

APOLLO

Outlook for the US consumer

Torsten Slok, Chief Economist
Jyoti Agarwal, Senior Economist
Rajvi Shah, Economist

Apollo Global Management

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Unless otherwise noted, information as of February 2023

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Key conclusions

Consumer spending growth remains solid, driven by:

- 1) The virus subsiding and more people going to restaurants, flying on airplanes, and staying at hotels**
- 2) Robust wage growth**
- 3) Robust employment growth**
- 4) High levels of excess savings and elevated levels of wealth, driven by high home prices and high stock prices**

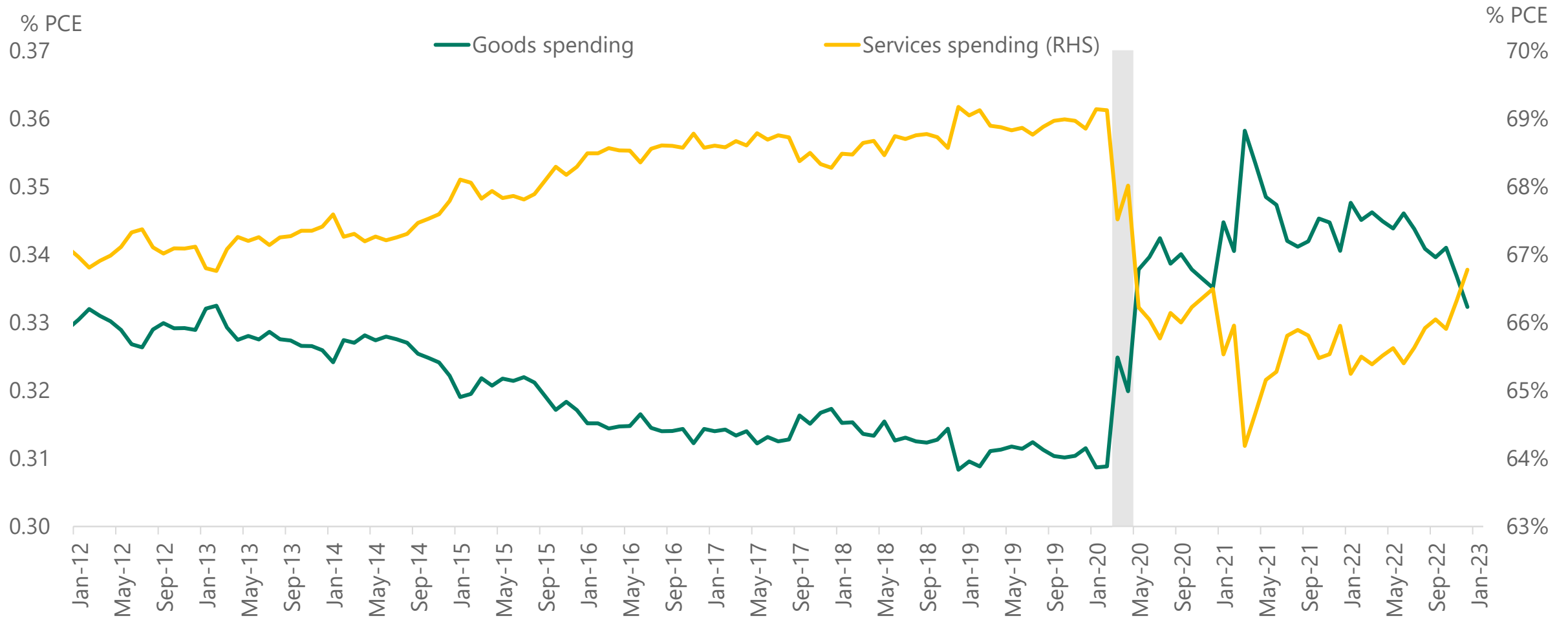
Risks to the outlook for the consumer are higher interest rates, a rise in unemployment, and high inflation making many purchases such as cars, gas, and homes too expensive.

