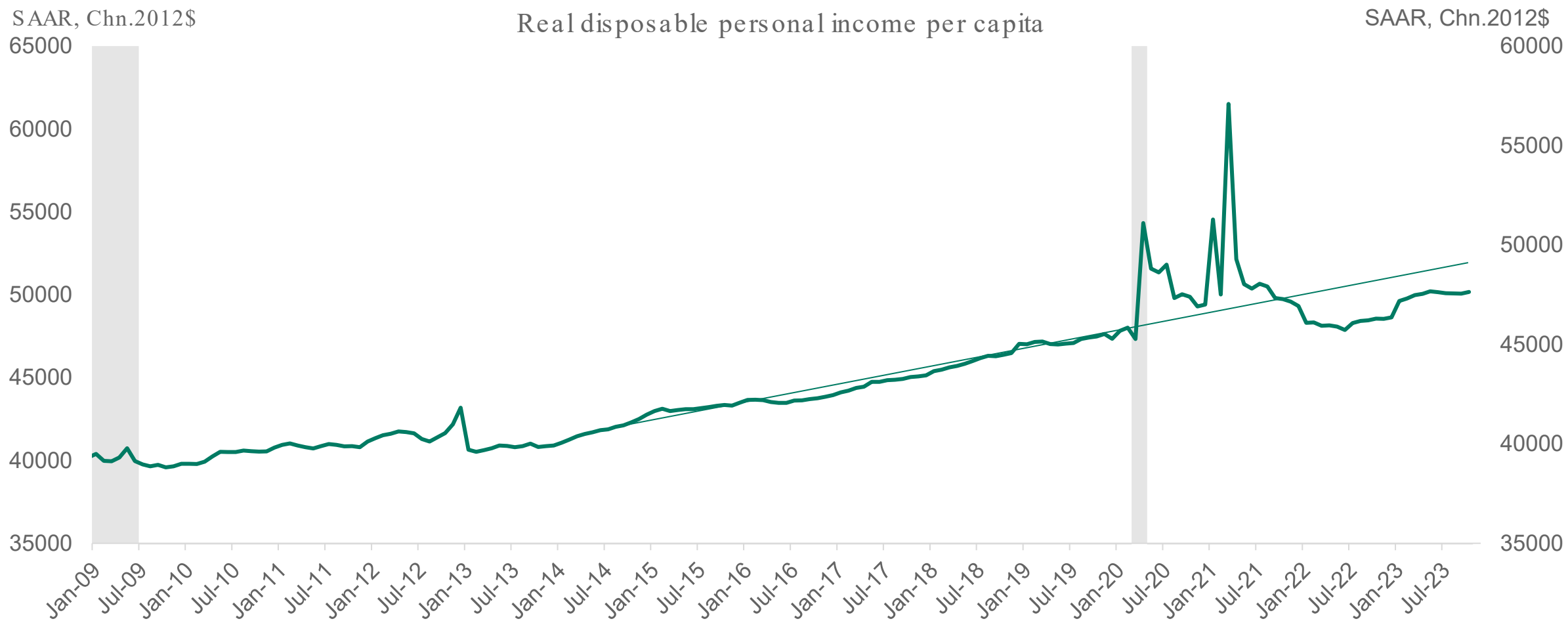


# Household debt service payments as a share of income



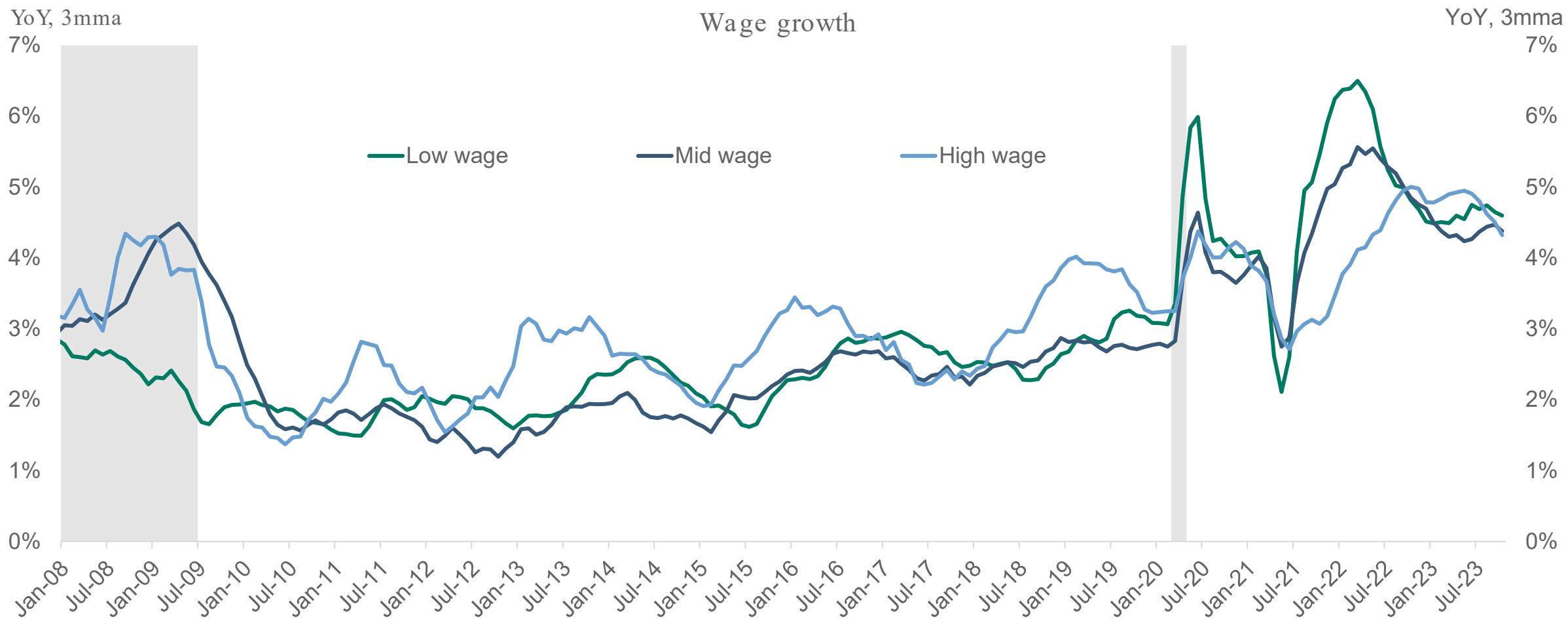
Source: FRB, Haver, Apollo Chief Economist

# Inflation-adjusted income per capita below the pre-pandemic trend



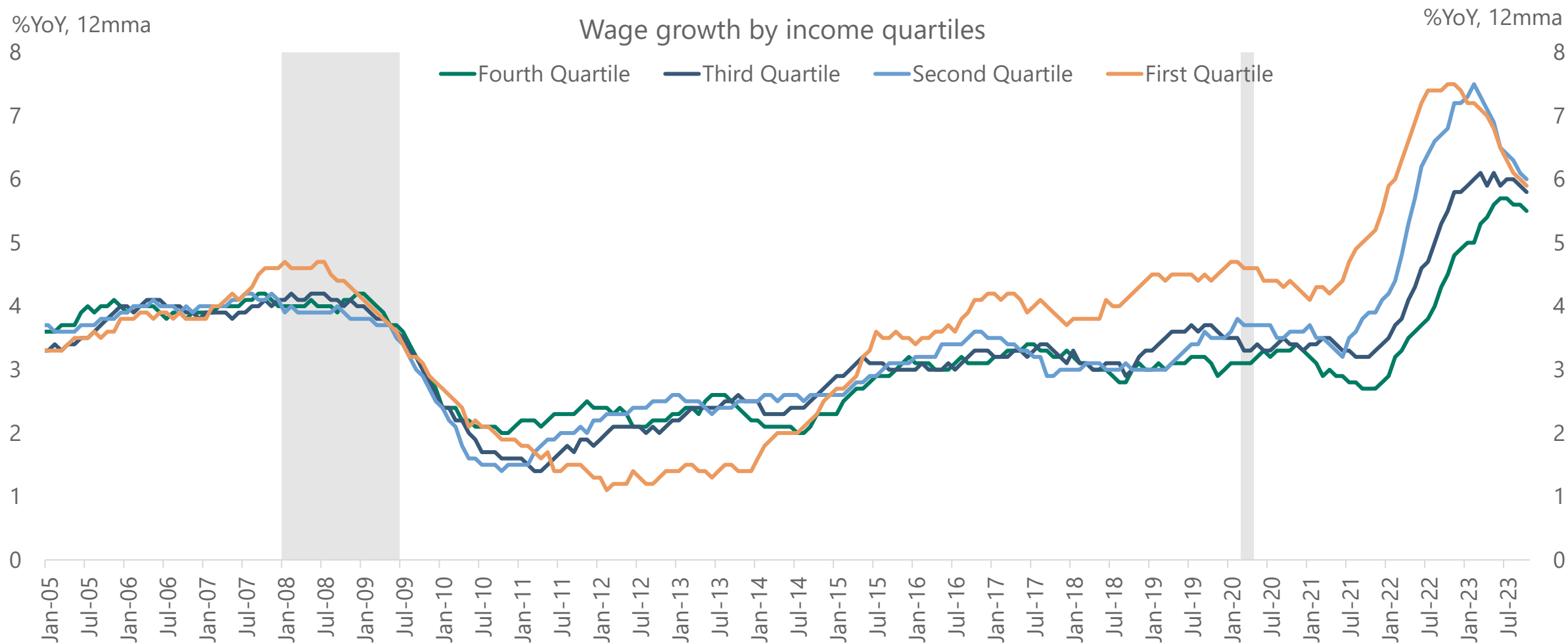
Source: BEA, Haver Analytics, Apollo Chief Economist

# Wage inflation sticky at 4.5%



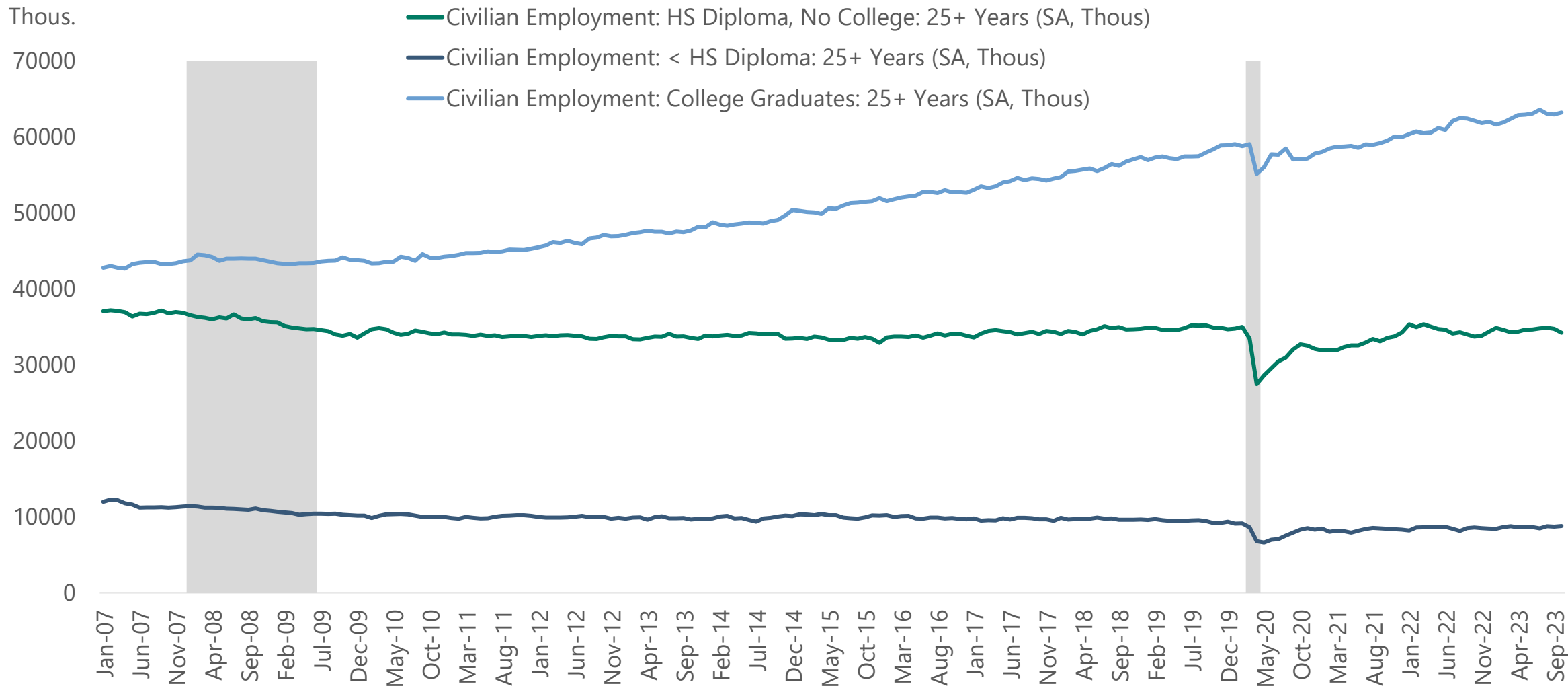
Source: BLS, Apollo Chief Economist. Note: Low wage workers are defined as the bottom third percentile in the wage distribution, mid wage workers as the mid third percentile and high wage workers as top third percentile

# Wage growth still elevated across the income distribution

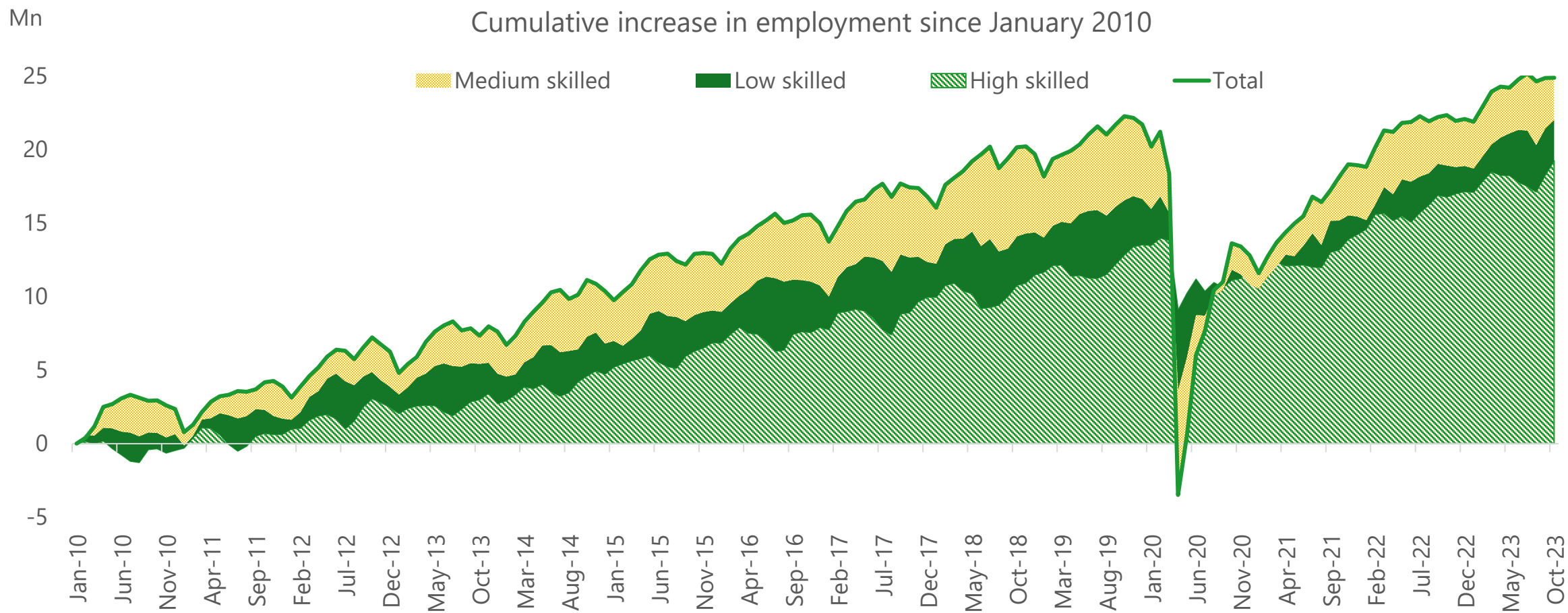


Source: Federal Reserve Bank of Atlanta, Haver, Apollo Chief Economist

# Employment for workers, by education



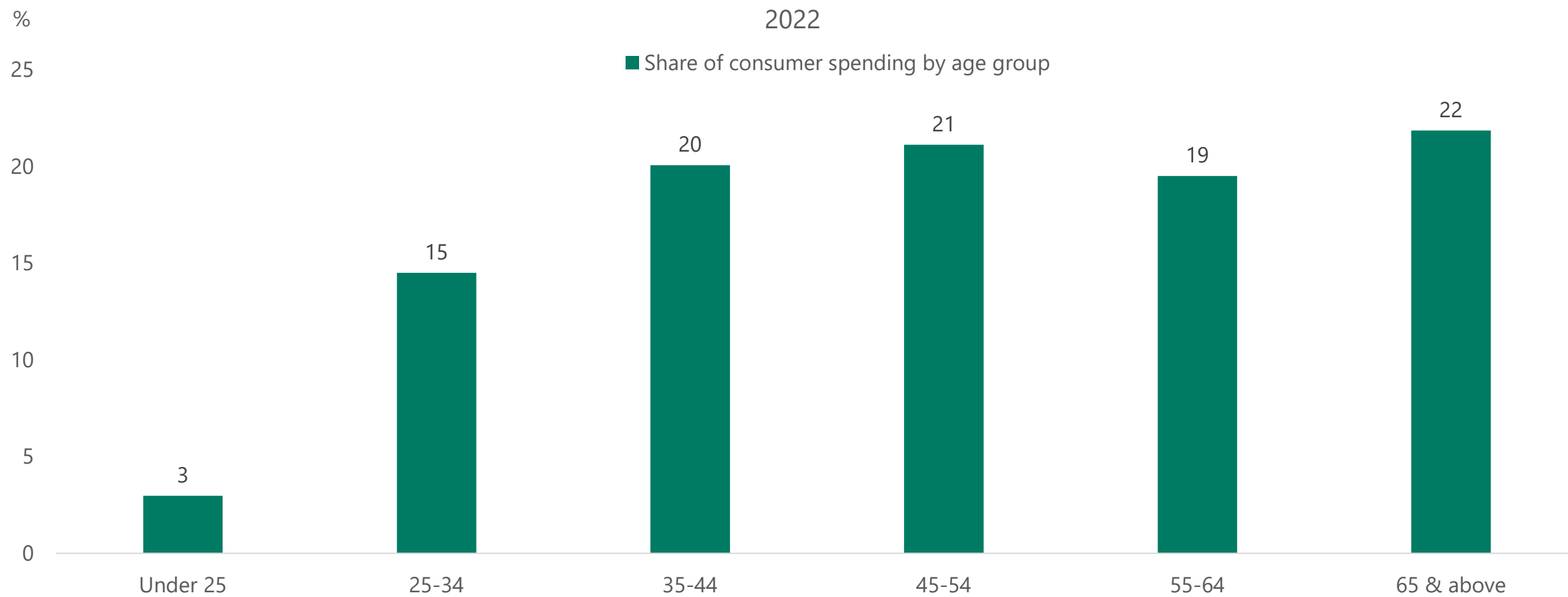
# The composition of employment, by skill



Source: BLS, Haver, Apollo Chief Economist

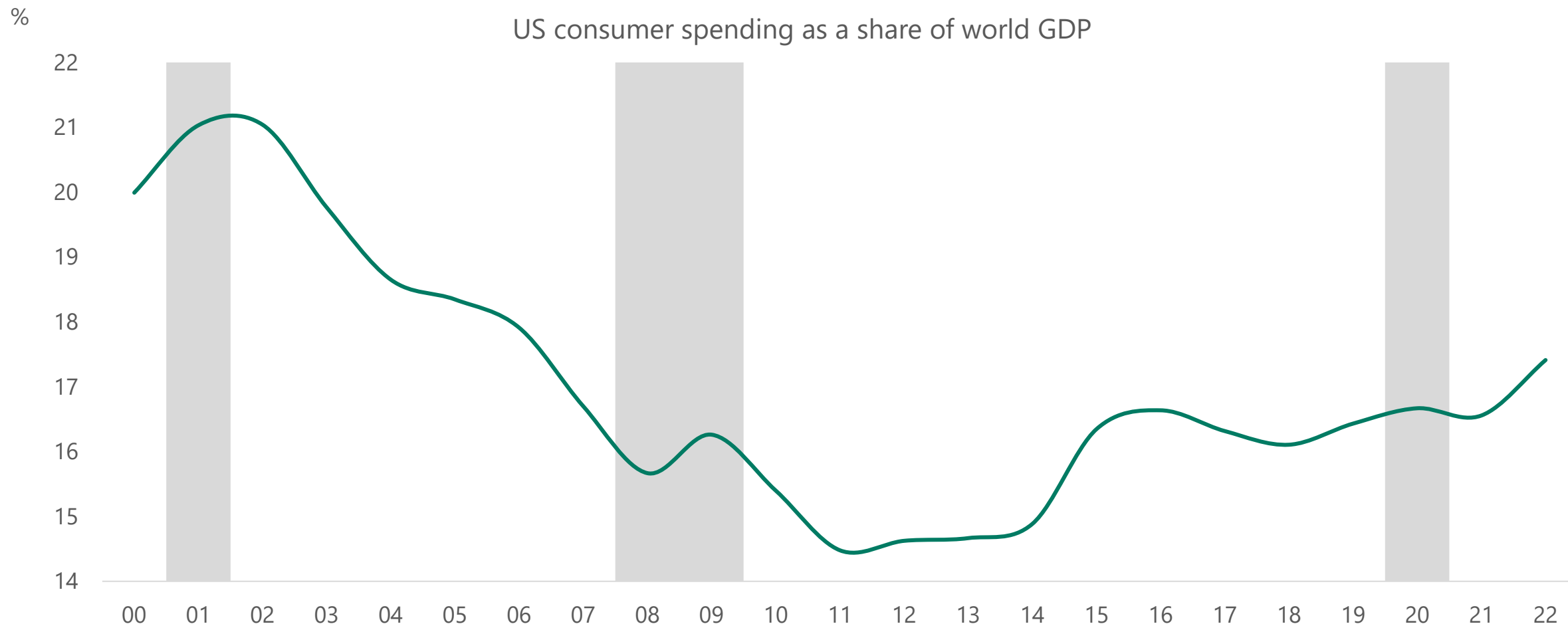
Note: High-skill occupational categories are management and financial operations and Professionals and related occupations; Medium-skill categories are sales and related occupations, office administrative support, construction, installation and repair, production occupations, and transportation and material moving; Low-skill categories are service occupations and farming, fishing, and forestry.

# People age 55 and above account for 41% of total consumer spending



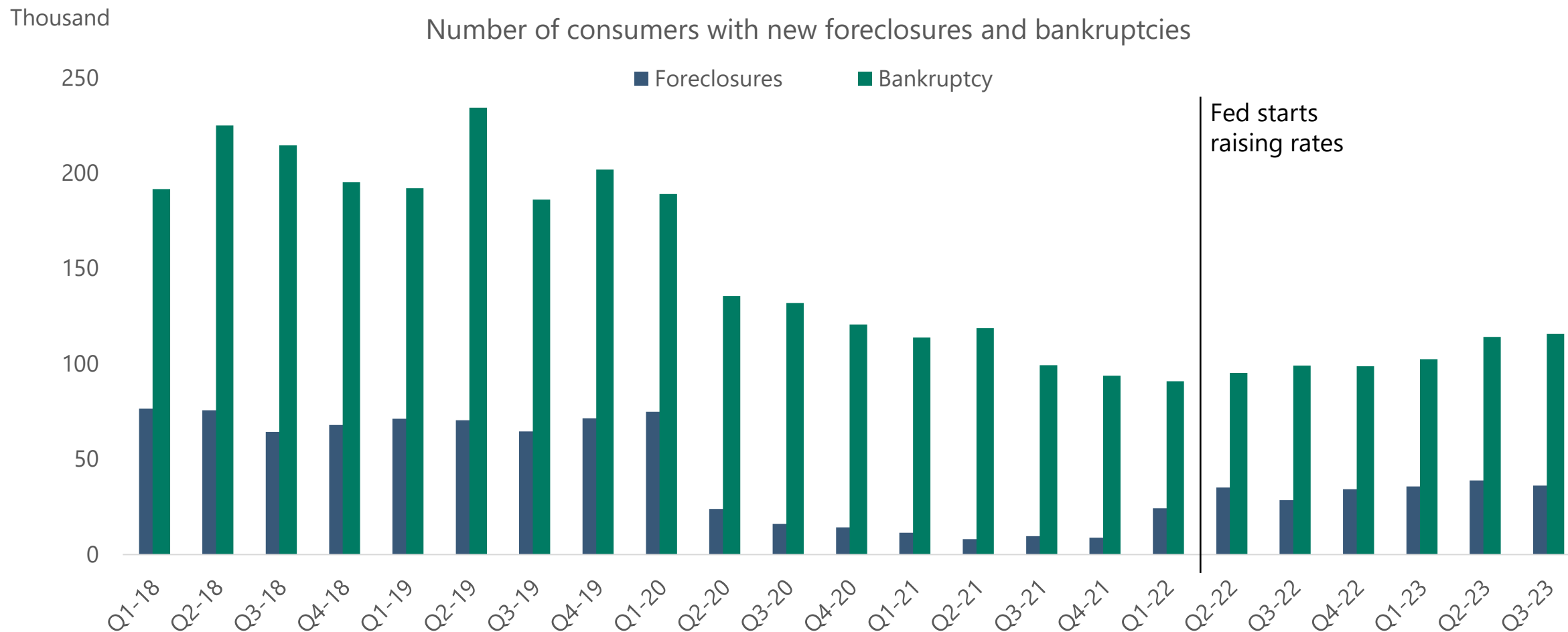


# The US consumer makes up 17% of global GDP

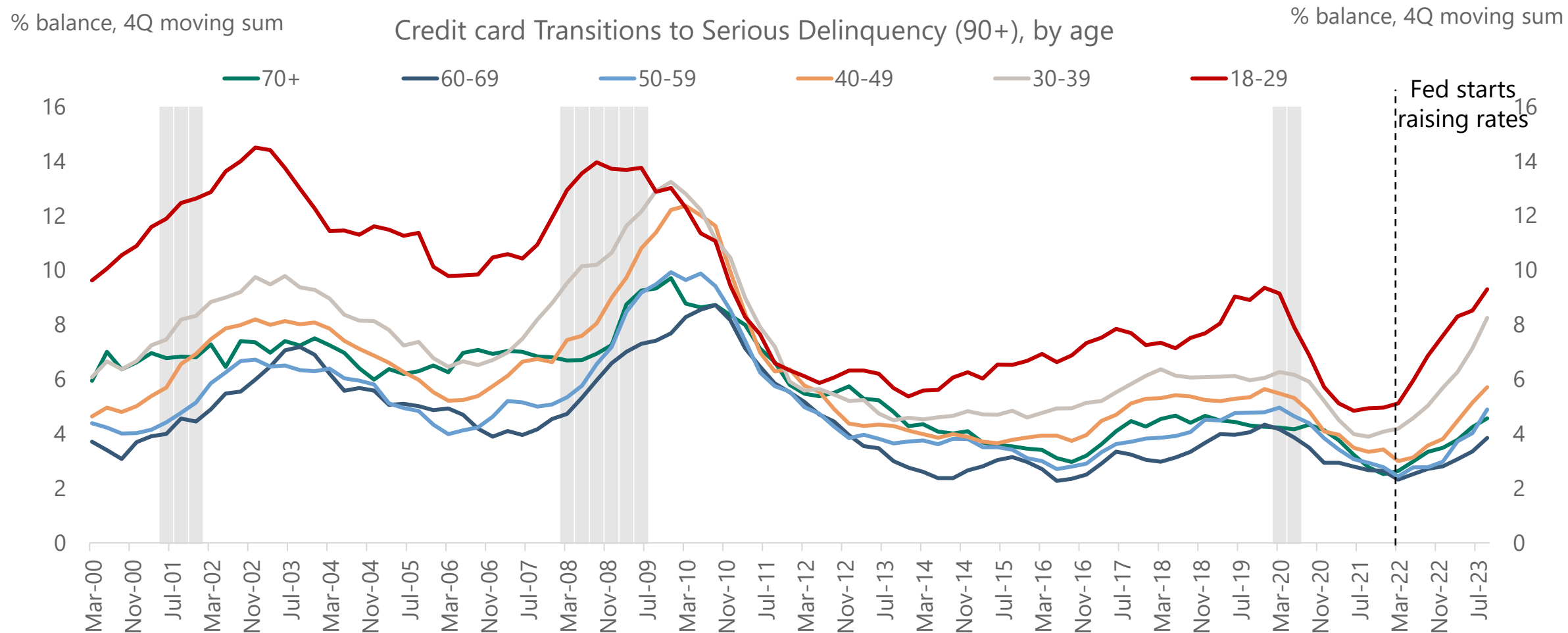


# Health of the household sector balance sheet

# Foreclosures and bankruptcies starting to rise after the Fed raised rates

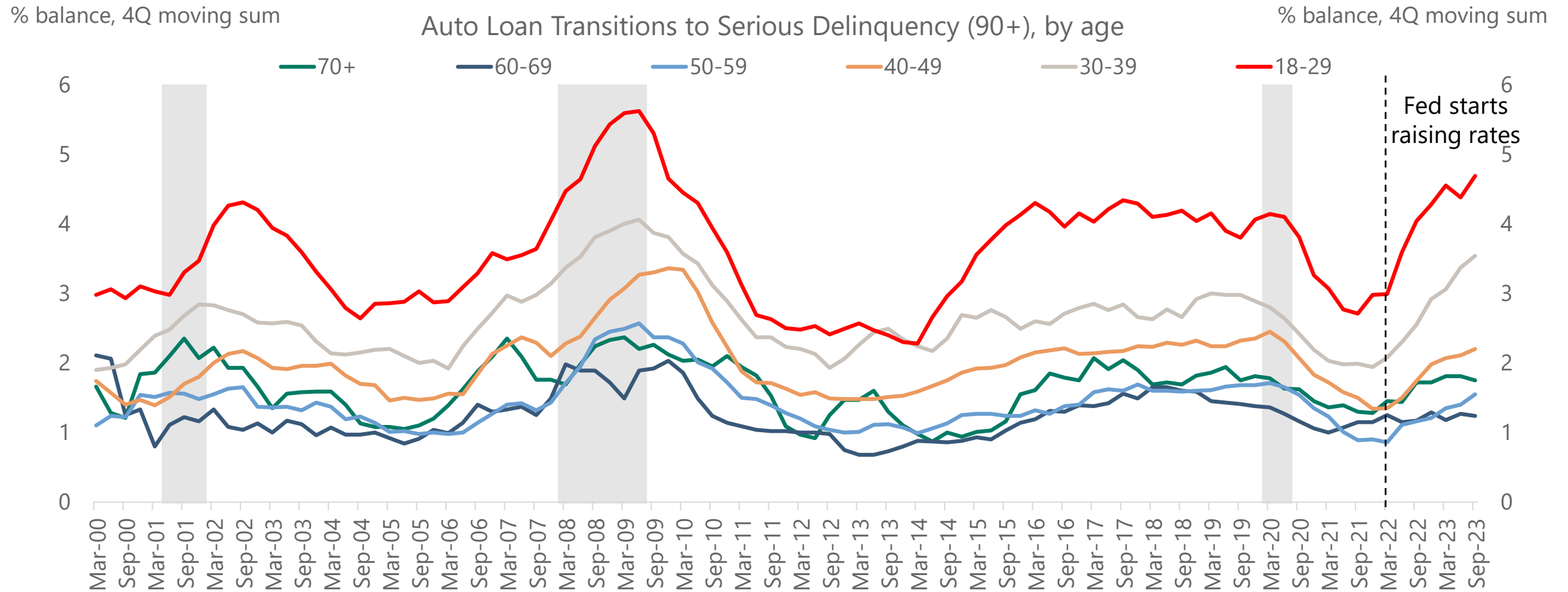


# Credit card delinquency rates rising



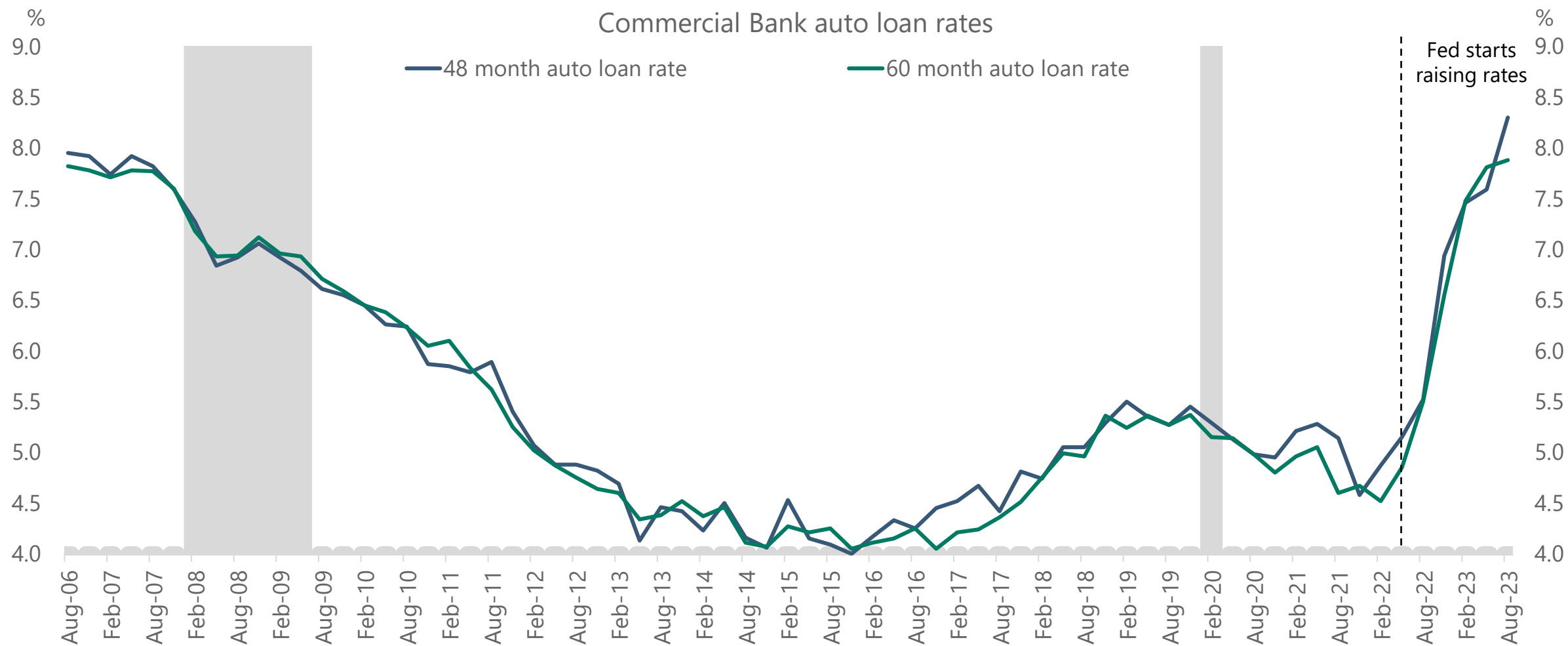
Source: New York Fed Consumer Credit Panel / Equifax, Apollo Chief Economist

# Auto loan transitions to serious delinquency at 2008 levels



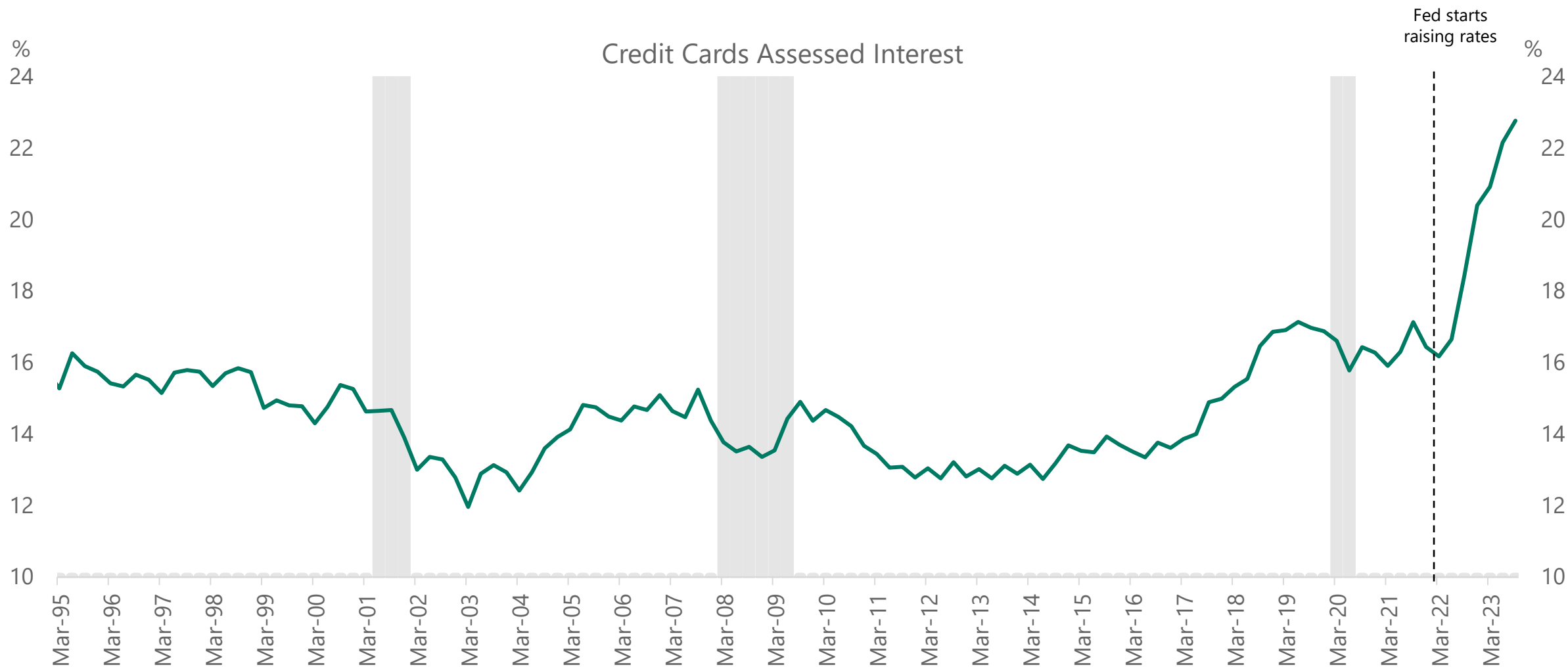
Source: FRBNY Consumer Credit Panel, Equifax, Haver Analytics, Apollo Chief Economist

# Interest rate on auto loans

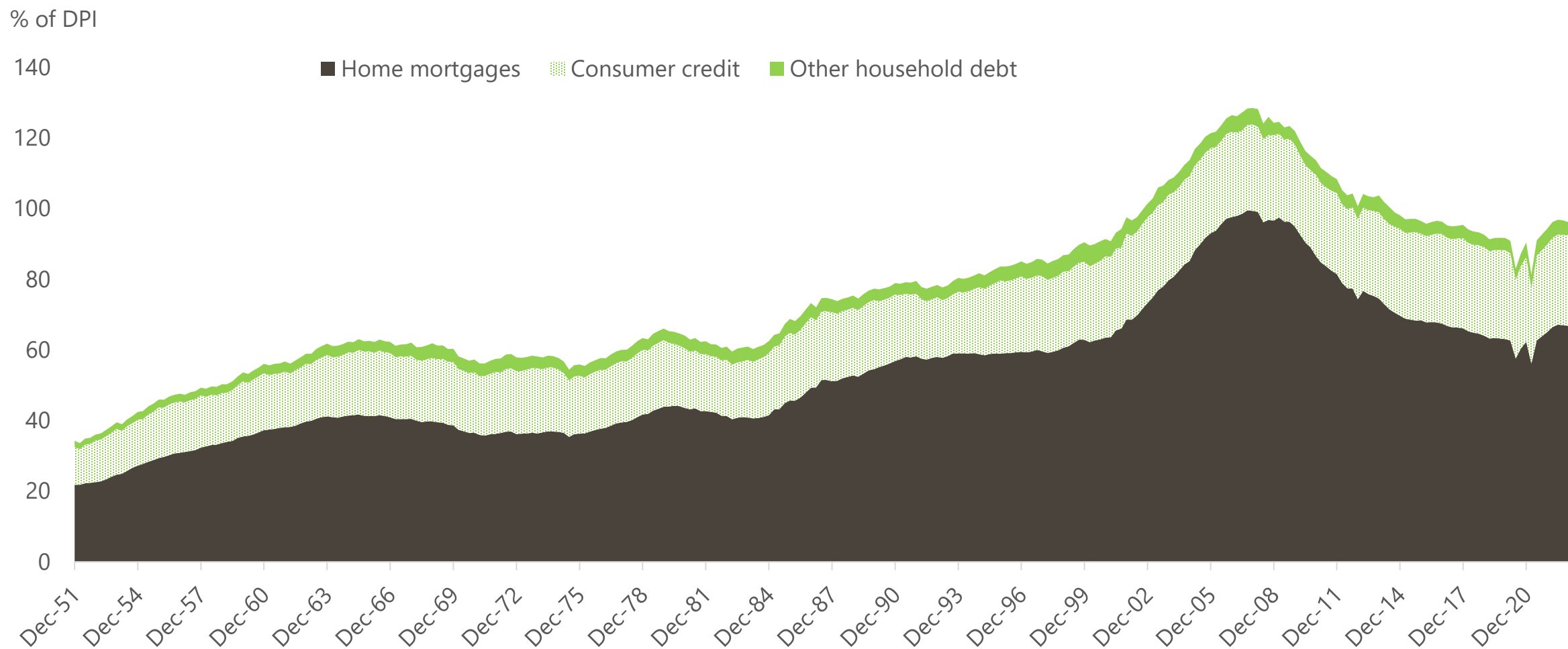


Source: FRB, Bloomberg, Apollo Chief Economist

# Interest rate on credit cards at historical highs



# Household sector leverage well below 2007 levels

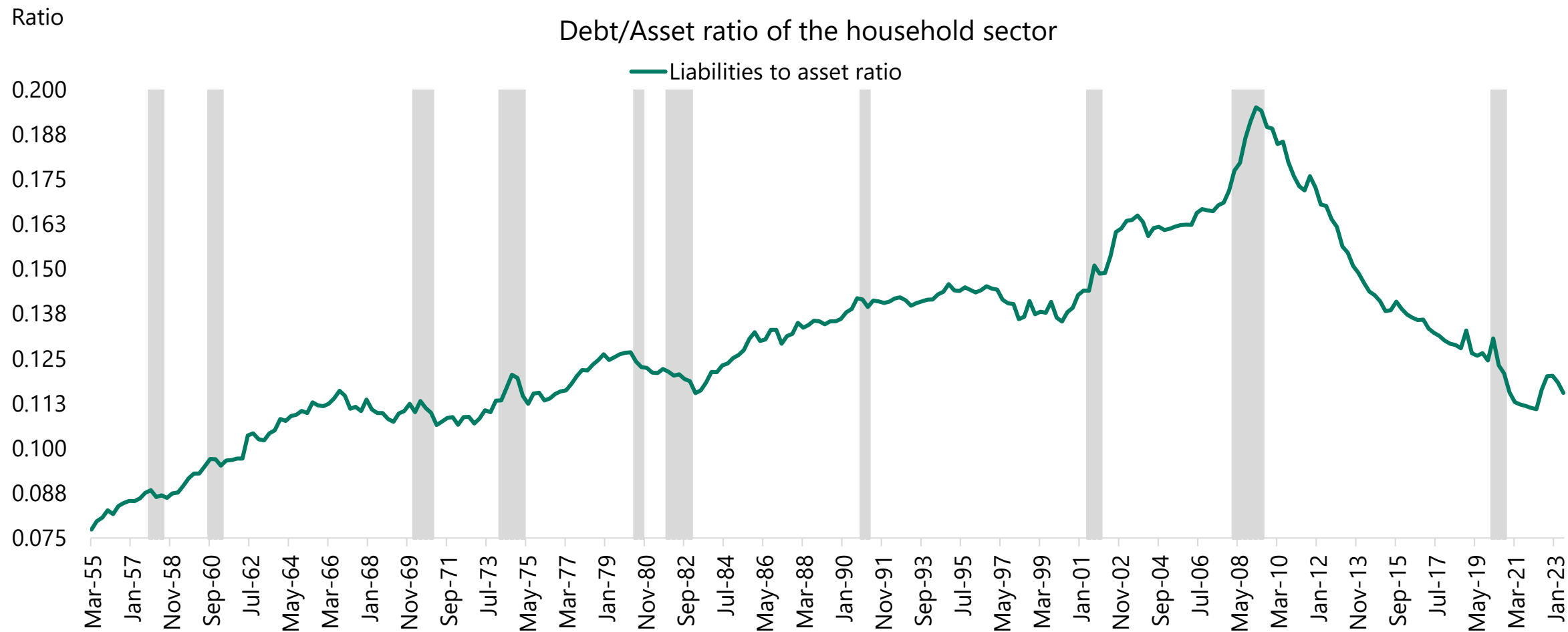




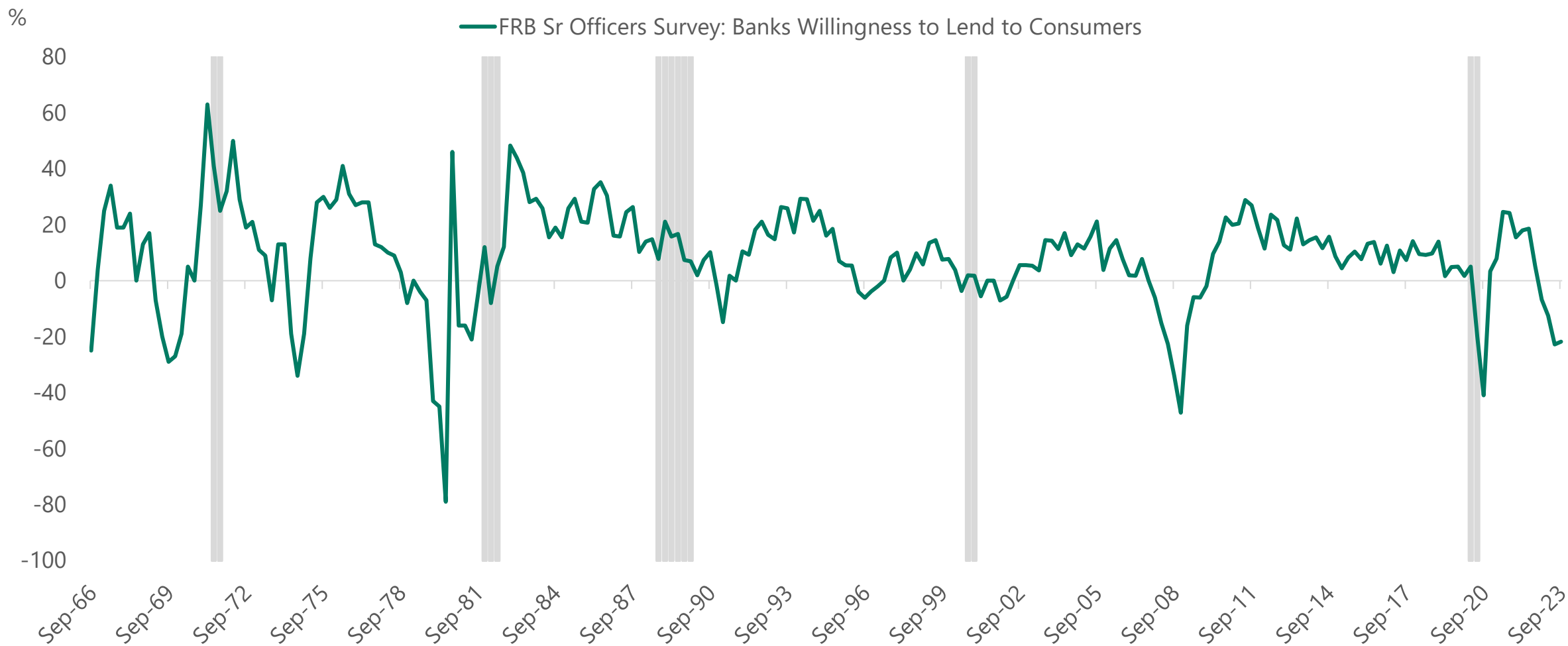
# Delinquency rates for auto loans and credit cards across the credit spectrum

Auto Loans					Credit Cards					Mortgages				
+60 day delinquency rate					+90 day delinquency rate					Distribution of Delinquency				
	Oct. 2023	Sep. 2023	Oct. 2022	June 2019		Oct. 2023	Sep. 2023	Oct. 2022	June 2019		Oct. 2023	Sep. 2023	Oct. 2022	June 2019
<b>Super Prime</b>	0.0%	0.0%	0.0%	0.0%	<b>Super Prime</b>	0.00%	0.00%	0.00%	0.00%	<b>Current</b>	94.6%	94.7%	95.3%	94.0%
<b>Prime plus</b>	0.01%	0.01%	0.01%	0.01%	<b>Prime plus</b>	0.01%	0.01%	0.01%	0.01%	<b>30-59 DPD</b>	3.1%	3.0%	2.6%	3.3%
<b>Prime</b>	0.14%	0.16%	0.13%	0.12%	<b>Prime</b>	0.20%	0.20%	0.18%	0.16%	<b>60-89 DPD</b>	1.5%	1.4%	1.3%	1.7%
<b>Near prime</b>	0.62%	0.62%	0.54%	0.39%	<b>Near prime</b>	1.26%	1.26%	1.08%	1.07%	<b>90+</b>	0.8%	0.8%	0.7%	0.9%
<b>Subprime</b>	12.69%	12.91%	11.83%	7.39%	<b>Subprime</b>	20.39%	19.82%	18.56%	17.39%	<b>Foreclosure</b>	0.1%	0.1%	0.1%	0.2%
<b>Total</b>	2.13%	2.12%	1.86%	1.23%	<b>Total</b>	2.39%	2.29%	2.02%	1.71%					

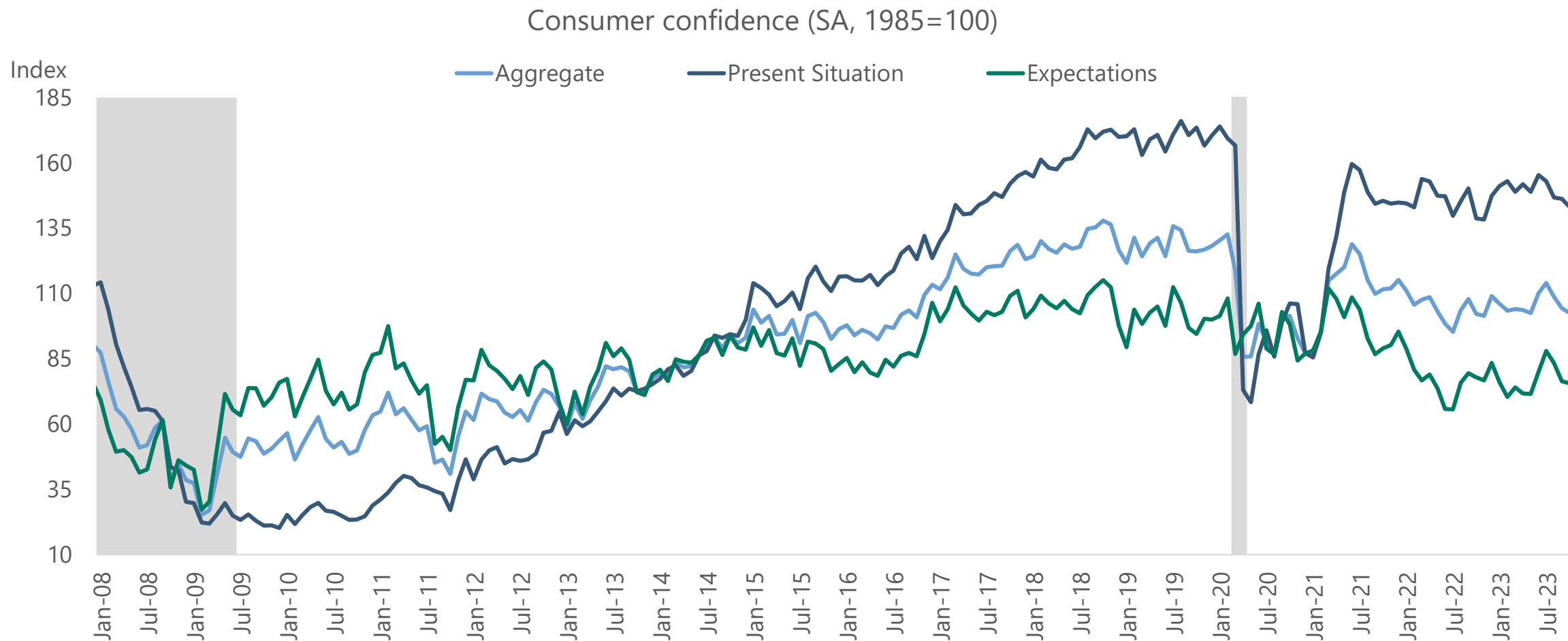
# Household liabilities to assets



# Banks less willing to lend to consumers



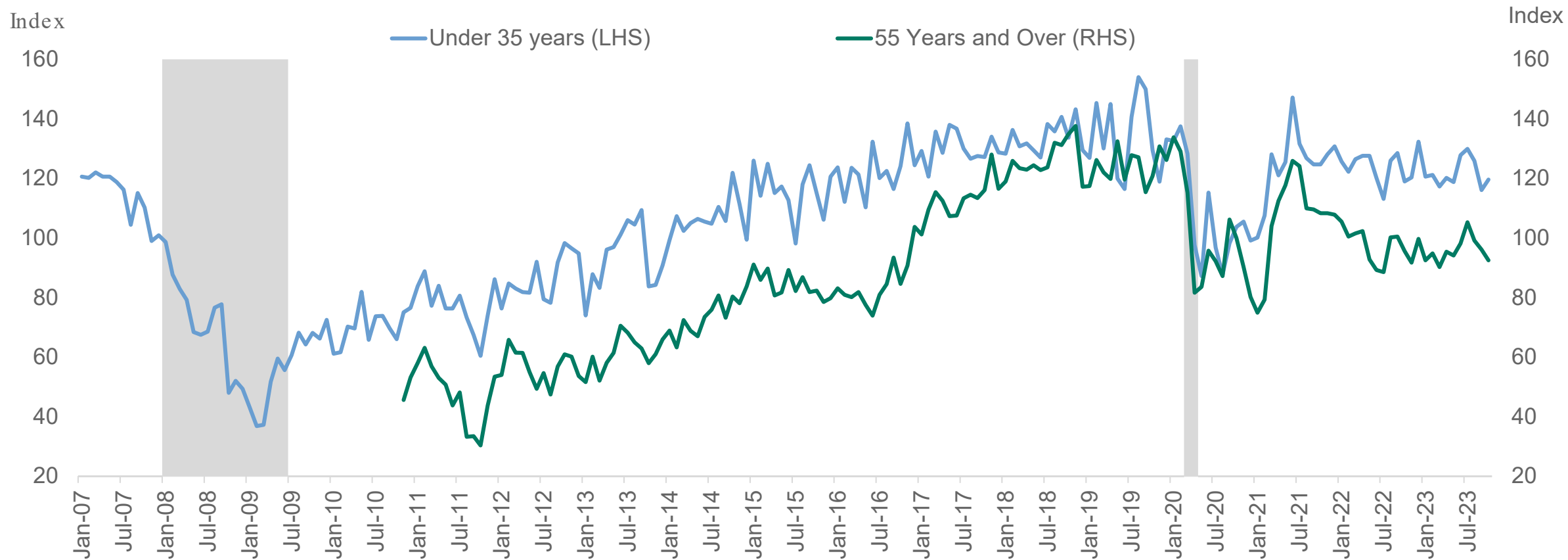
# Consumer confidence gradually lower since the Fed started raising rates



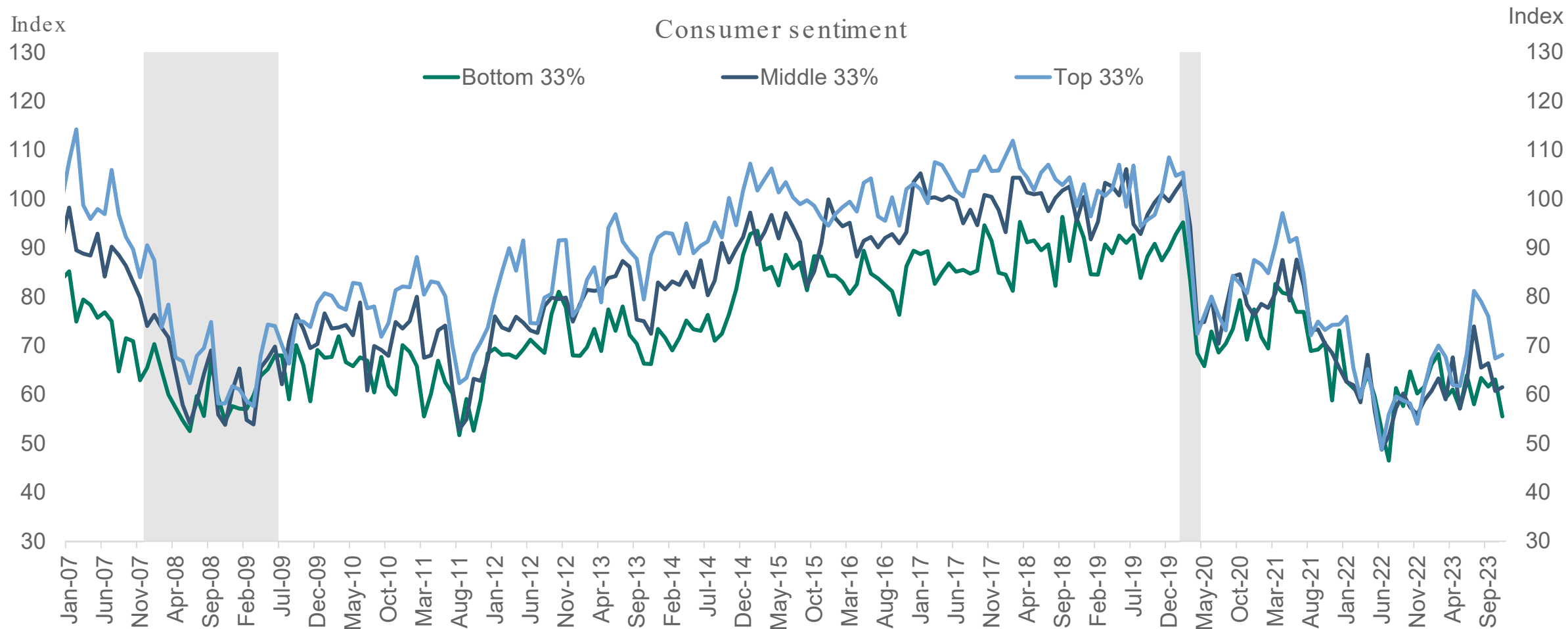
Source: Conference Board, Haver Analytics, Apollo Chief Economist

# Consumer confidence across generations

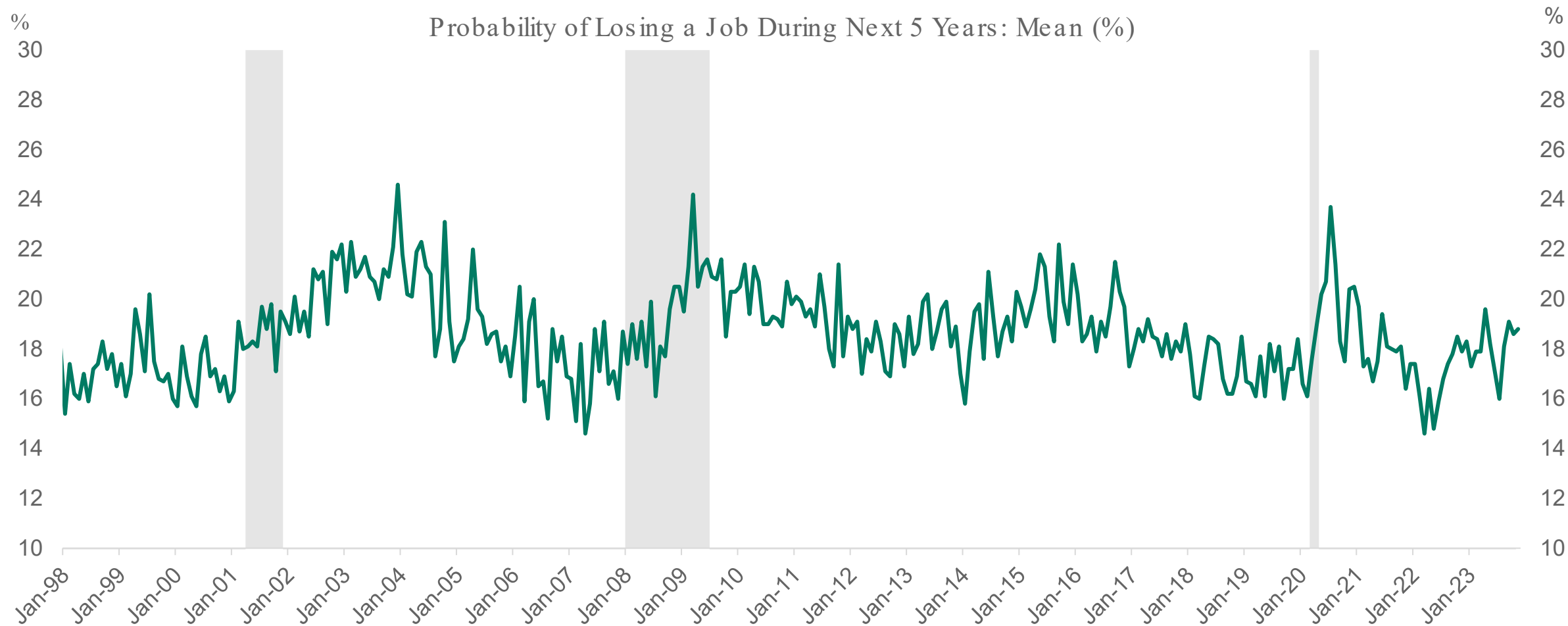
Consumer confidence by Age (SA, Index)



# Consumer sentiment across the income distribution

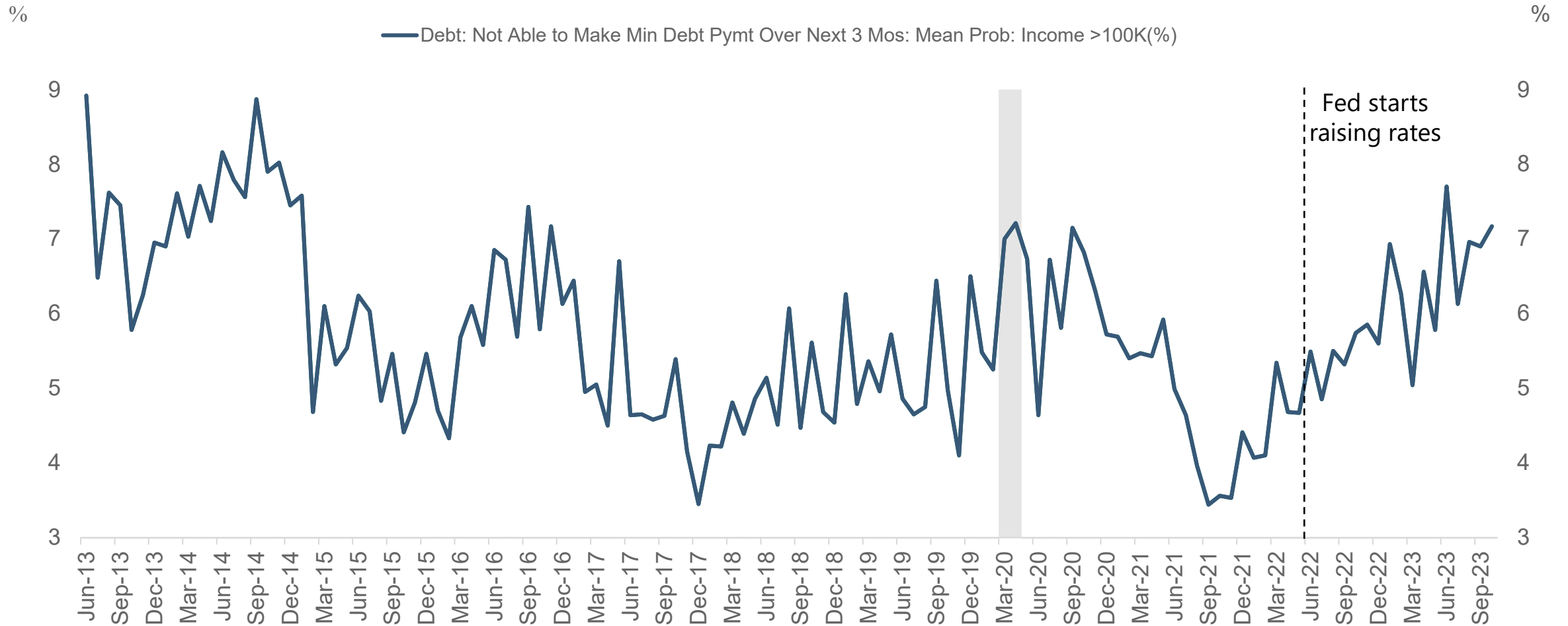


# Households a bit more worried about losing their jobs



Source: University of Michigan, Haver Analytics, Apollo Chief Economist

# Higher income households starting to worry about whether they can make minimum debt payments

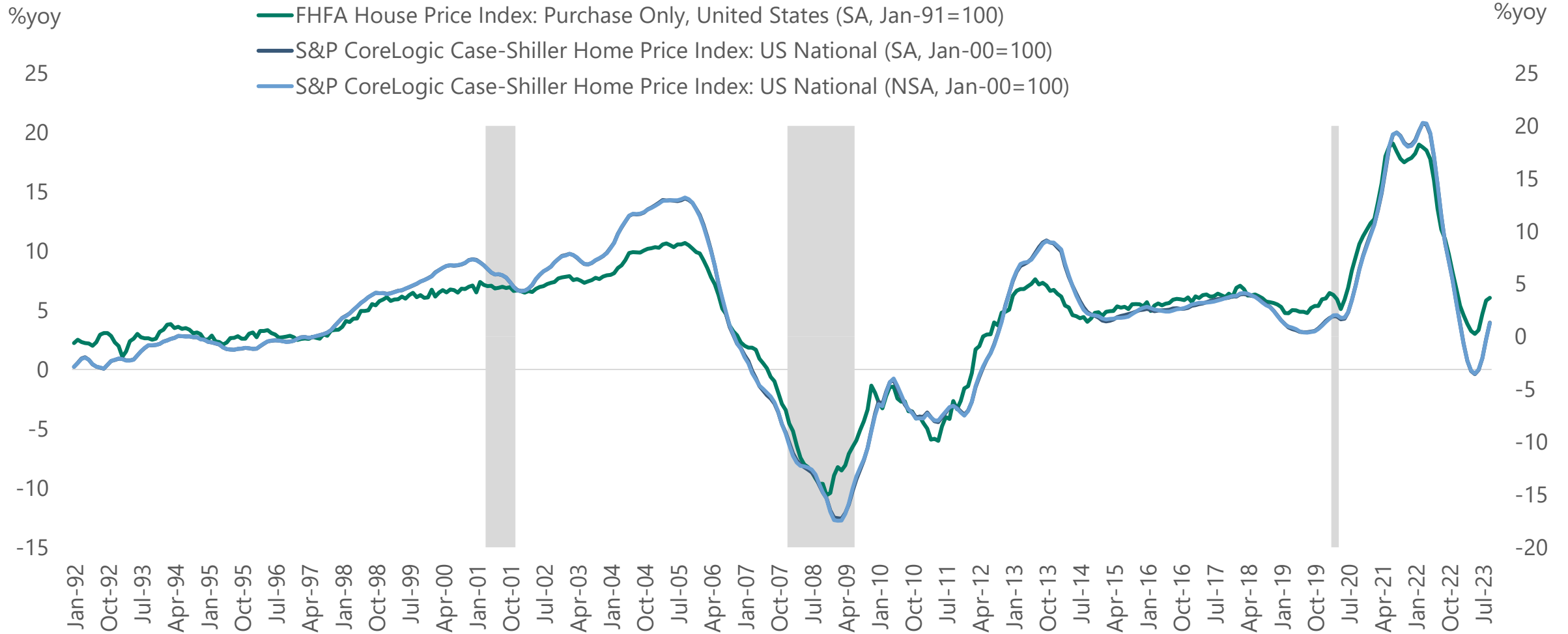


Source: FRBNY, Haver Analytics, Apollo Chief Economist. Note: The data shows the average probability of not being able to make minimum debt payment over the next three months for people earning (income) greater than 100k.

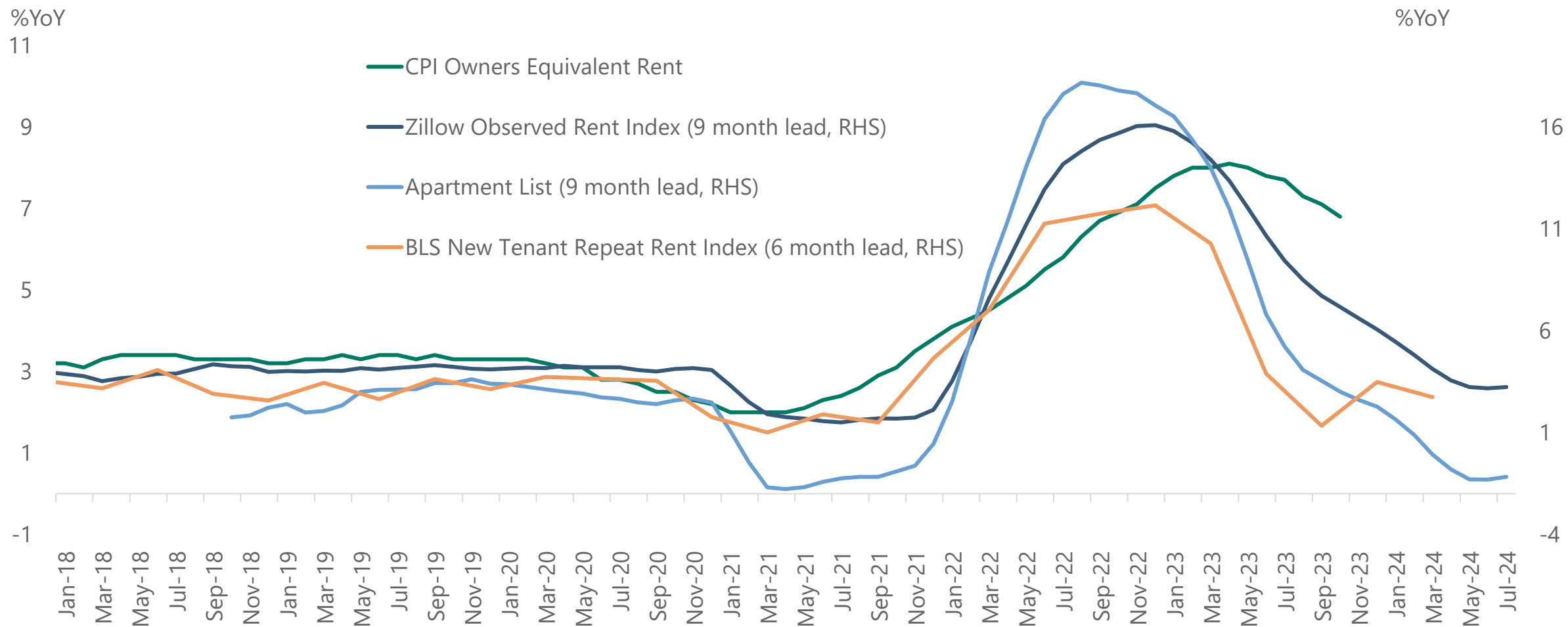


# Outlook for spending on housing

# Home price inflation rebounding

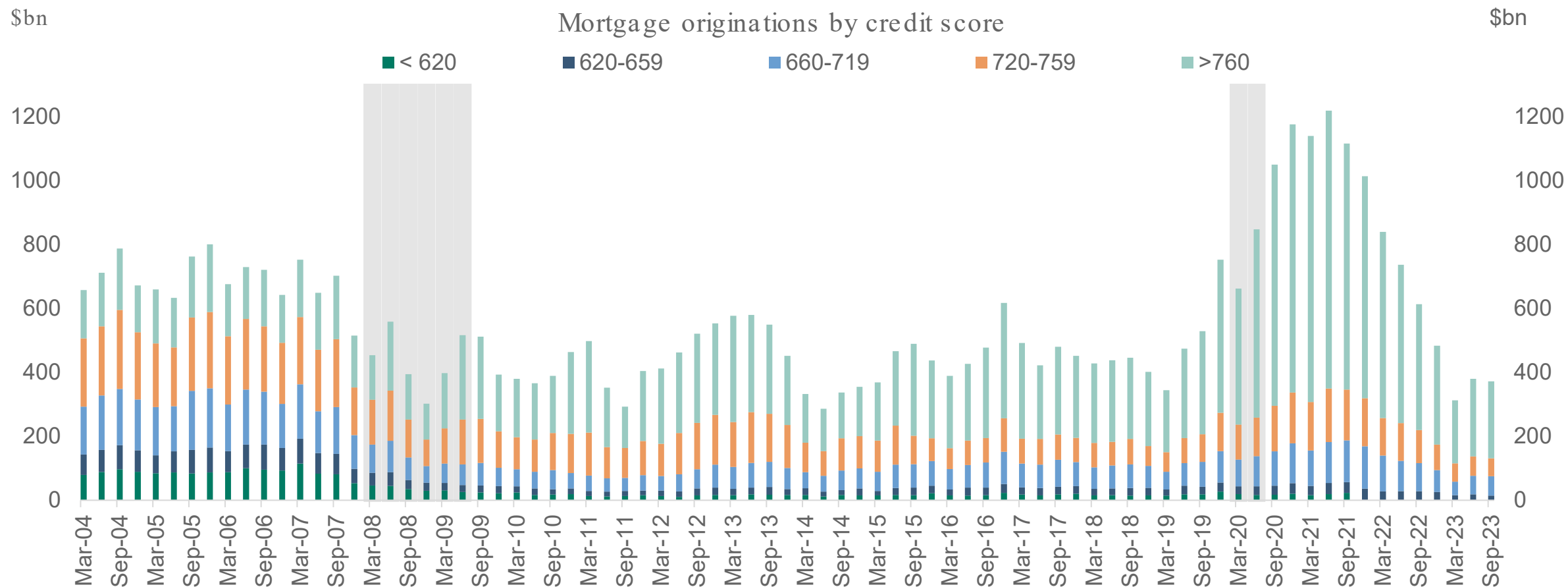


# Housing inflation



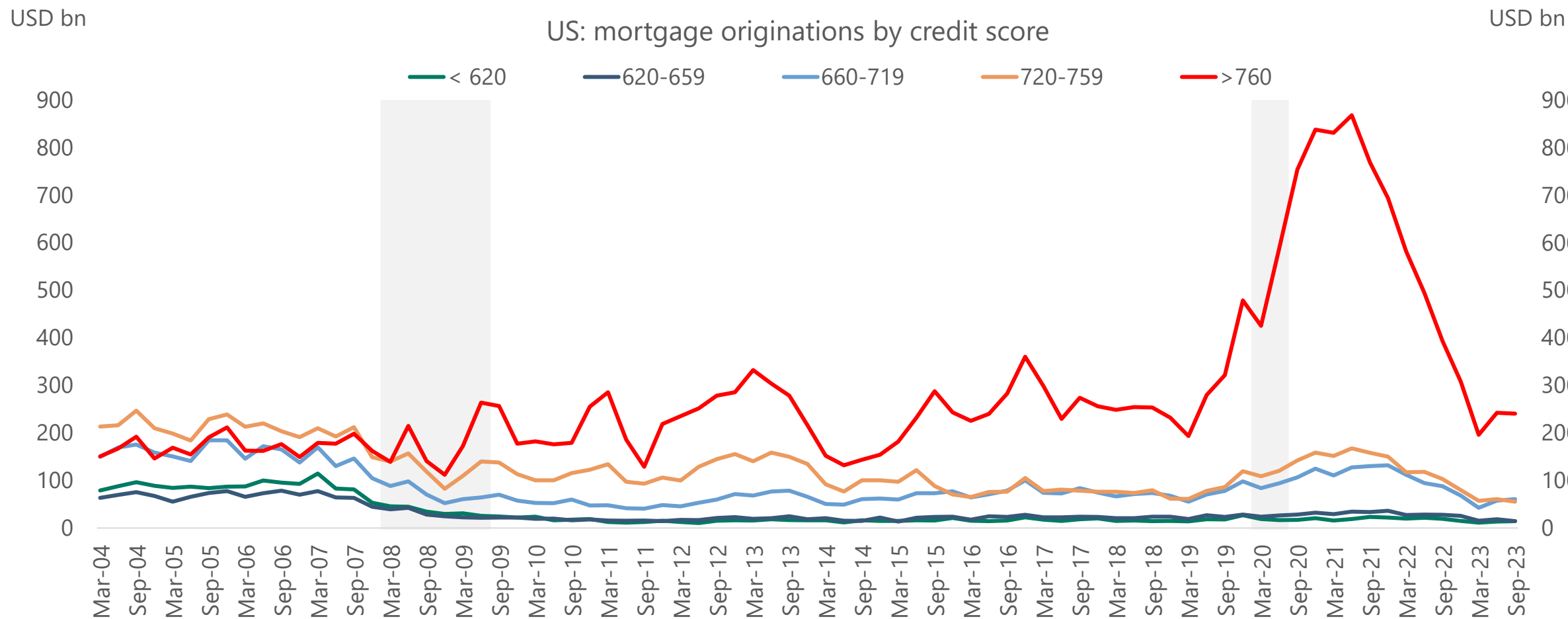
Source: Zillow, BLS, Haver Analytics, Apollo Chief Economist

# Purchase and refi activity during the pandemic driven by households with high credit scores



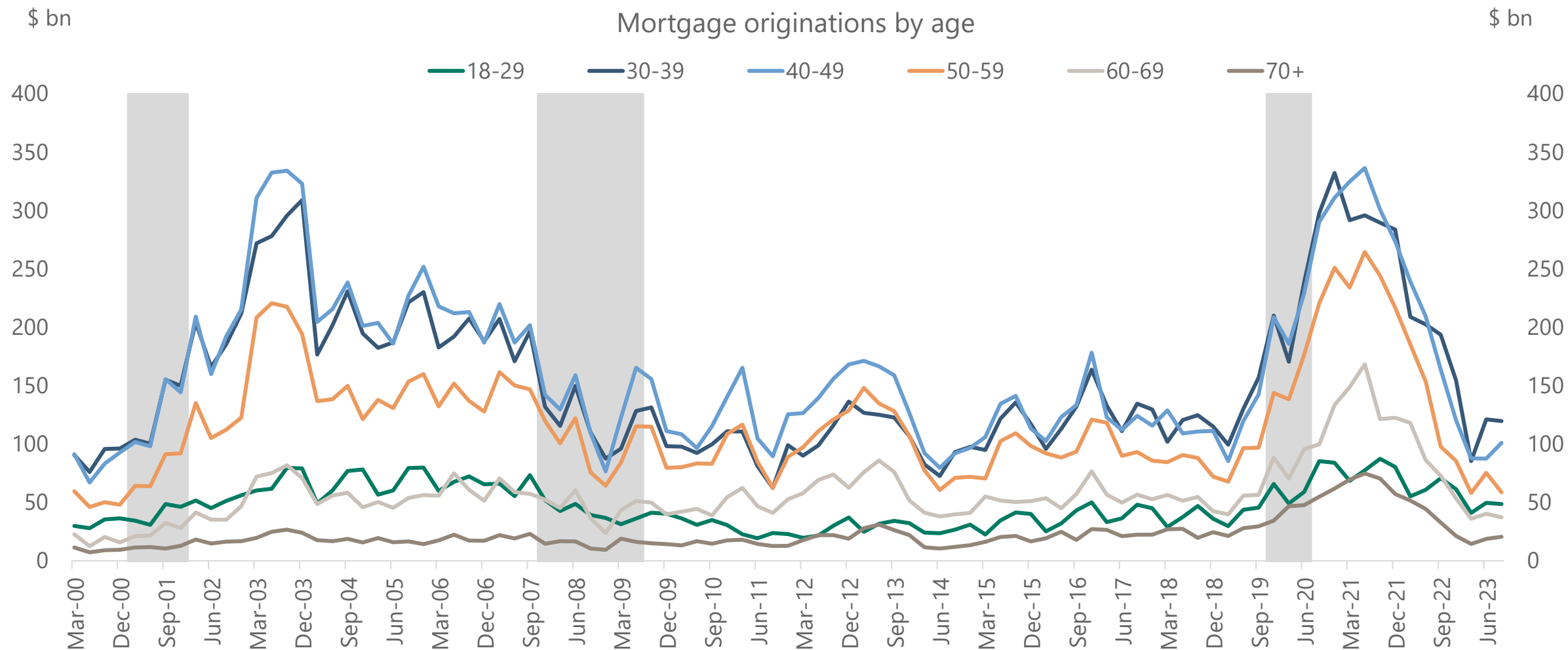
Source: FRBNY Consumer Credit Panel, Equifax, Haver Analytics, Apollo Chief Economist.

# US mortgage credit originations, by credit score



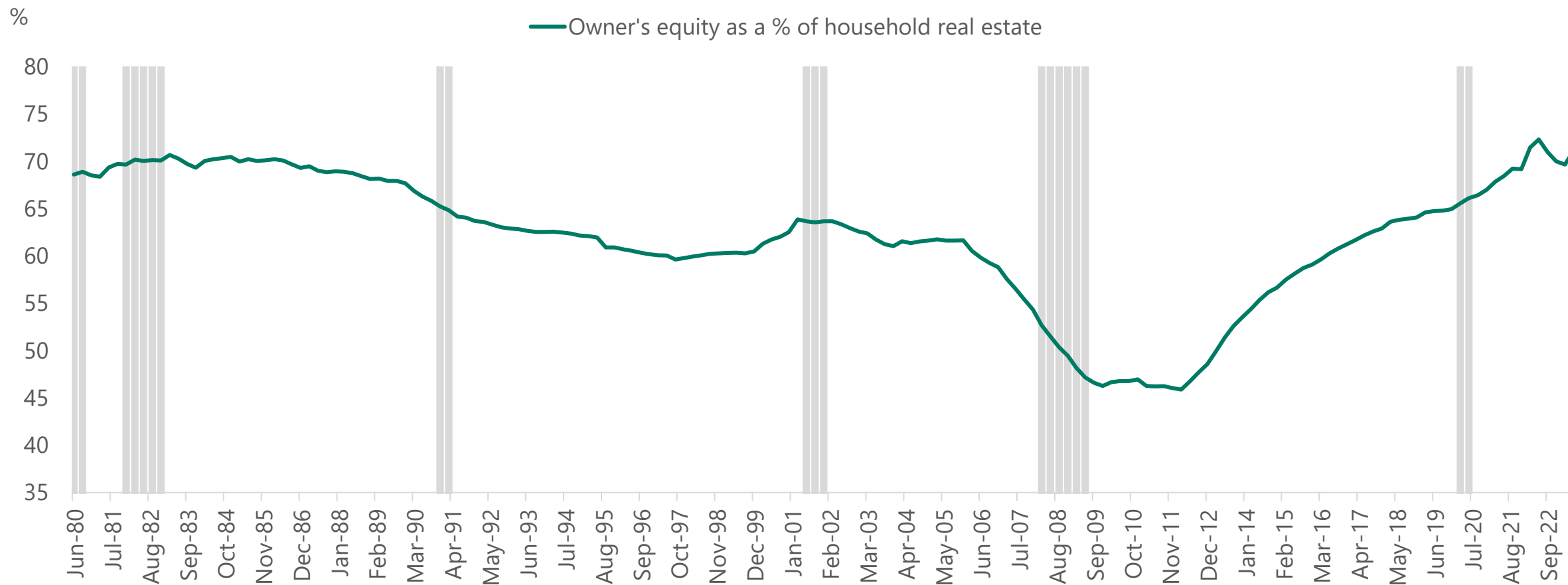
Source: FRBNY Consumer Credit Panel, Equifax, Haver Analytics, Apollo Chief Economist.

# Mortgage origination has normalized across age groups

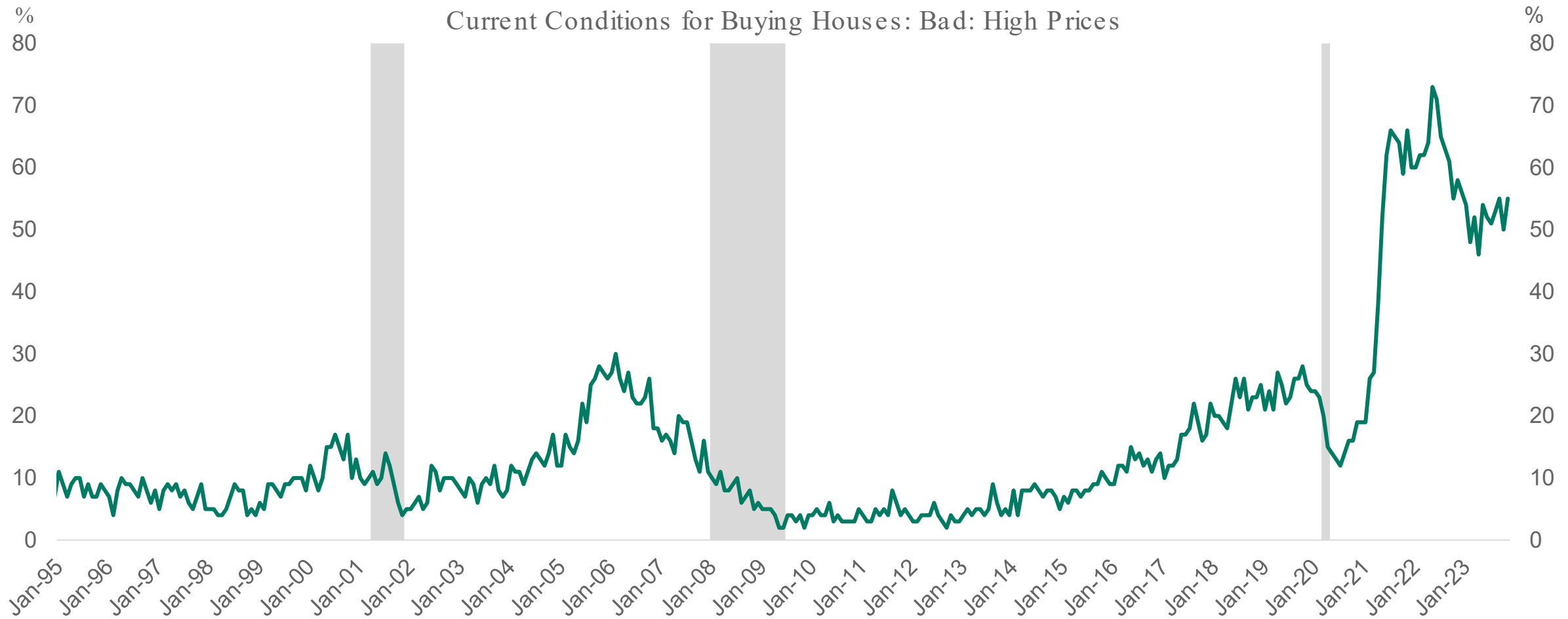


Source: NY Fed, Bloomberg, Apollo Chief Economist

# Households have less debt in their homes: Homeowner's equity near highest level in decades



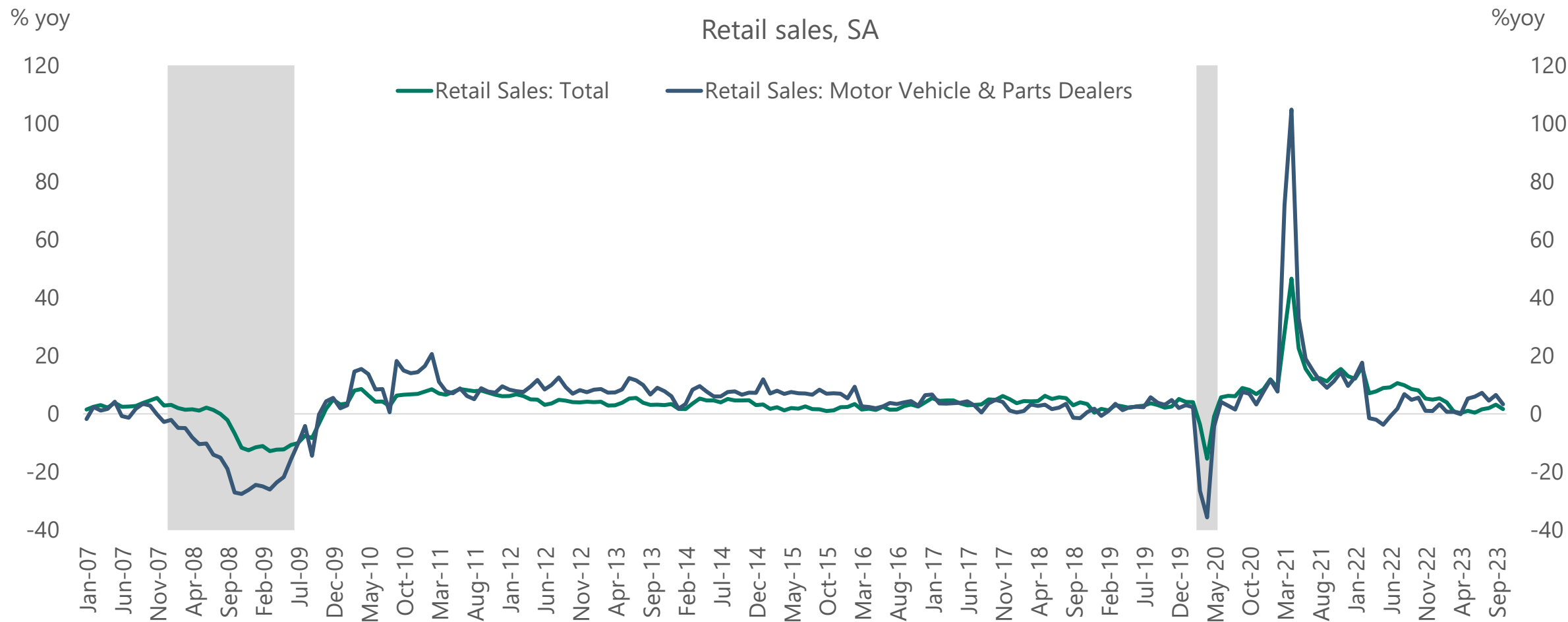
# High house prices affecting consumer's buying sentiment negatively



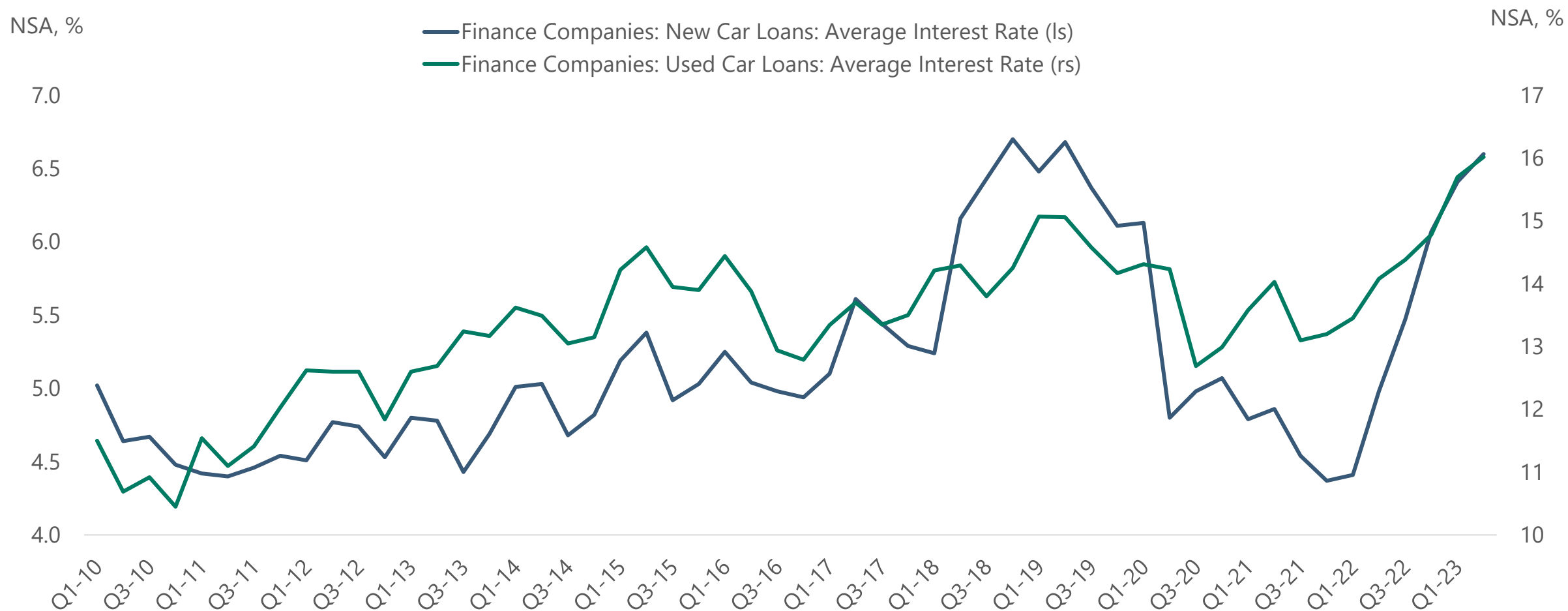


# Outlook for spending on cars

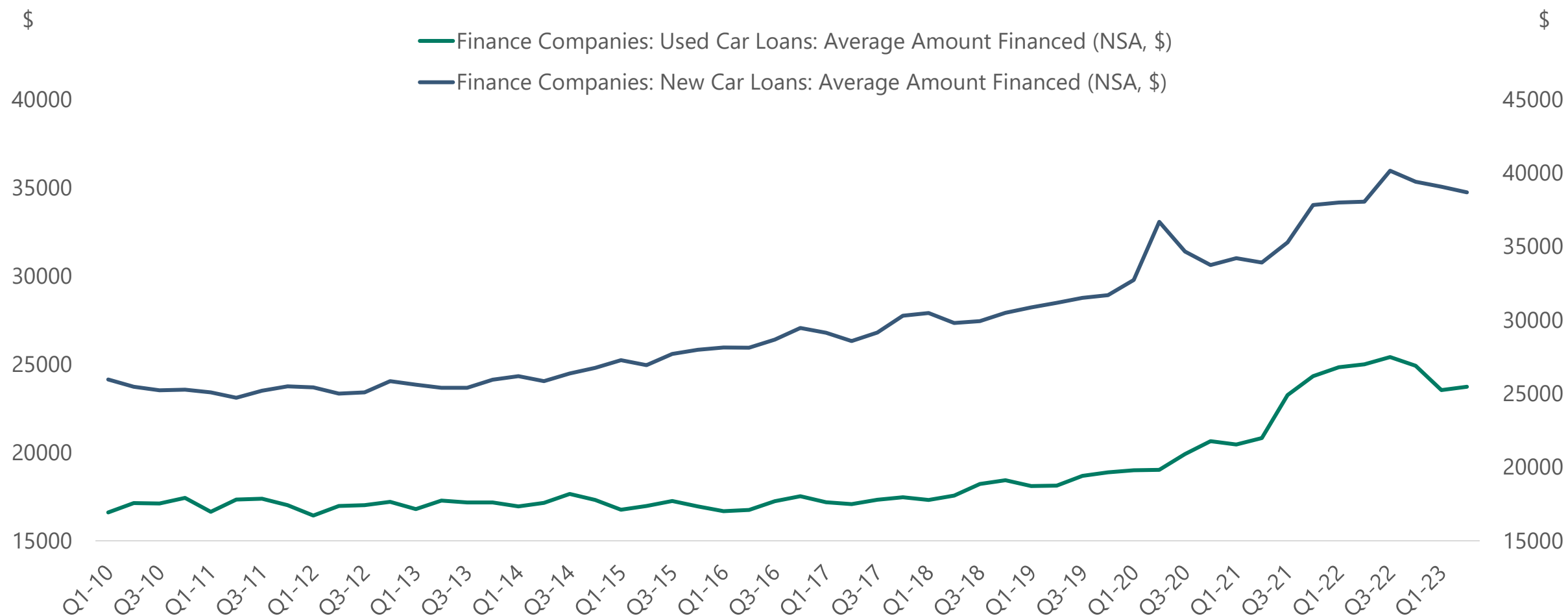
# Motor vehicle sales, from retail sales data



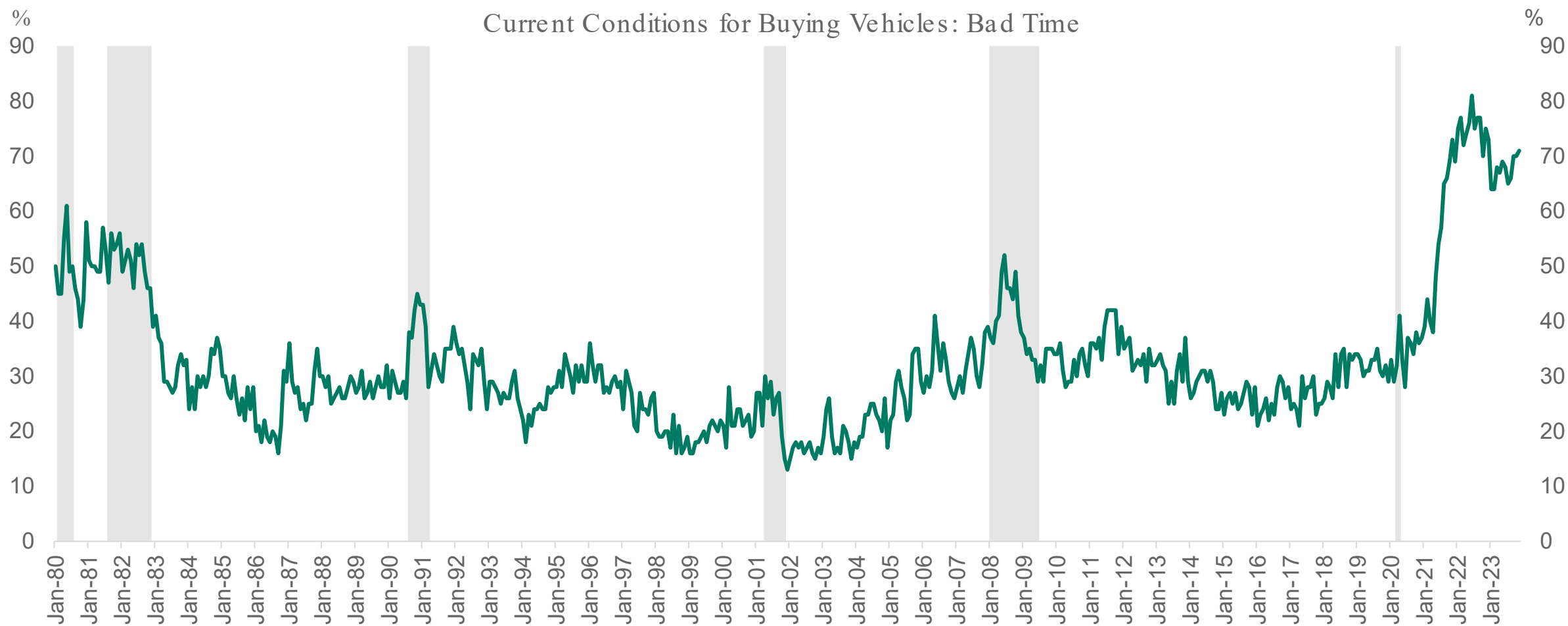
# Interest rates on auto loans have increased



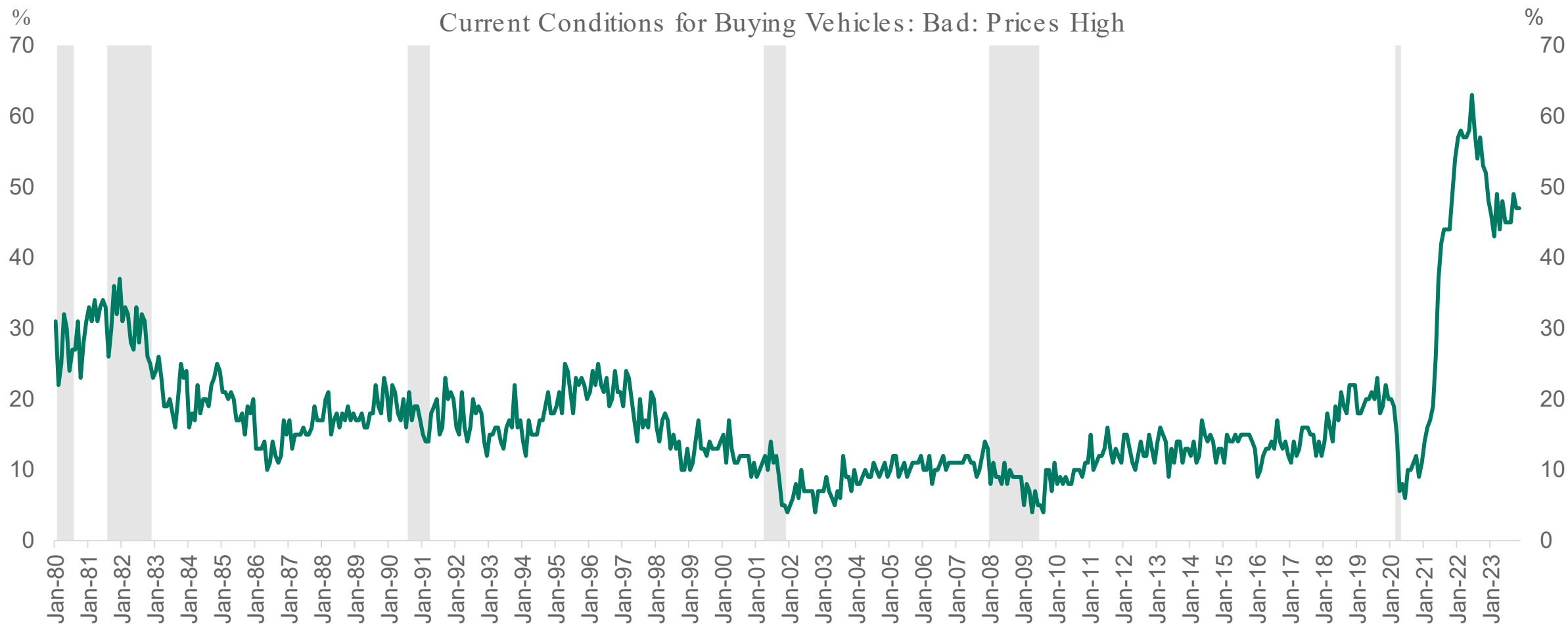
# Average amount financed for new and used car loans



# Sentiment deteriorating among car buyers

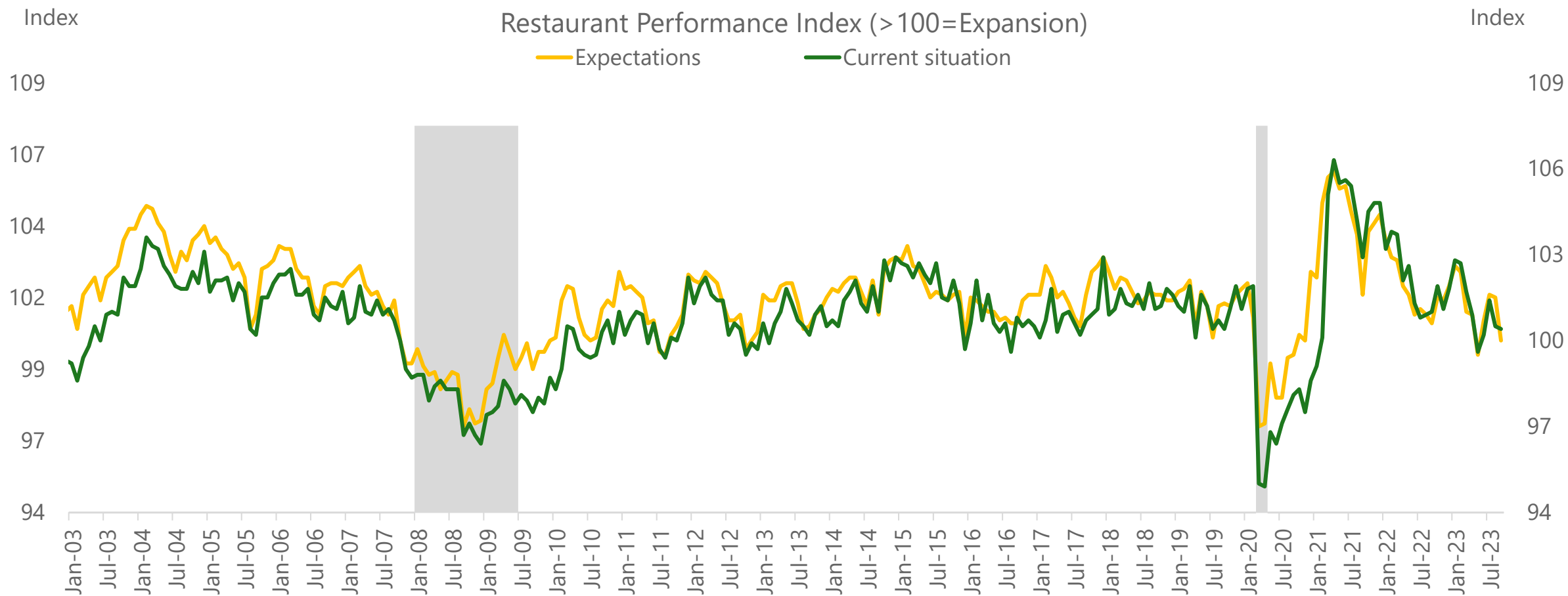


# Inflation impacting auto demand



# Outlook for spending on restaurants

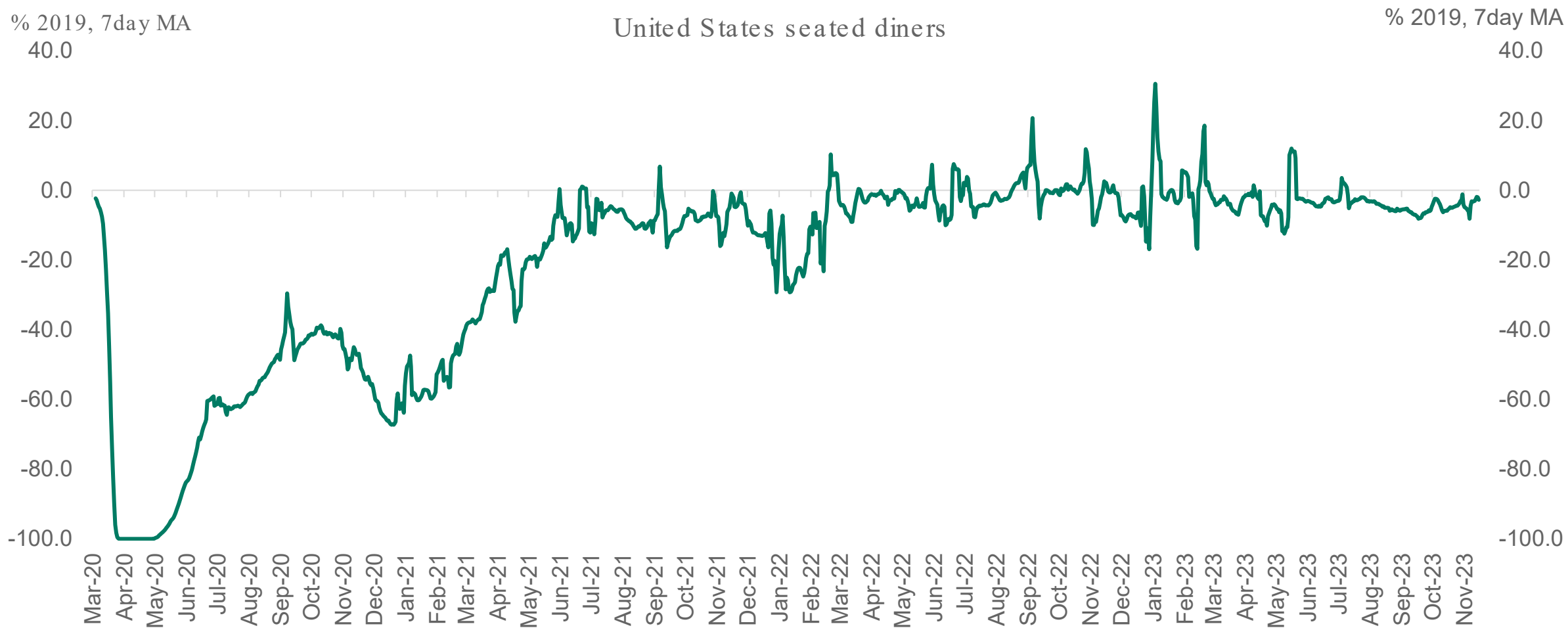
# Restaurant demand declining



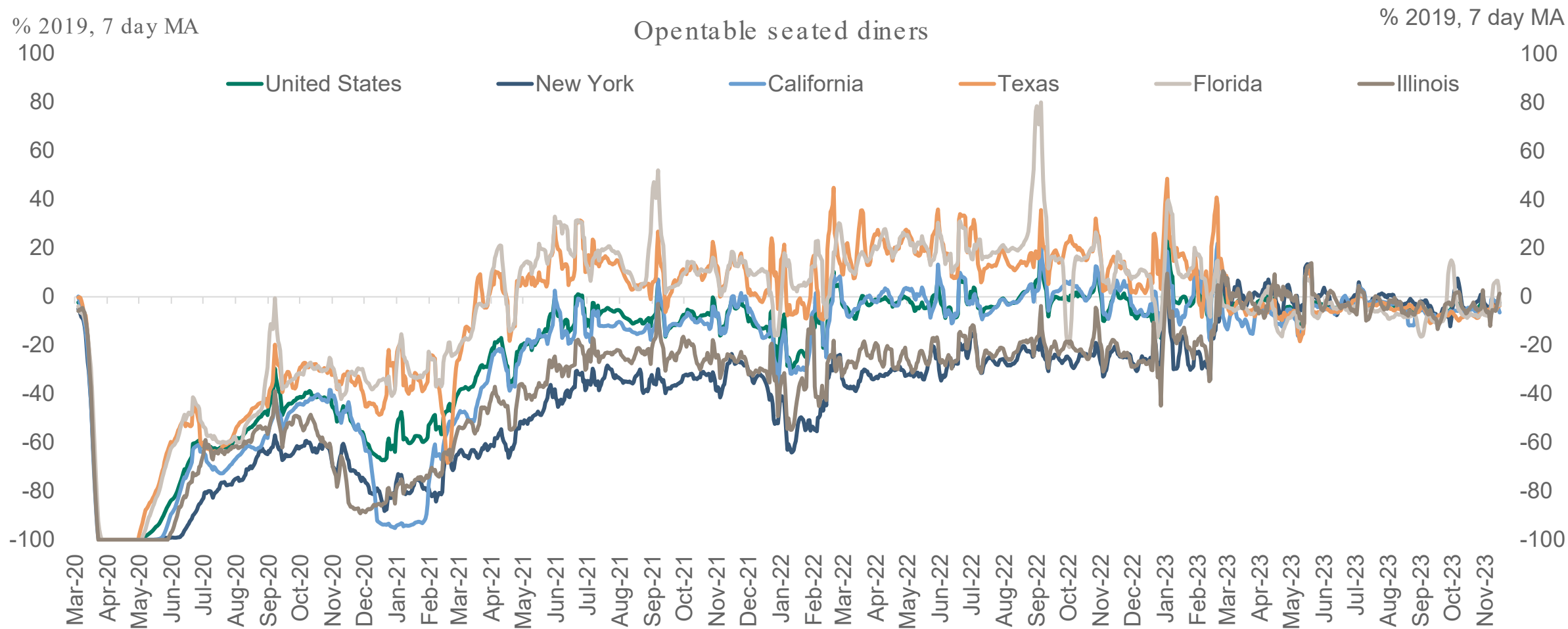
Source: National Restaurant Association, Haver, Apollo Chief Economist



# Daily data for restaurant bookings



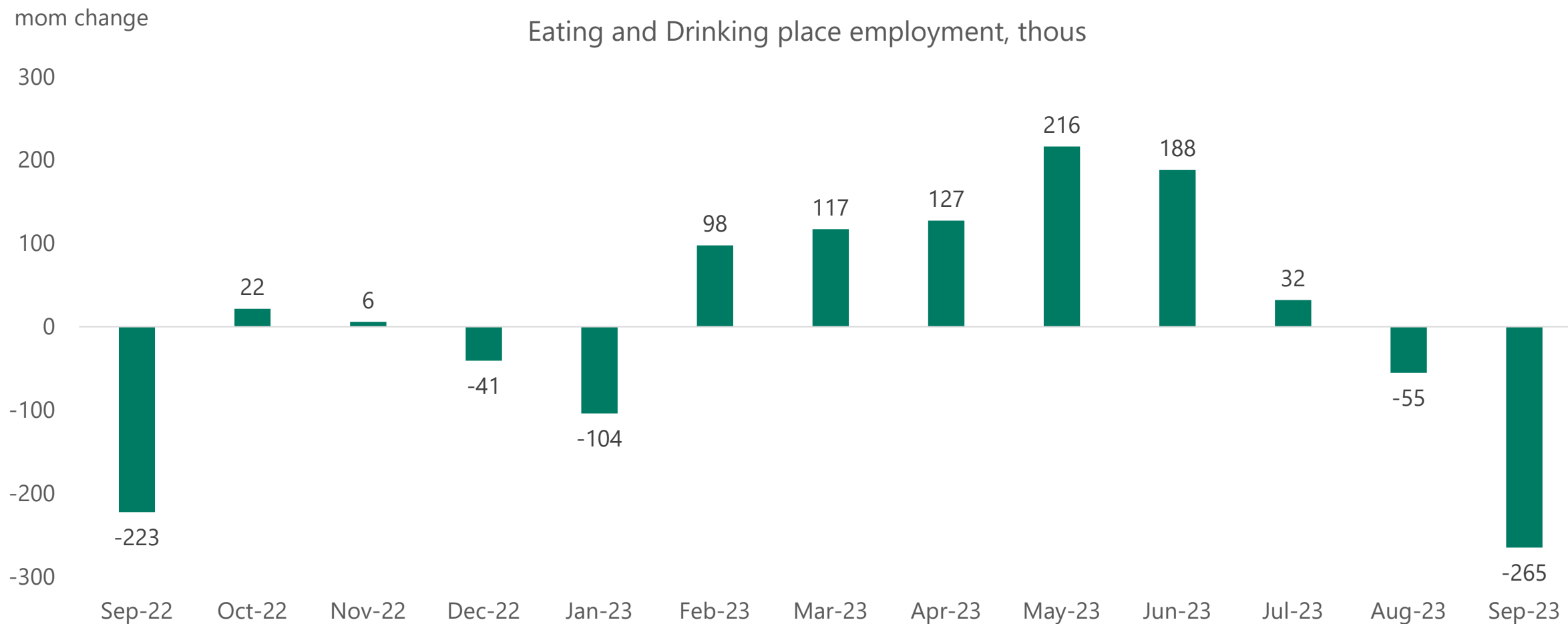
# Daily data for restaurant bookings, selected cities



# Employment in restaurants and bars at pre-pandemic levels

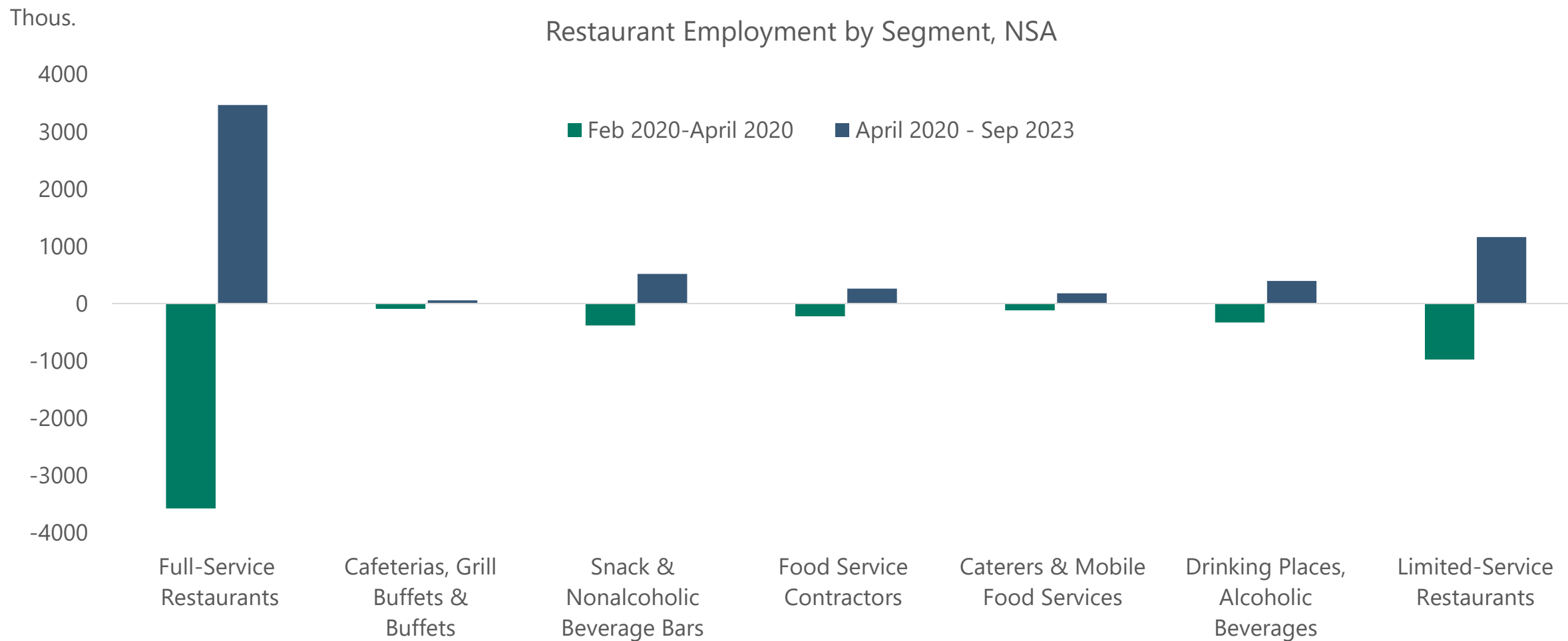


# Employment growth for Eating and Drinking places

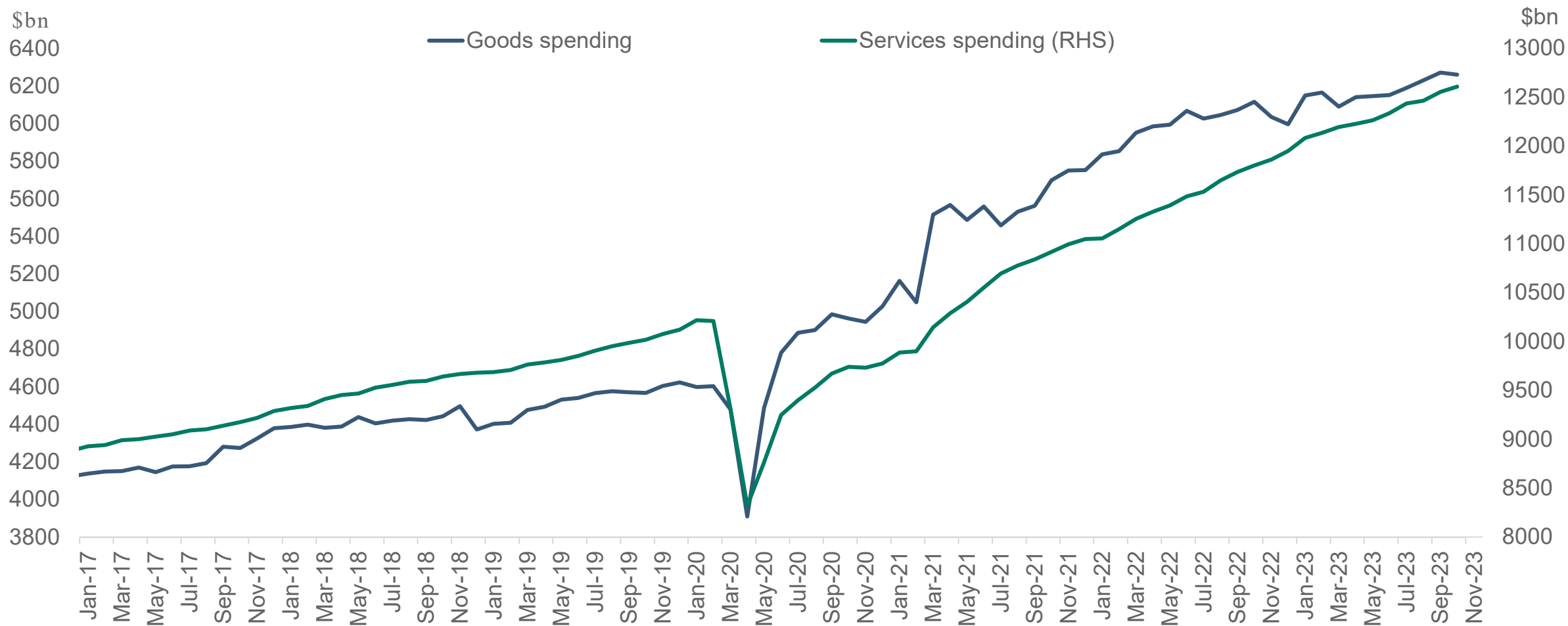


Source: BLS, Haver, Apollo Chief Economist

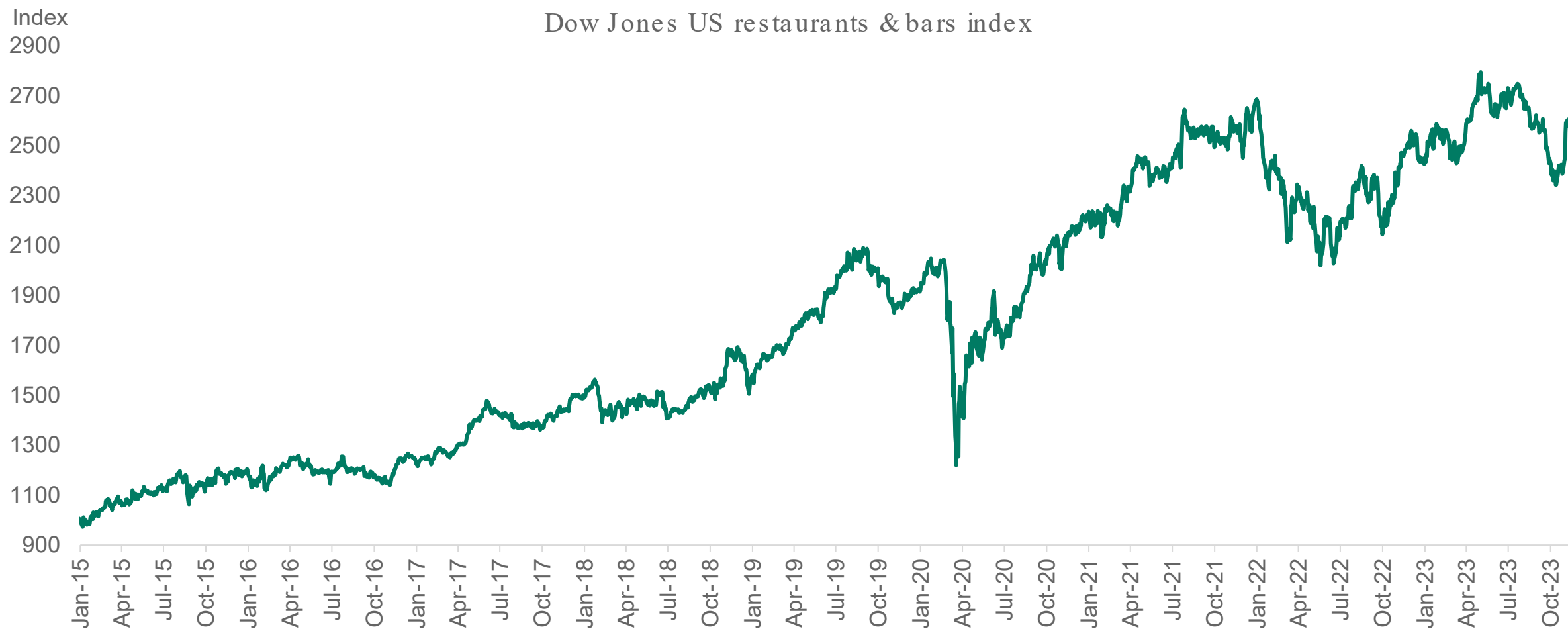
# Growth in restaurant employment, by type of restaurant



# Service sector spending significantly above pre-pandemic levels



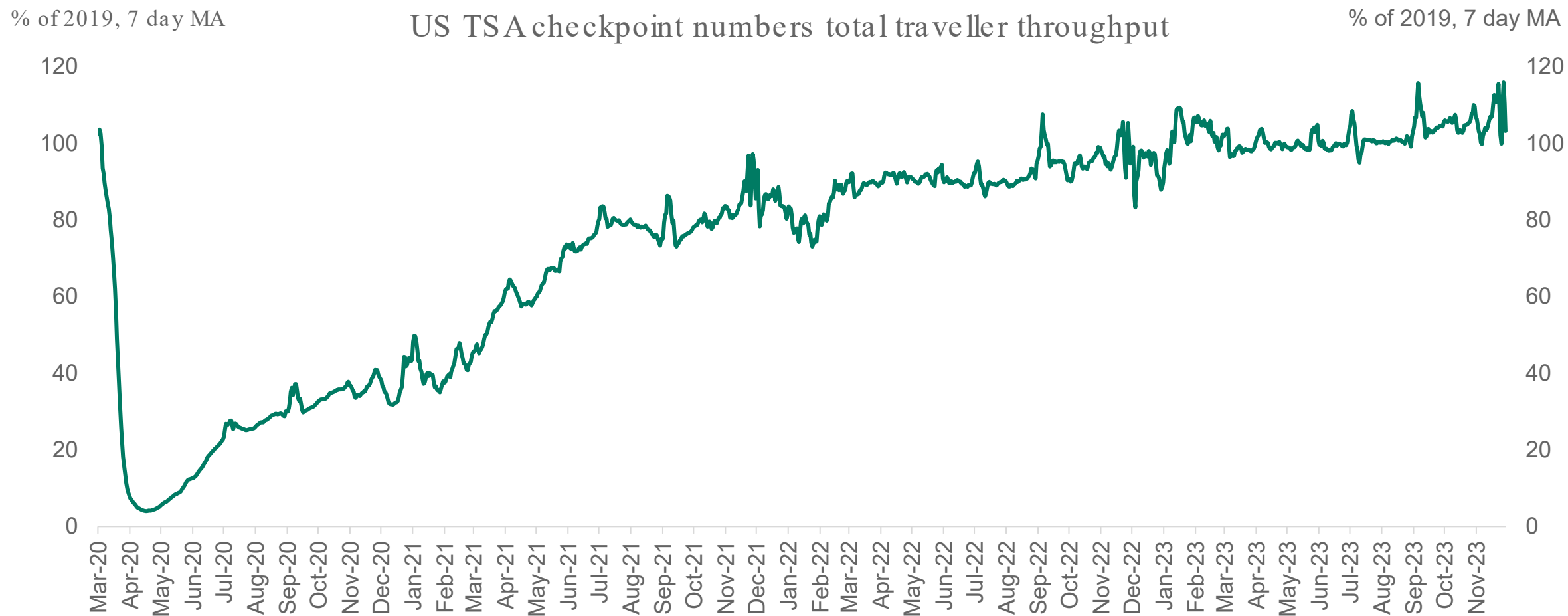
# Stock price index for restaurants and bars



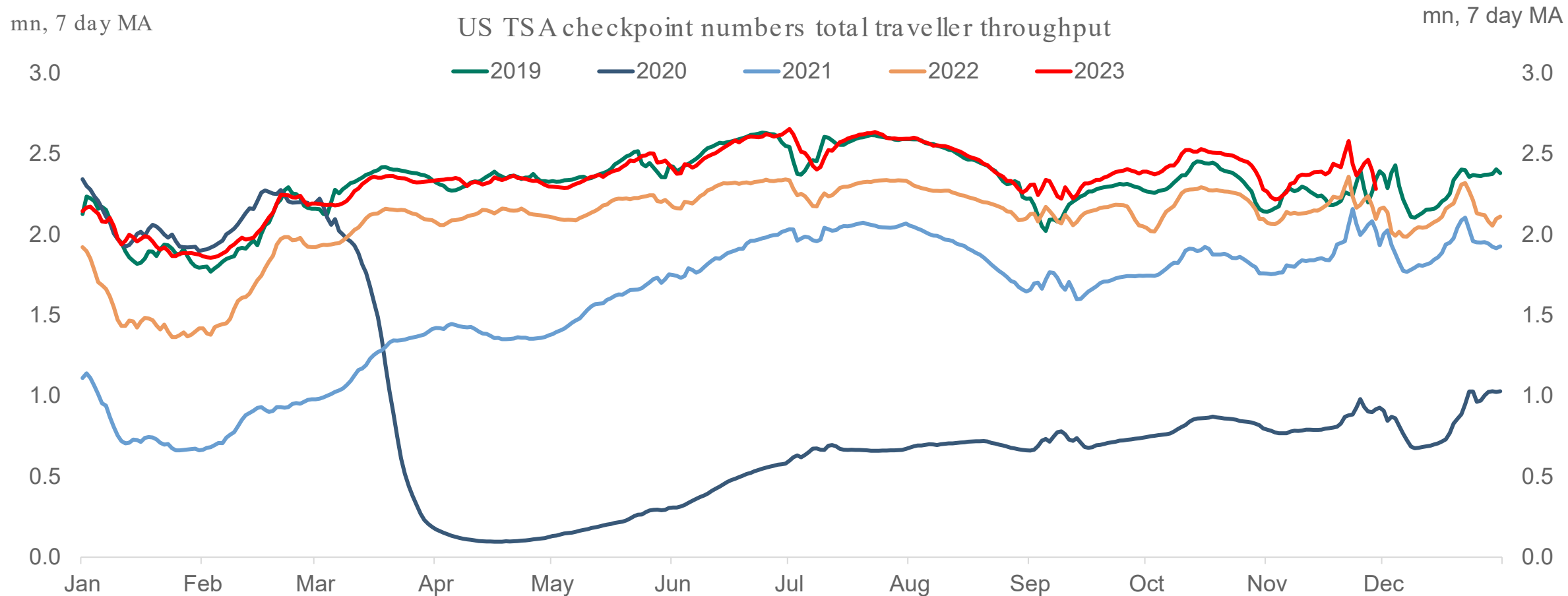
# Outlook for spending on travel



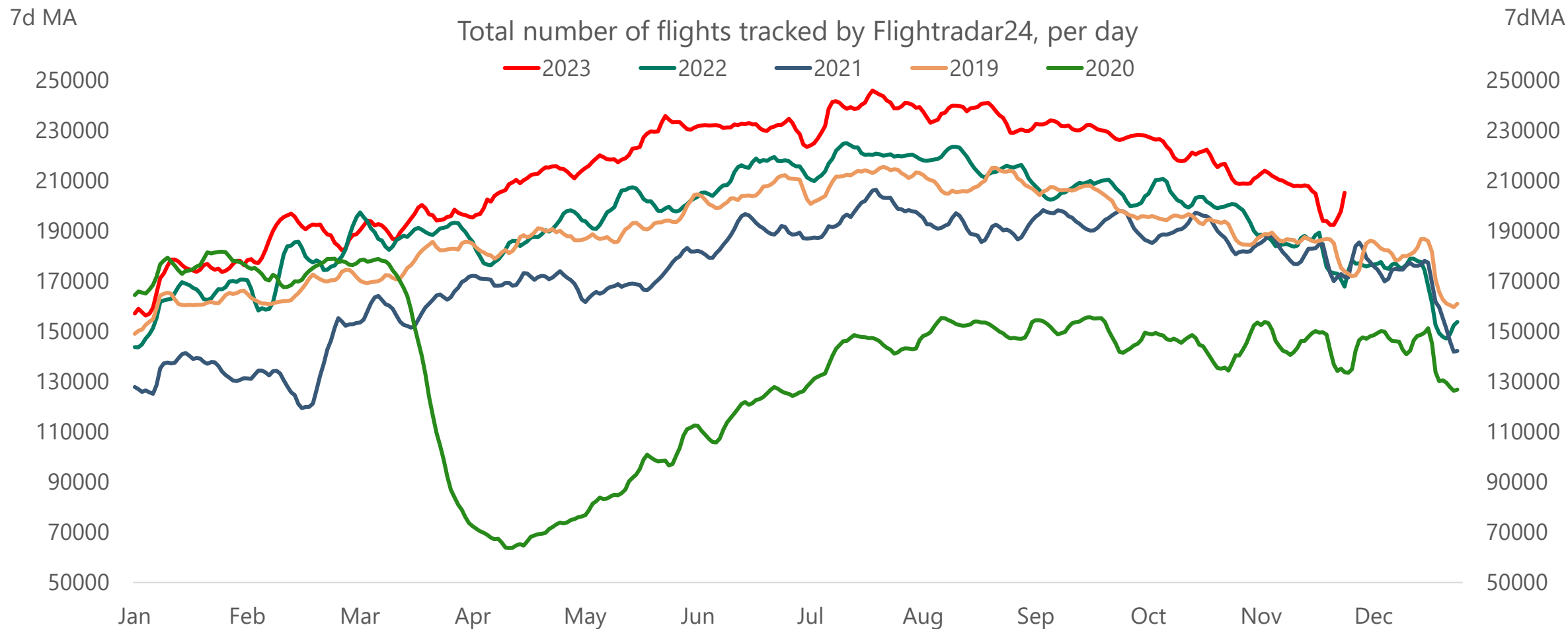
# TSA: US air travel still strong



# US air travel still strong



# Global air traffic still high

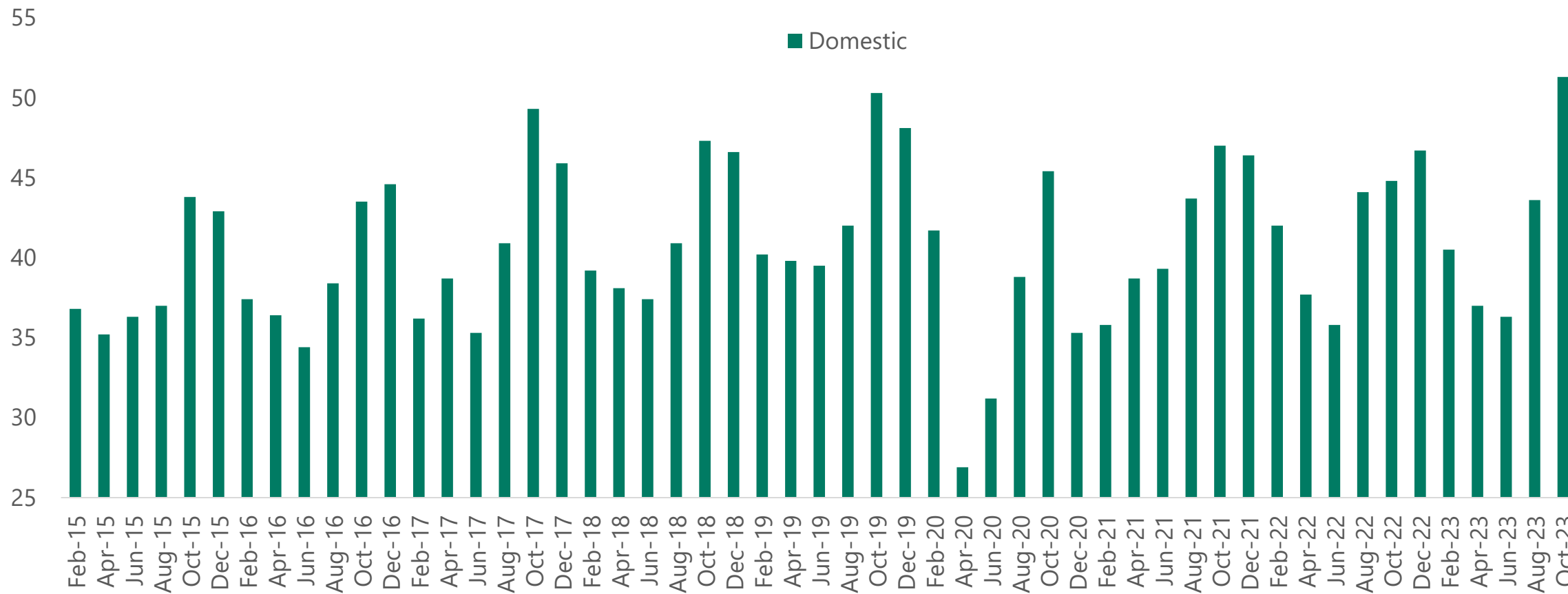


# Vacation intentions: Within the US

% respondents, SA

Vacation intended within 6 months:

■ Domestic



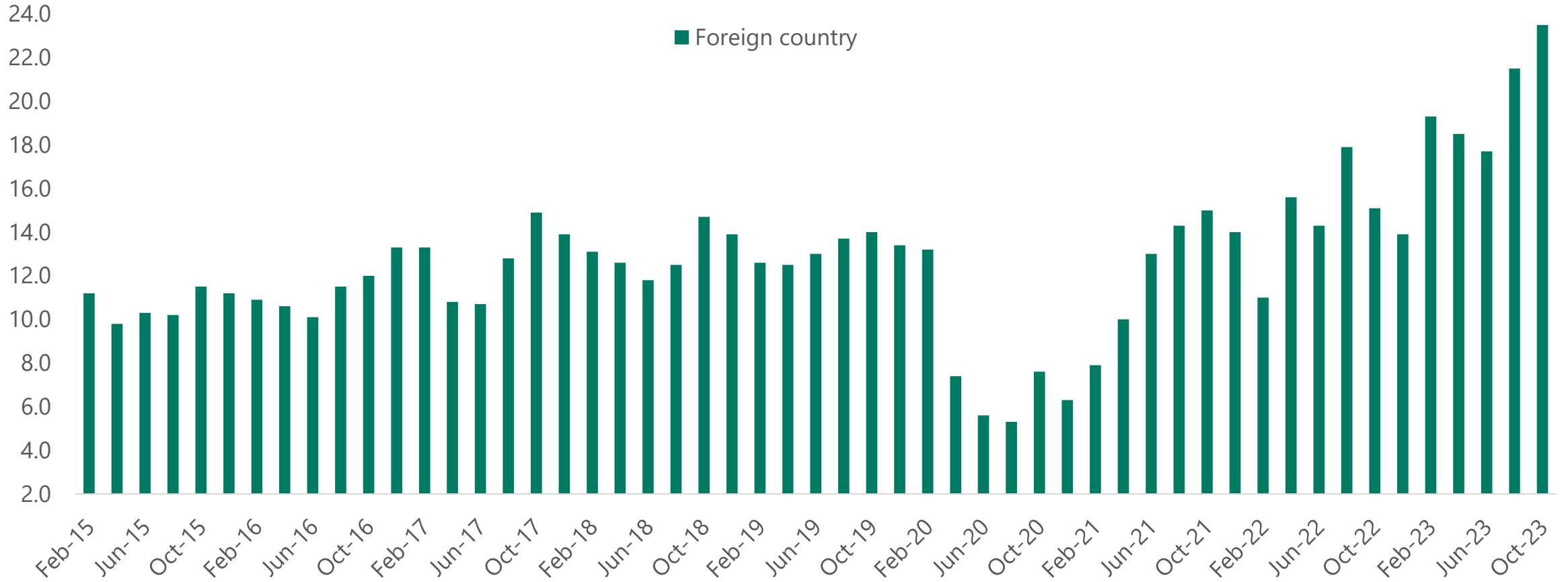
Source: Conference Board, Apollo Chief Economist

# Vacation intentions to a foreign country

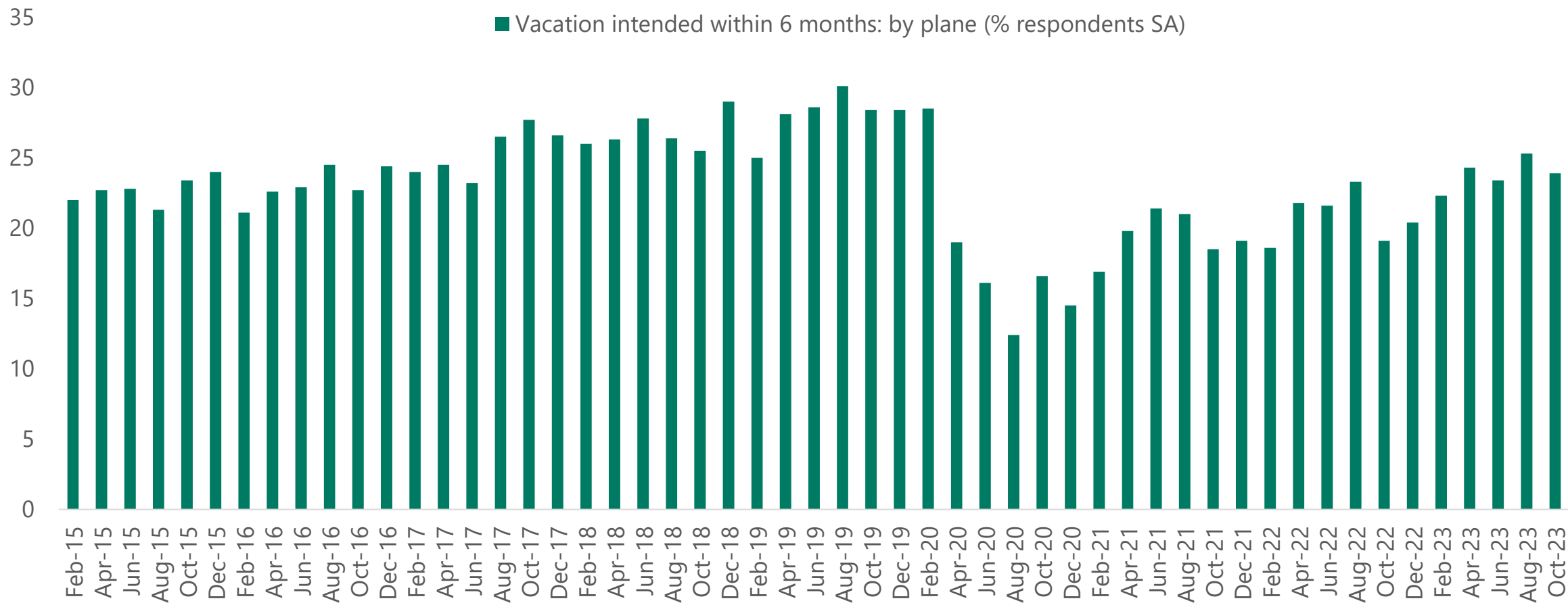
% respondents, SA

Vacation intended within 6 months:

Foreign country



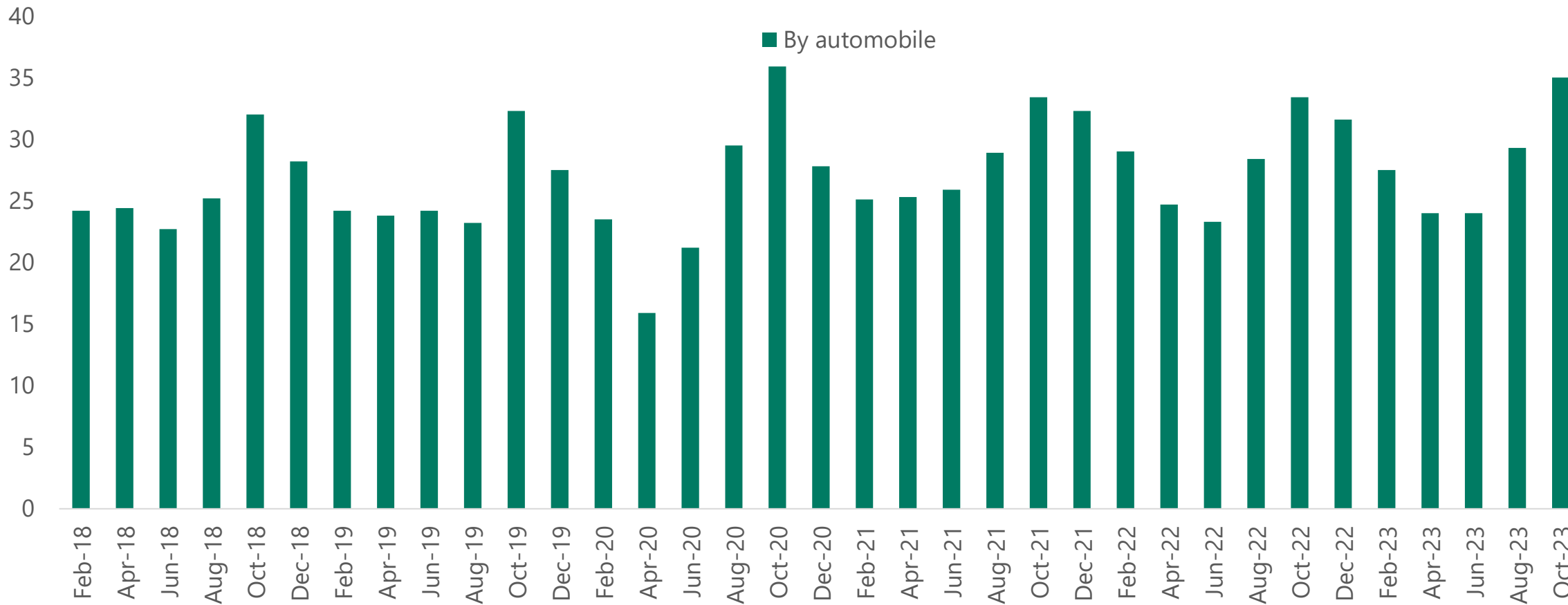
# Vacation intentions: By plane



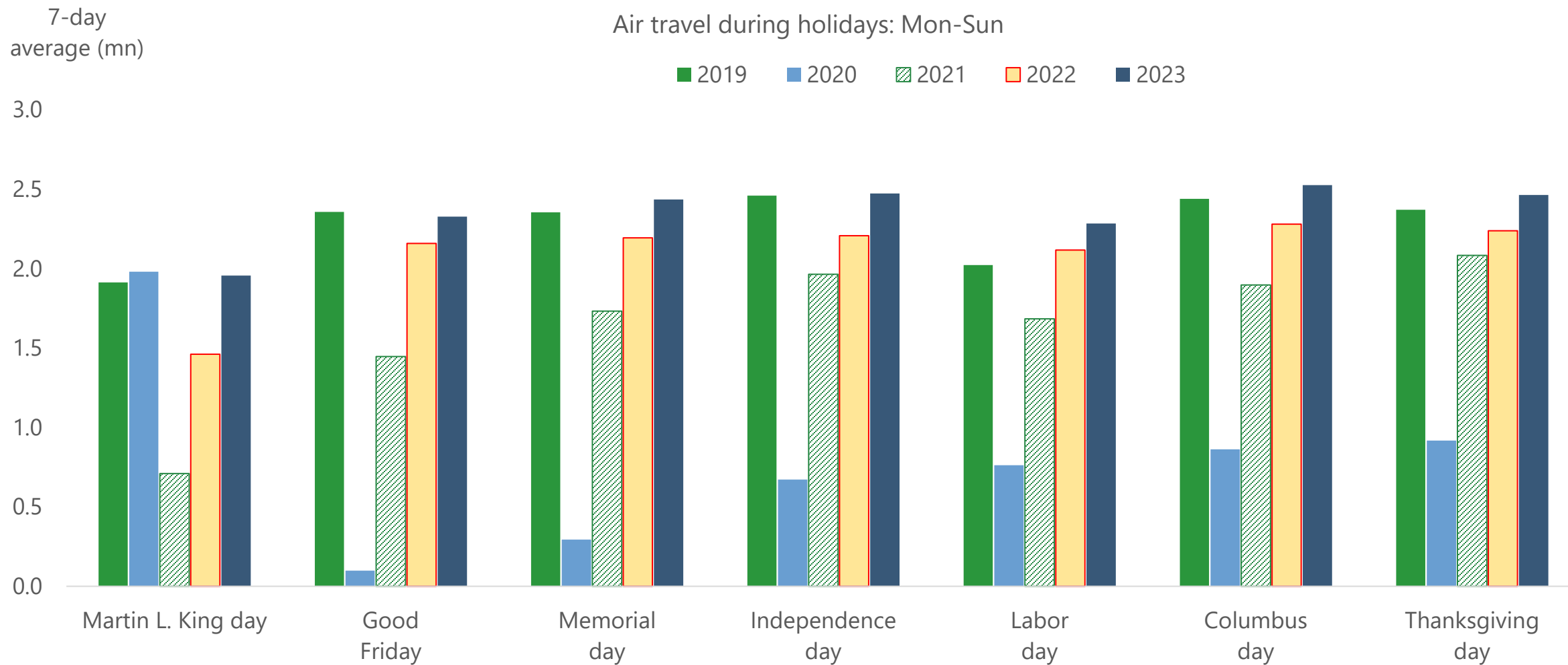
# Vacation intentions: By car

% respondents, SA

Vacation intended within 6 months:



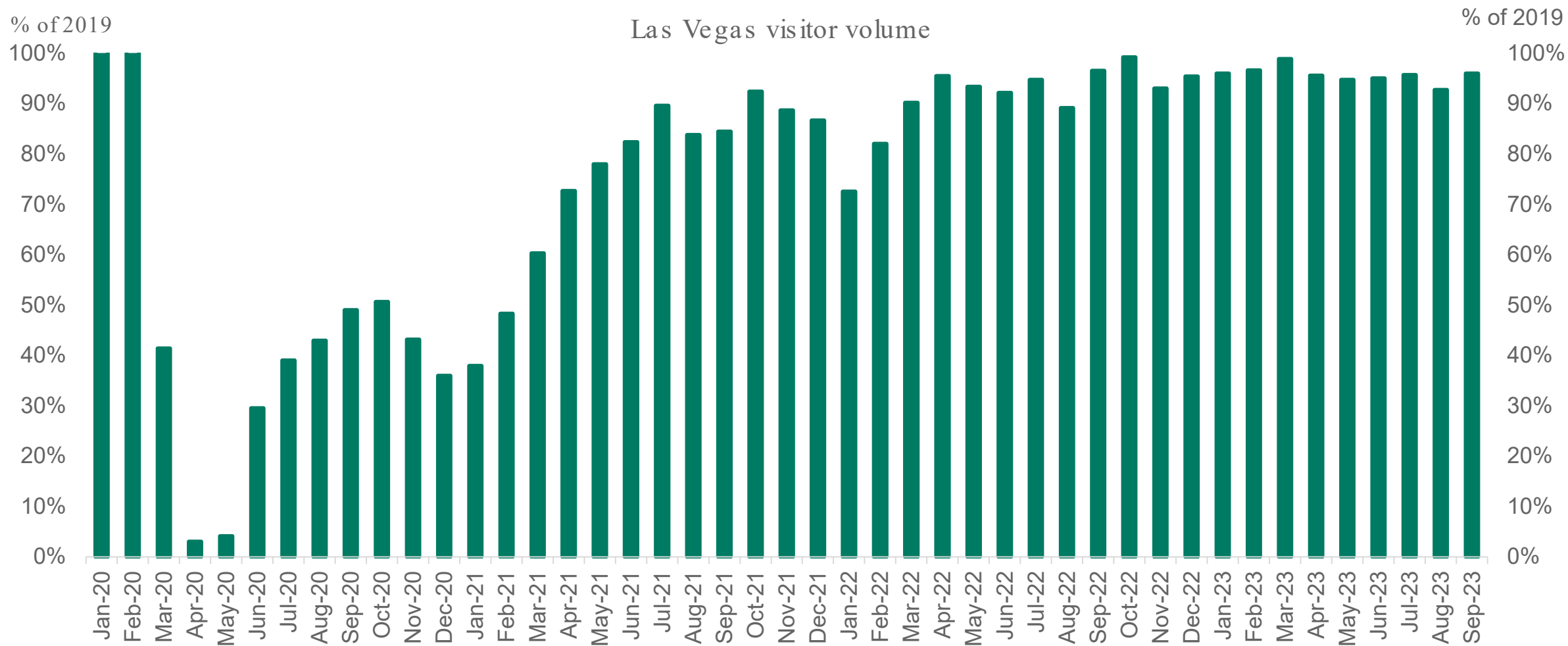
# Air travel during holidays, comparing 2023 with previous years



Source: TSA, Apollo Chief Economist

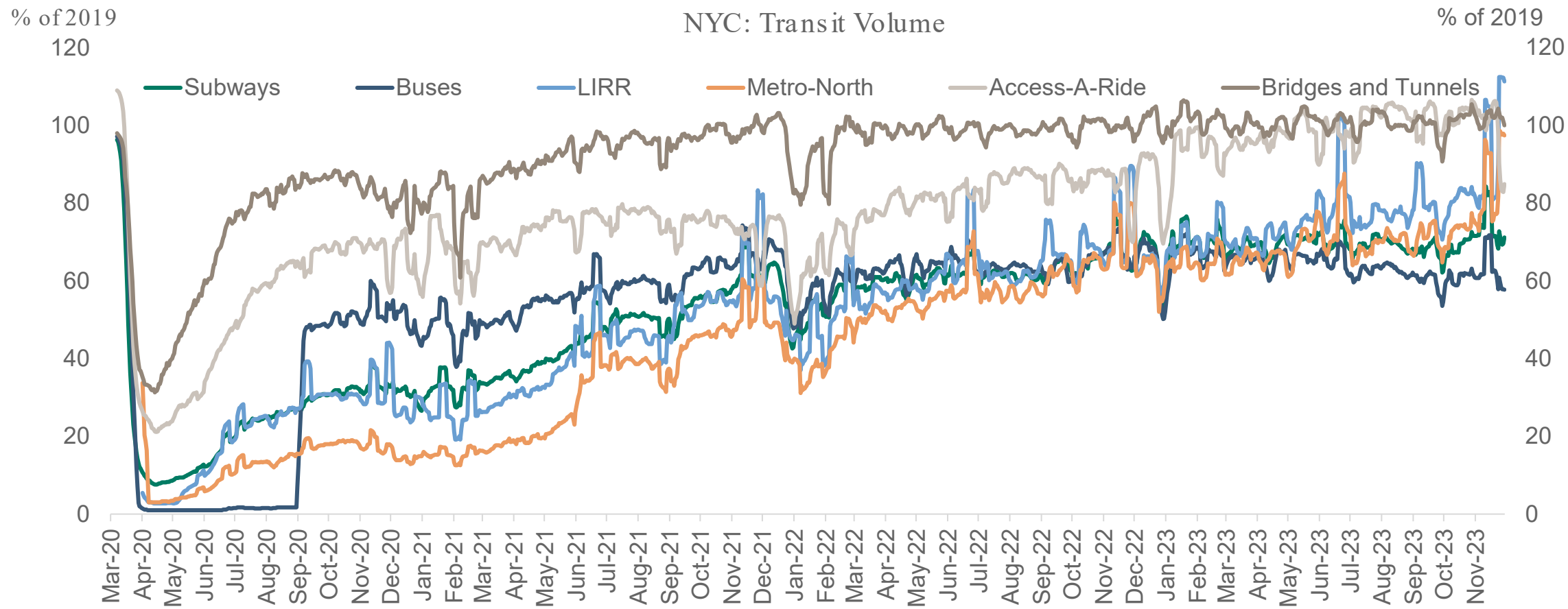


# Las Vegas visitor volumes

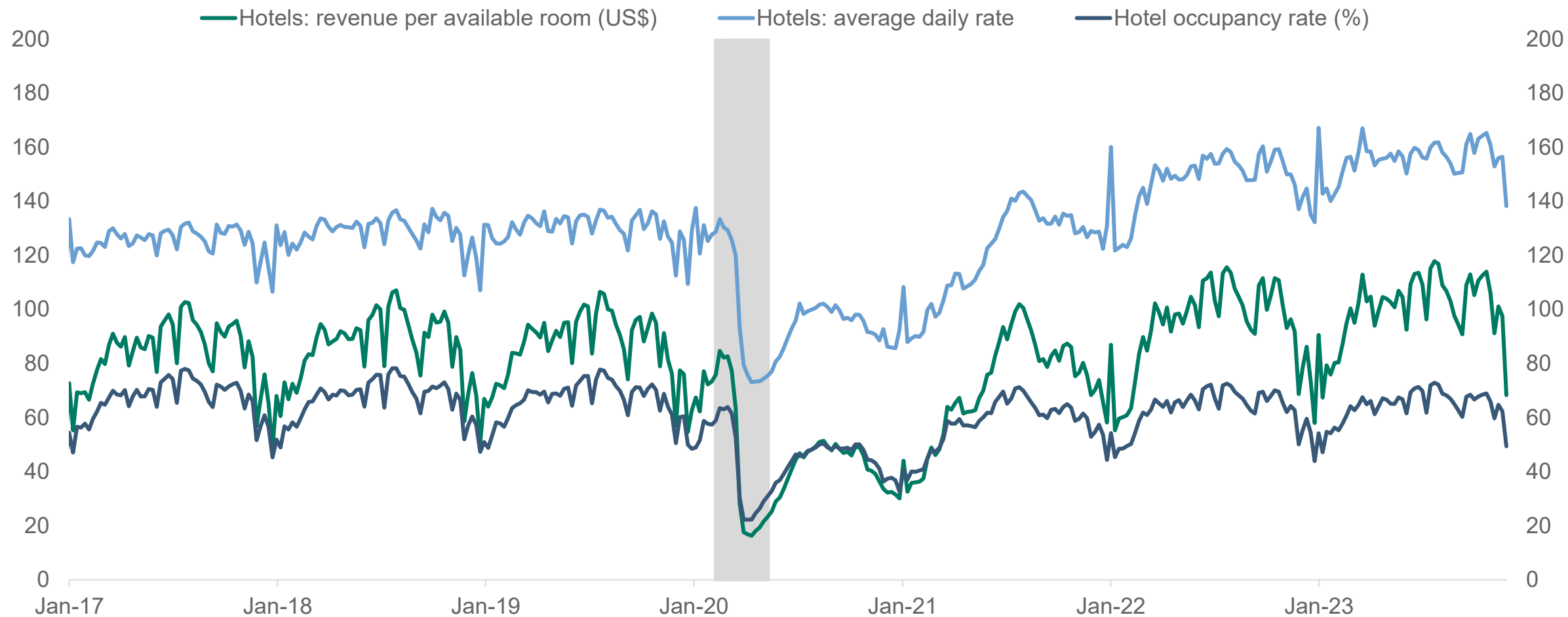


Source: Las Vegas Convention and Visitors Authority, Apollo Chief Economist

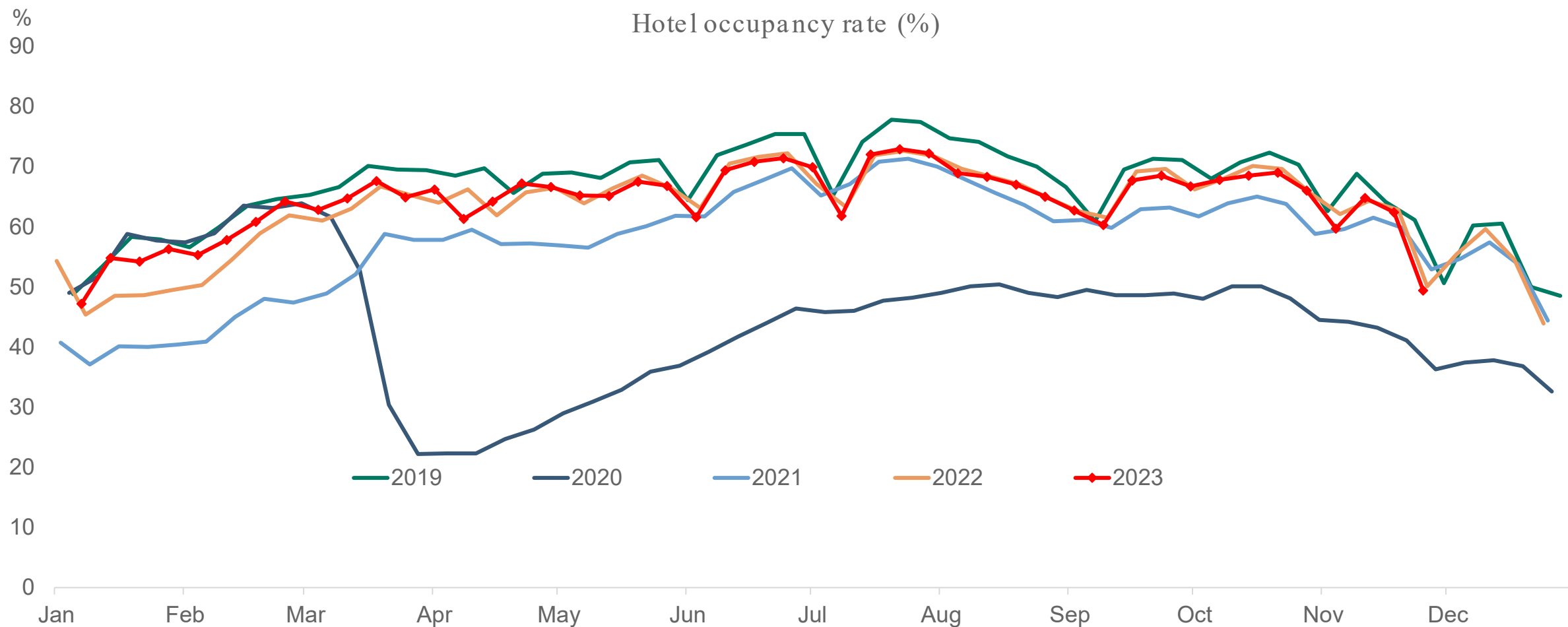
# NYC mobility indicators



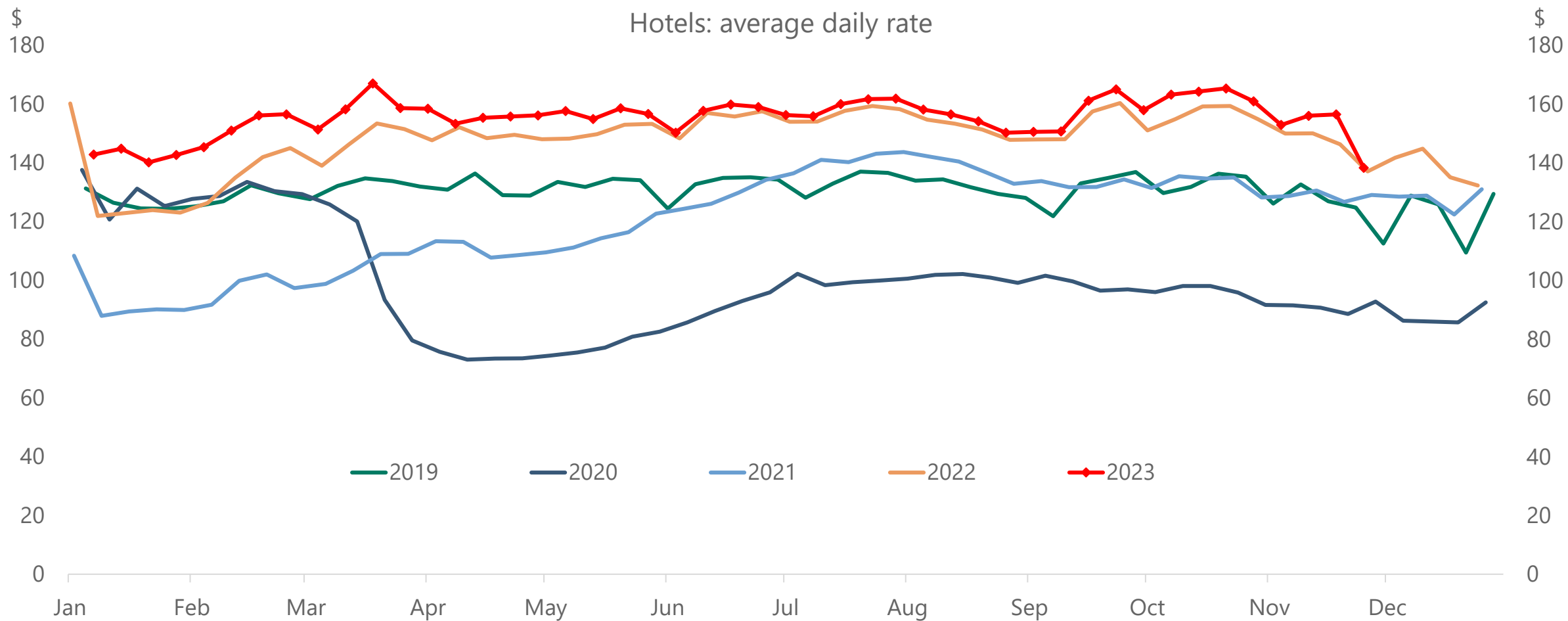
# Weekly data for hotel demand has been softening



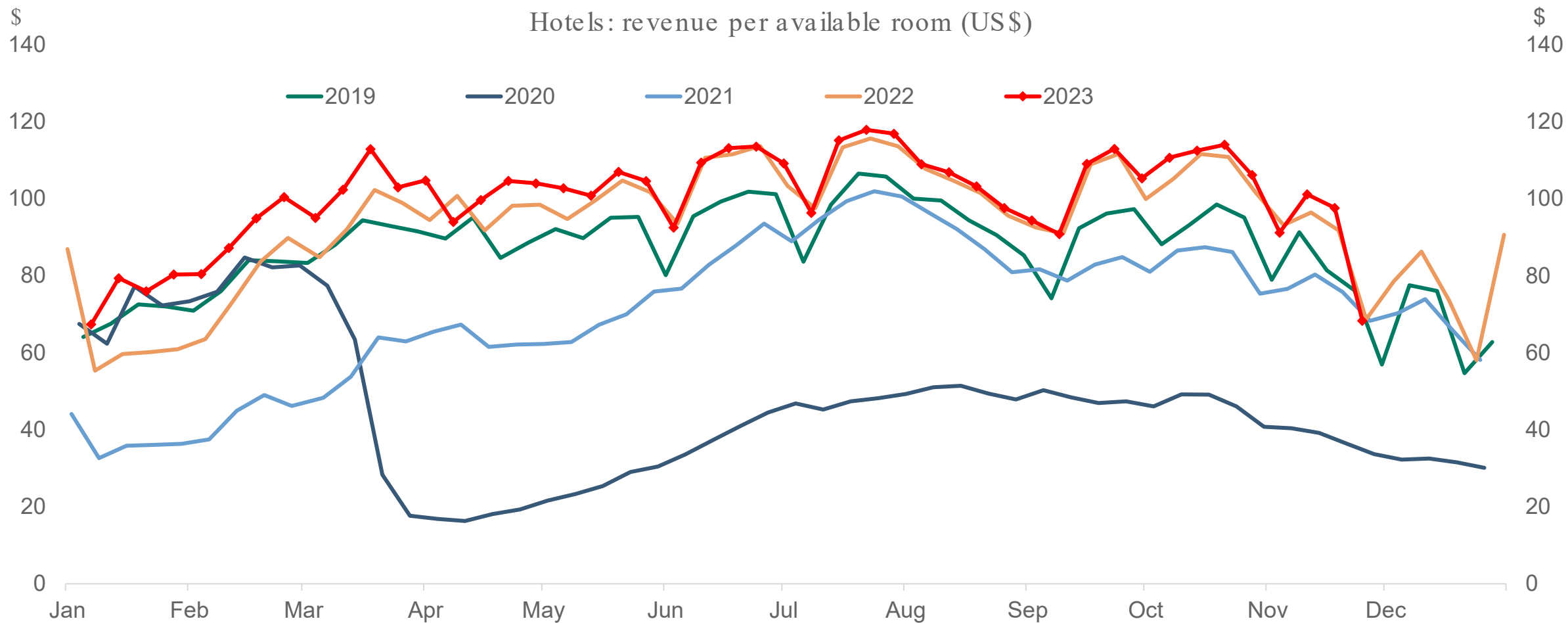
# Weekly data for hotel demand



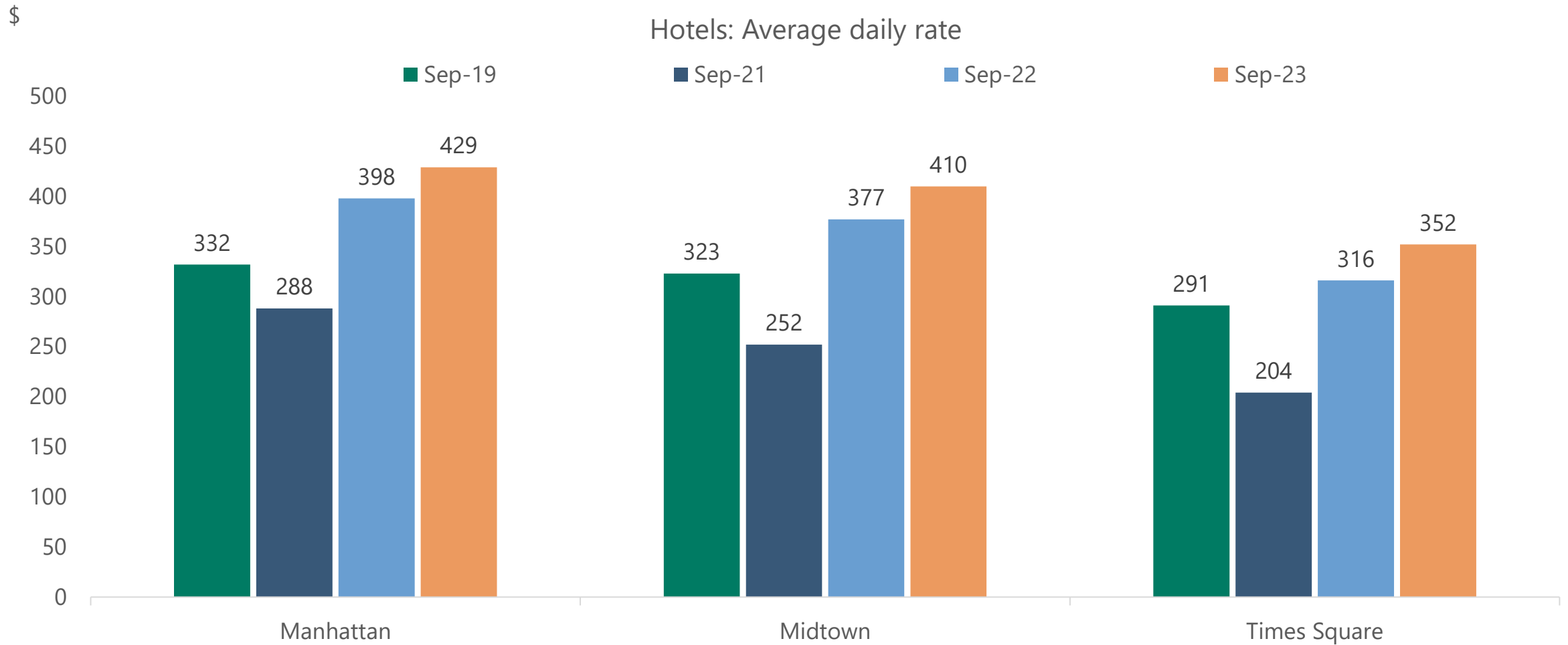
# Weekly data for hotel demand



# Weekly data for hotel demand



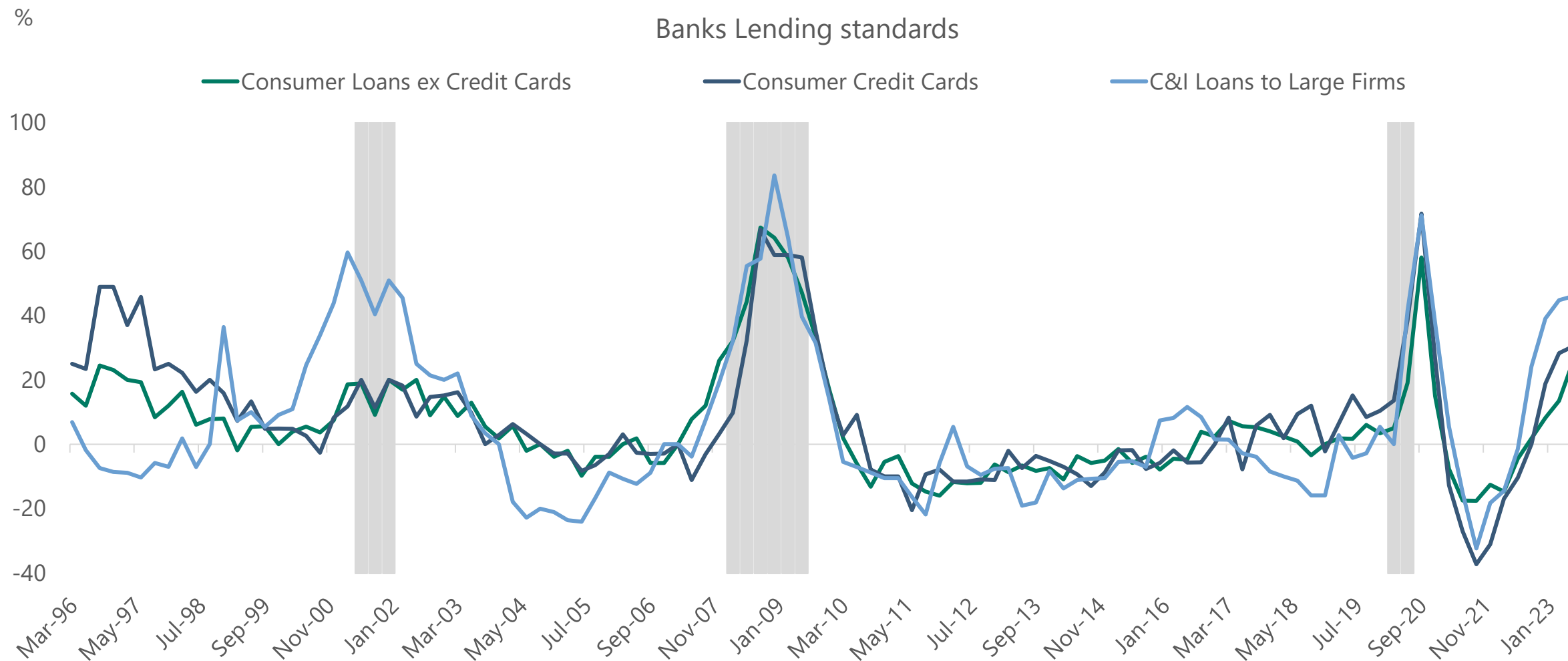
# New York hotel prices are now significantly above pre-pandemic levels



# Outlook for spending on other consumer goods

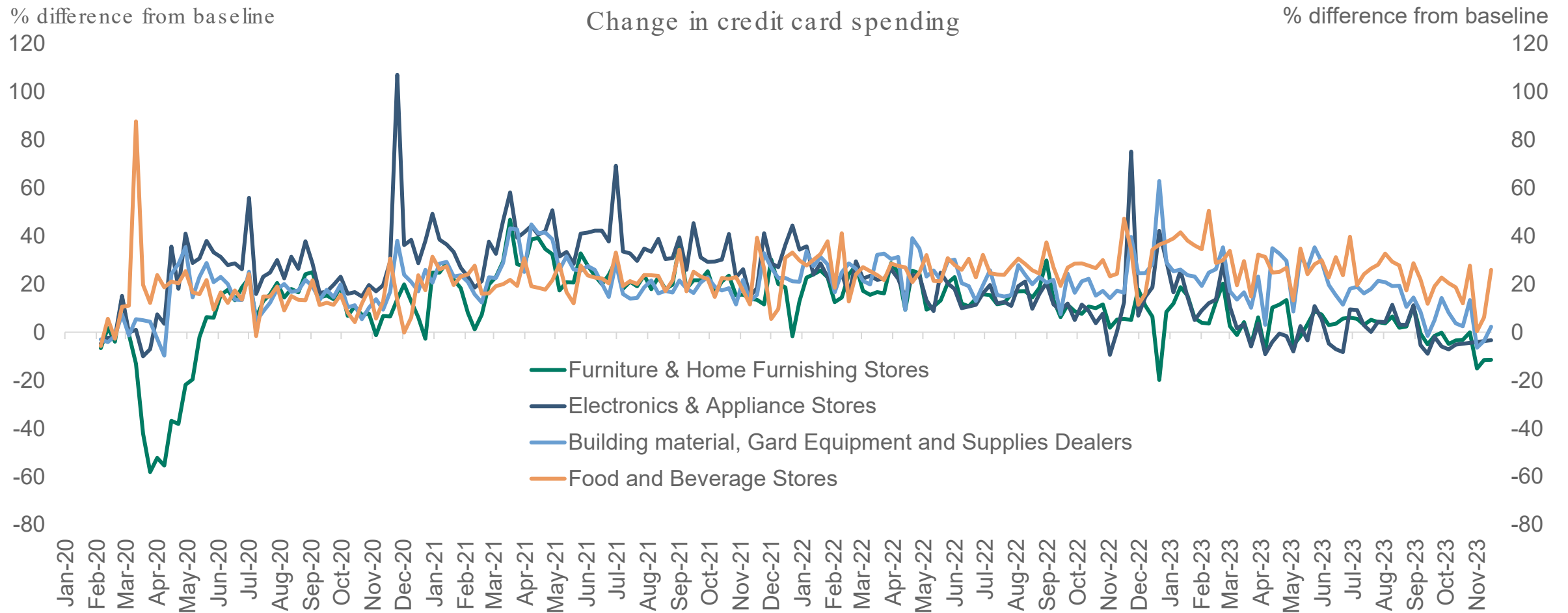


# Tightening lending standards will weigh on consumer spending



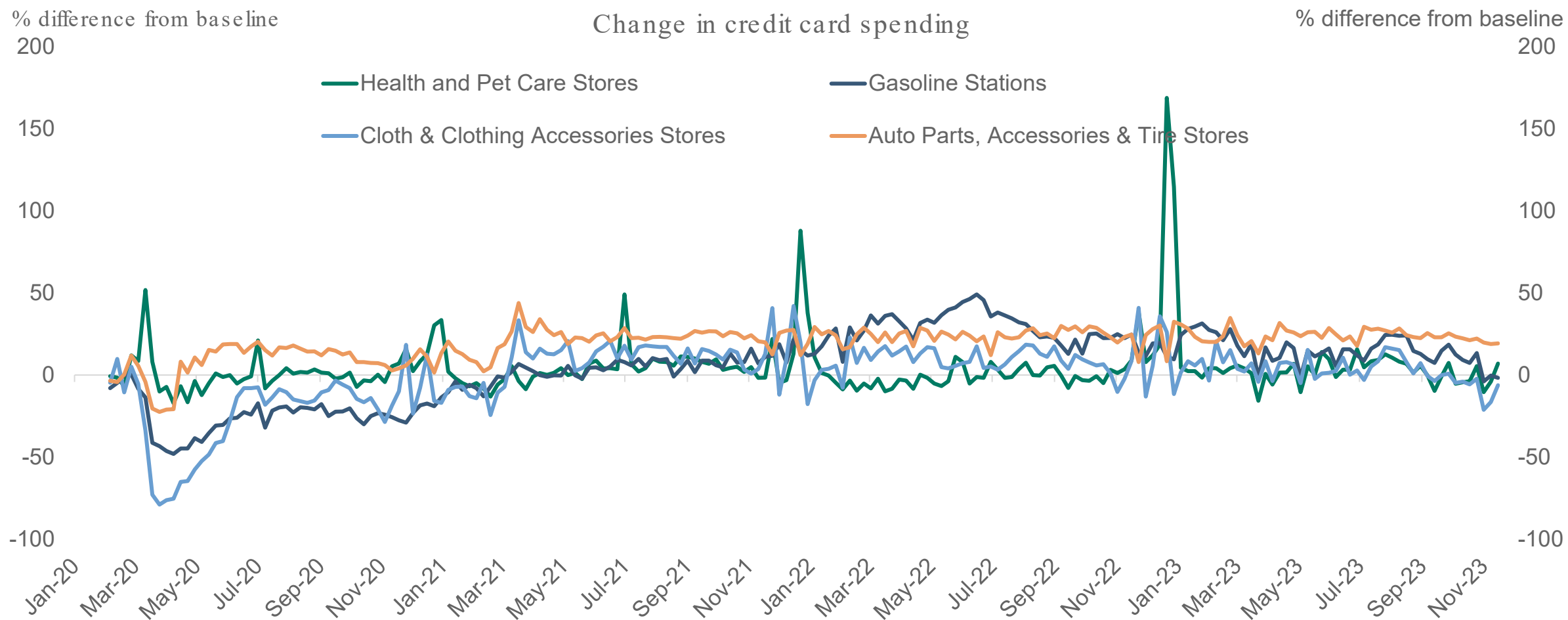
Source: FRB, Haver, Apollo Chief Economist

# US consumer still ok, some weakness starting to emerge



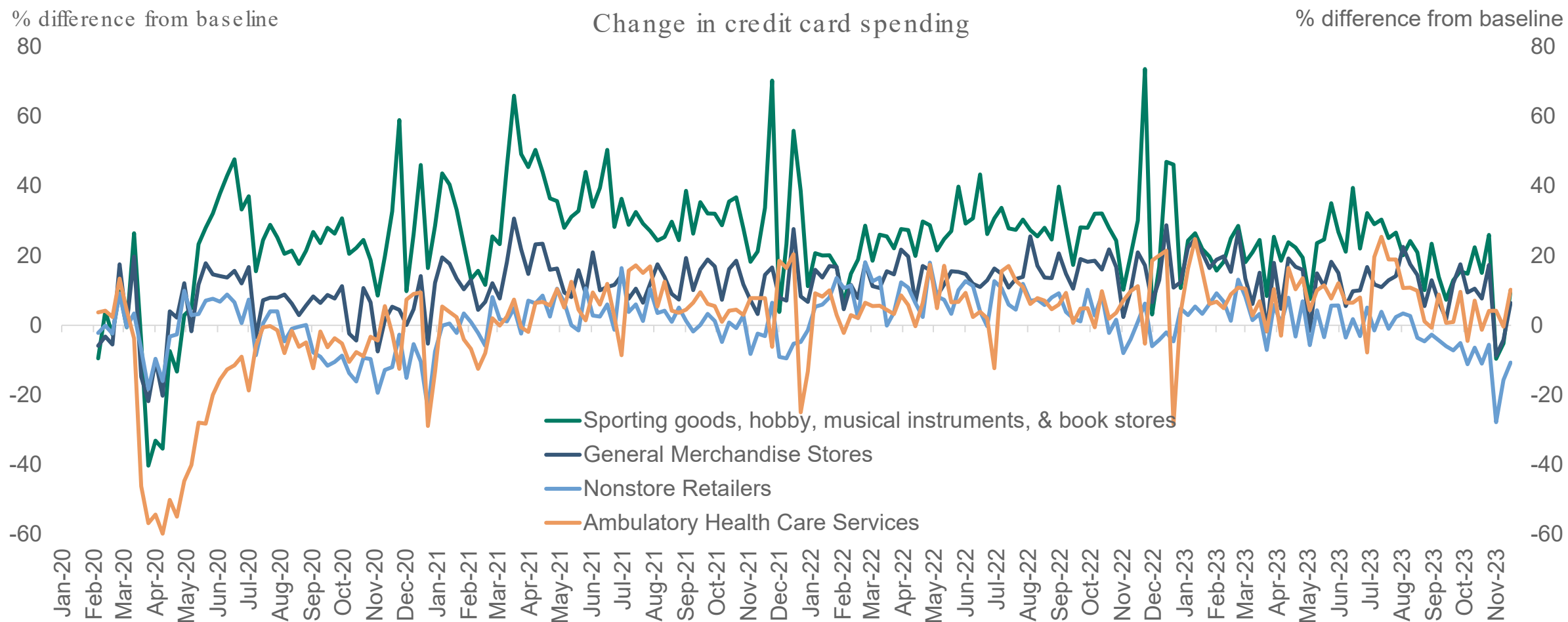
Source: BEA, Haver analytics, Apollo Chief Economist. Note: The weekly values represent the predicted percentage difference from the typical level of spending (prior to the pandemic declared by the World Health Organization on March 11, 2020) after adjusting for day-of-week, month, and year effects, based on daily data. The typical level corresponds to a value of zero.

# US consumer credit card spending



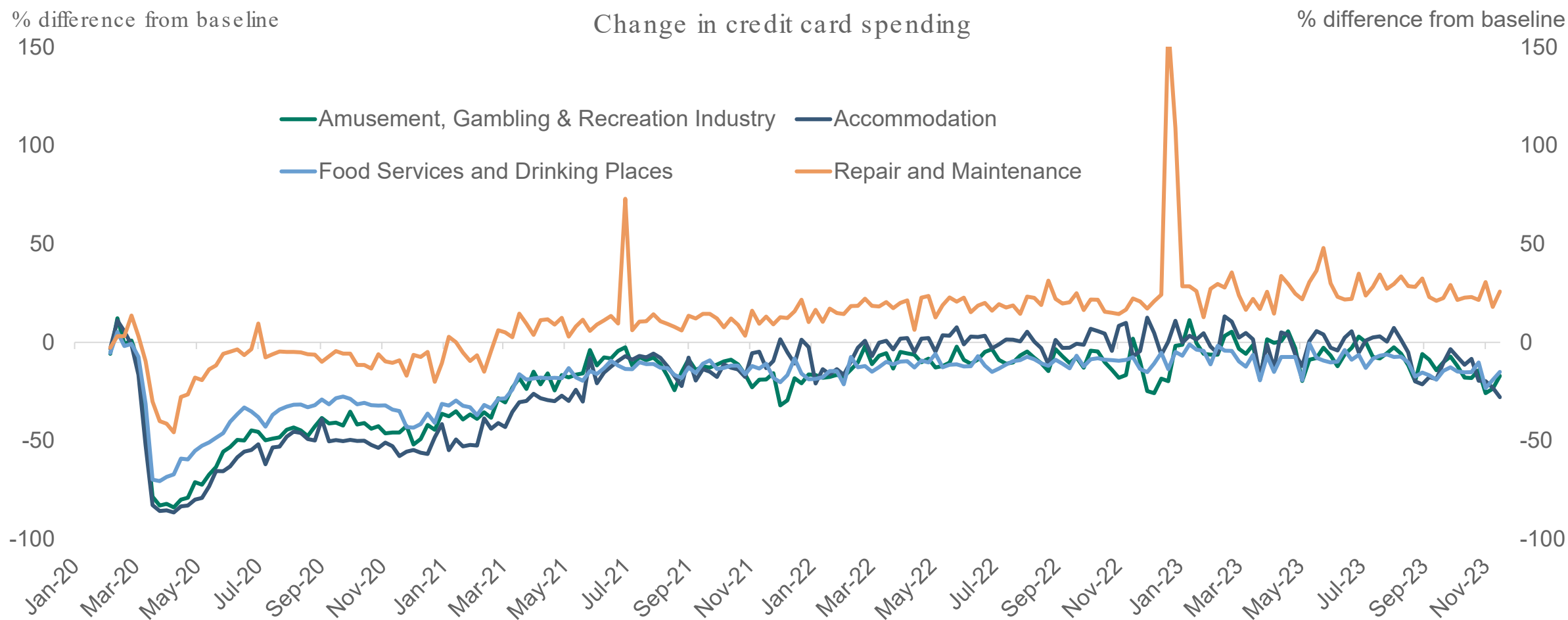
Source: BEA, Haver analytics, Apollo Chief Economist. Note: The weekly values represent the predicted percentage difference from the typical level of spending (prior to the pandemic declared by the World Health Organization on March 11, 2020) after adjusting for day-of-week, month, and year effects, based on daily data. The typical level corresponds to a value of zero.

# US consumer credit card spending



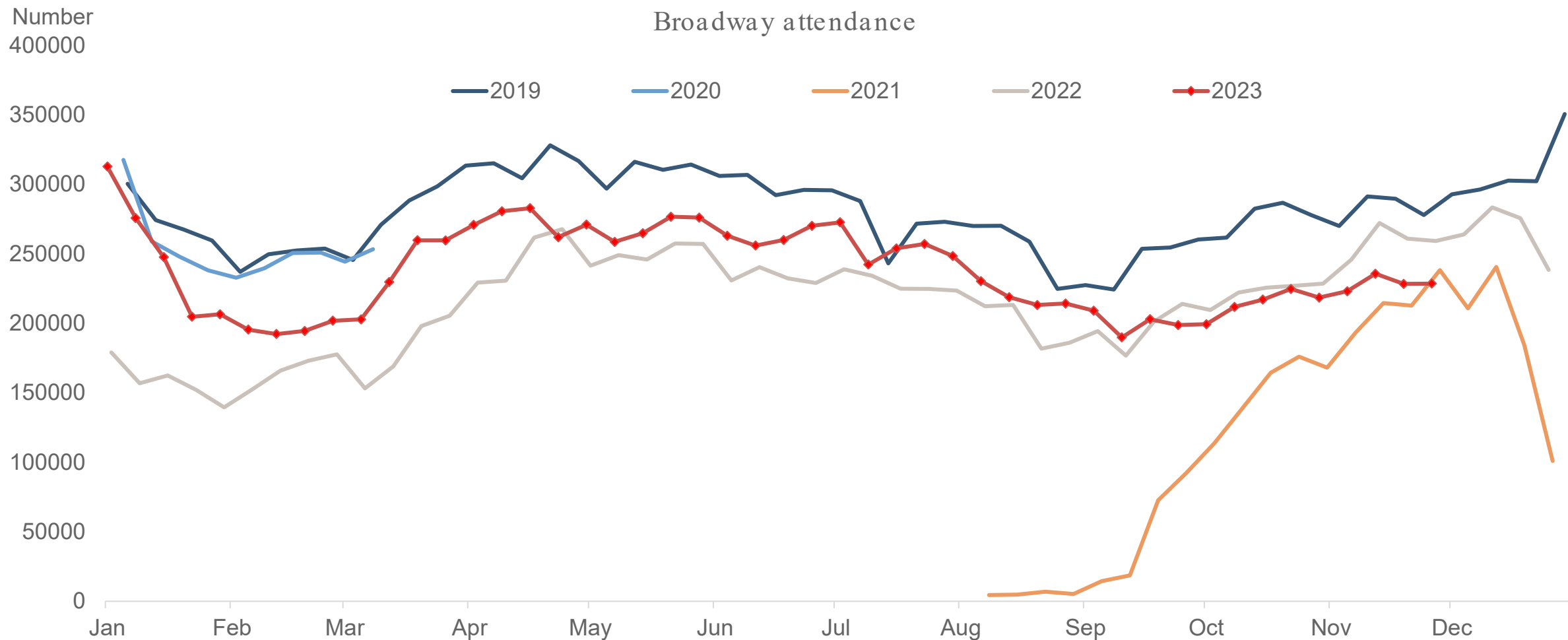
Source: BEA, Haver analytics, Apollo Chief Economist. Note: The weekly values represent the predicted percentage difference from the typical level of spending (prior to the pandemic declared by the World Health Organization on March 11, 2020) after adjusting for day-of-week, month, and year effects, based on daily data. The typical level corresponds to a value of zero.

# US consumer credit card spending



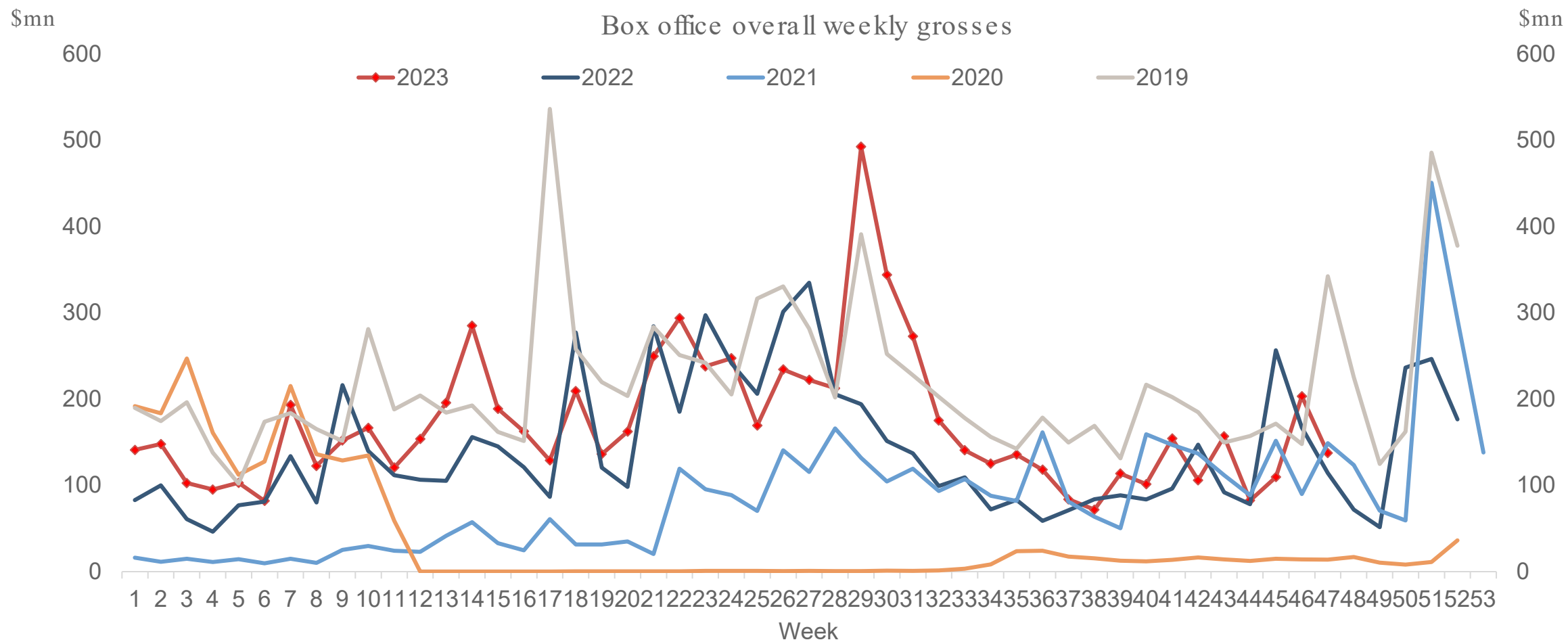
Source: BEA, Haver analytics, Apollo Chief Economist. Note: The weekly values represent the predicted percentage difference from the typical level of spending (prior to the pandemic declared by the World Health Organization on March 11, 2020) after adjusting for day-of-week, month, and year effects, based on daily data. The typical level corresponds to a value of zero.

# Some signs of slowdown in Broadway show attendance



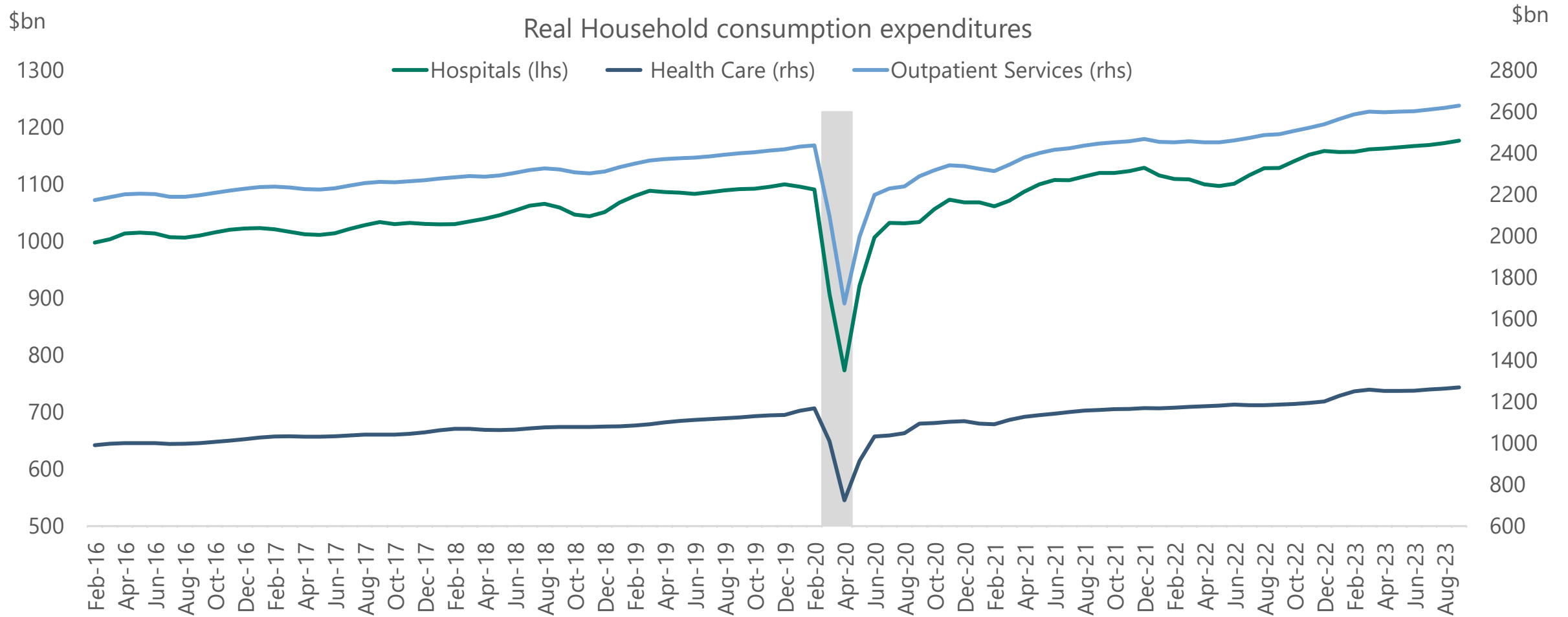
Source: Internet Broadway Database, Apollo Chief Economist

# Movie theatre visits in line with past years



Source: Boxofficemojo.com, Apollo Chief Economist

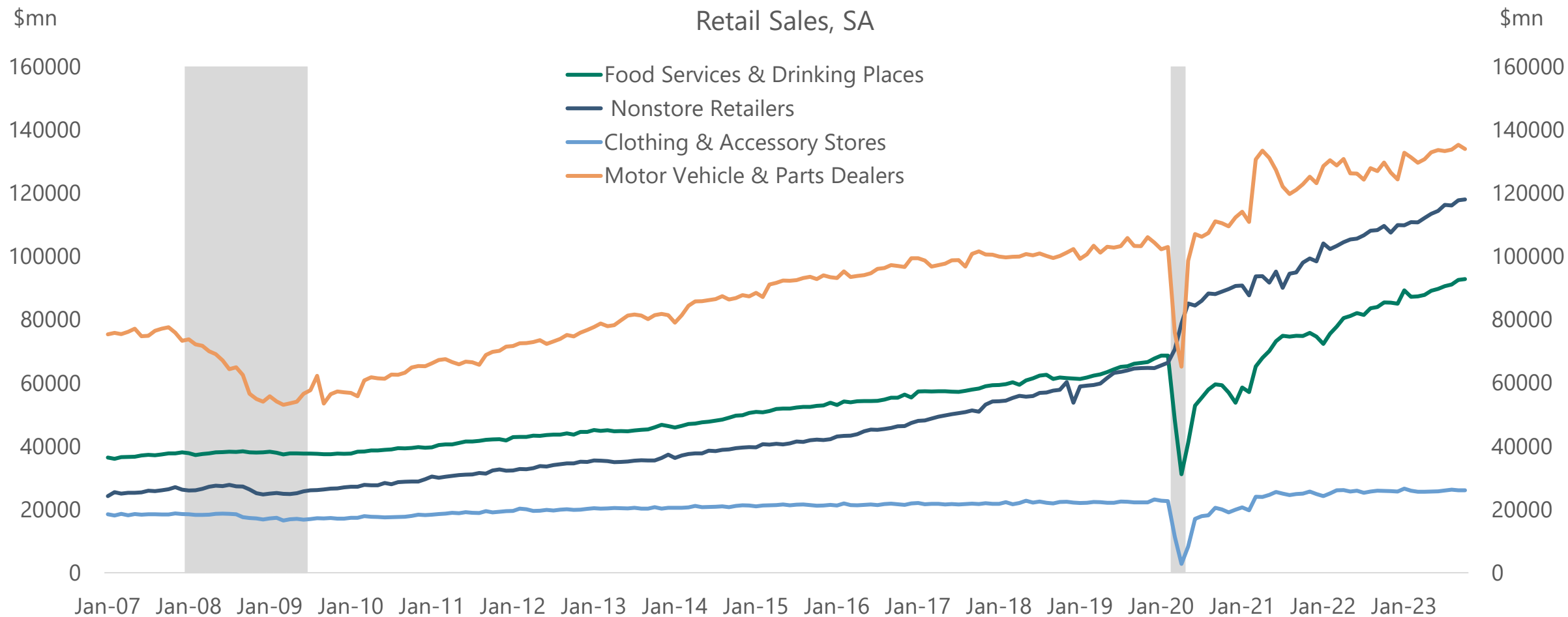
# Health care spending at pre-pandemic trend



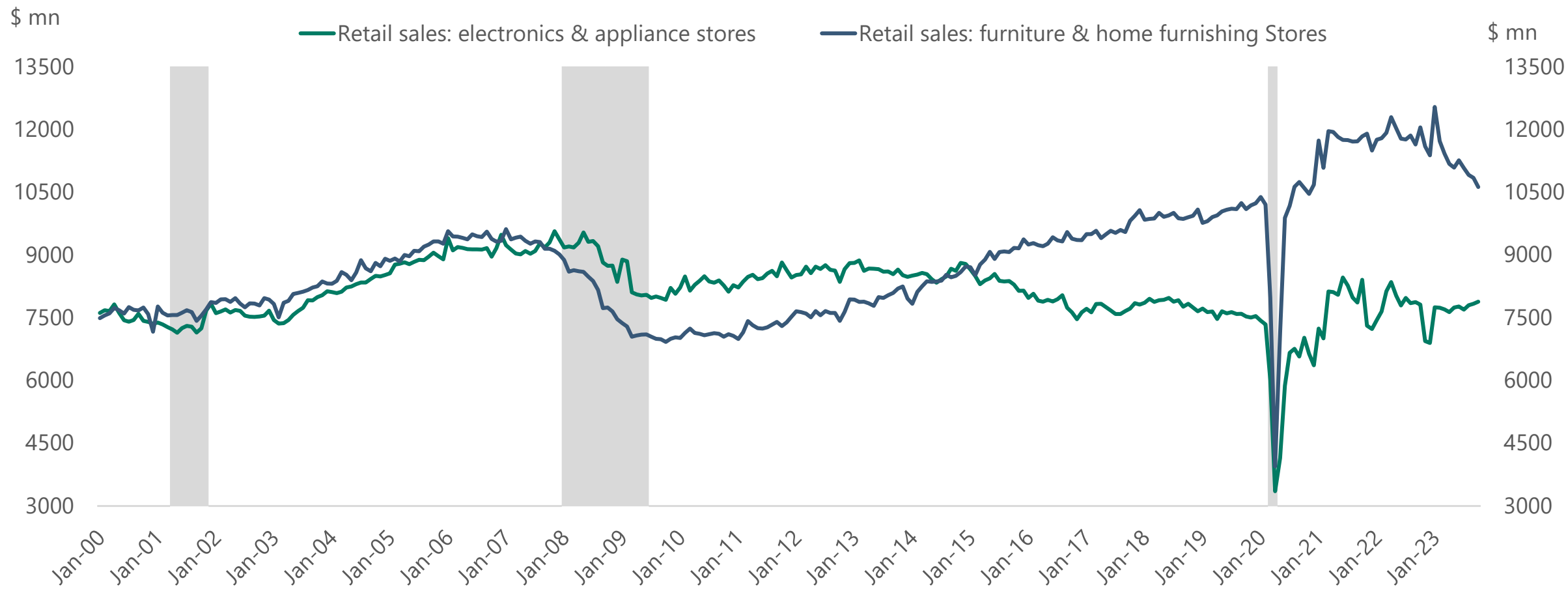
Source: BEA, Haver, Apollo Chief Economist



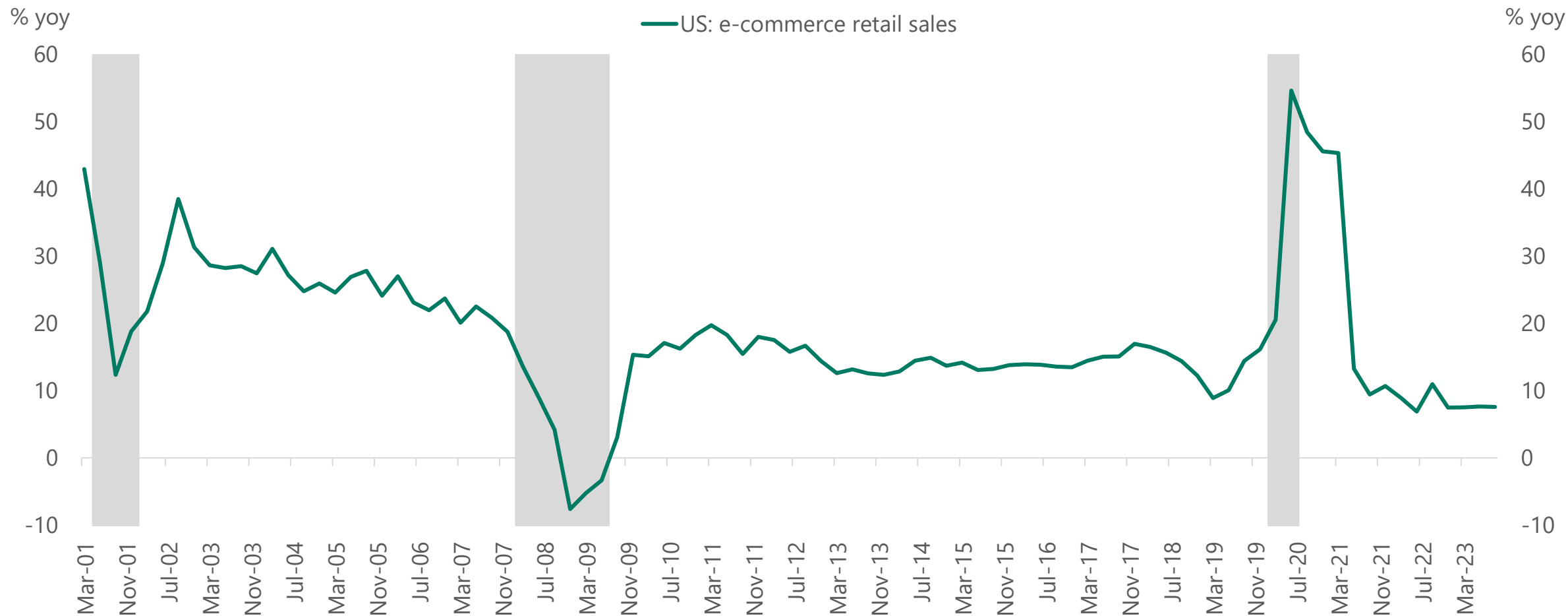
# Retail sales across different spending categories



# Some slowdown in sales of furniture, likely because this requires financing

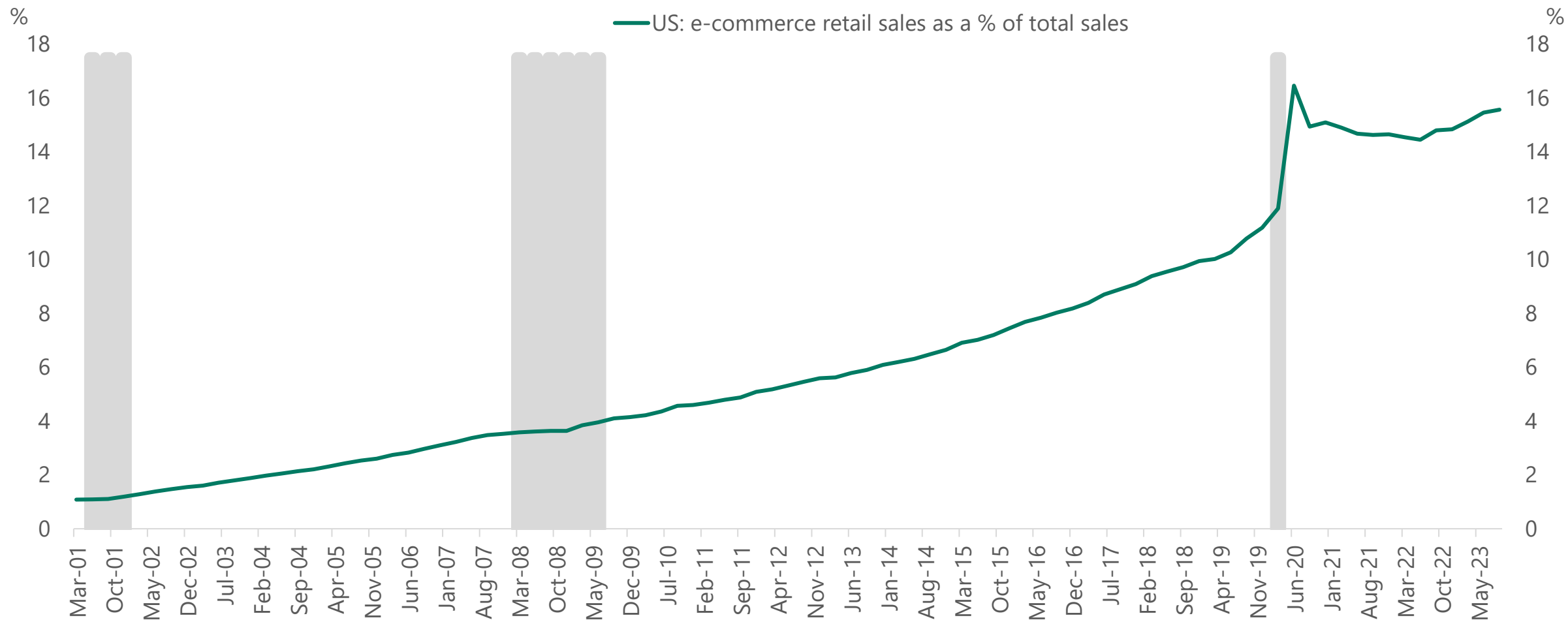


# E-commerce retail sales stabilizing



Source: Census Bureau, Haver, Apollo Chief Economist

# Online shopping as a share of total consumer spending





# Torsten Slok, Ph.D.

**Chief Economist**

Apollo Global Management

tslok@apollo.com

Torsten Slok joined Apollo in August 2020 as Chief Economist and he leads Apollo's macroeconomic and market analysis across the platform.

Prior to joining, Mr. Slok worked for 15 years as Chief Economist at Deutsche Bank where his team was top ranked in the annual Institutional Investor survey for a decade, including #1 in 2019. Prior to joining Deutsche Bank Mr. Slok worked at the IMF in Washington, DC and at the OECD in Paris.

Mr. Slok has a Ph.D in Economics and has studied at the University of Copenhagen and Princeton University.