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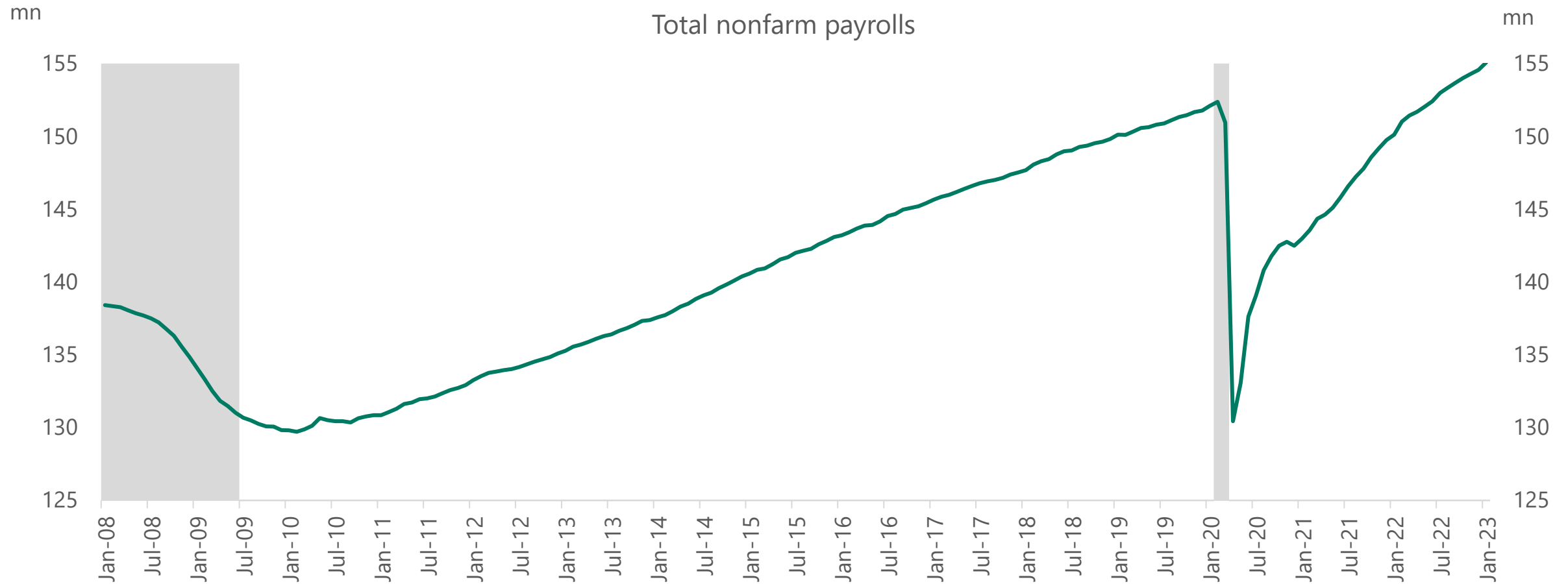
- **Overview**
- **Leading indicators of consumer spending**
- **Health of the household sector balance sheet**
- **Outlook for spending on housing**
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Overview

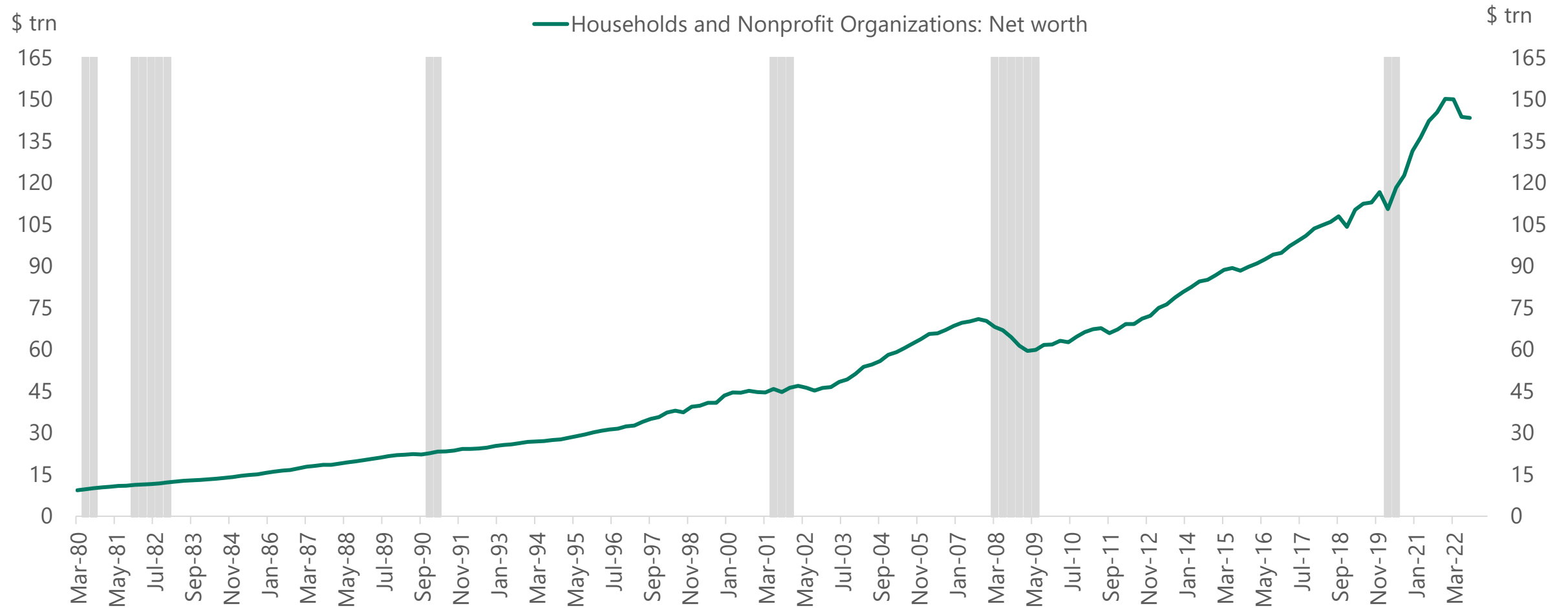
Shift from goods to services in US consumer spending



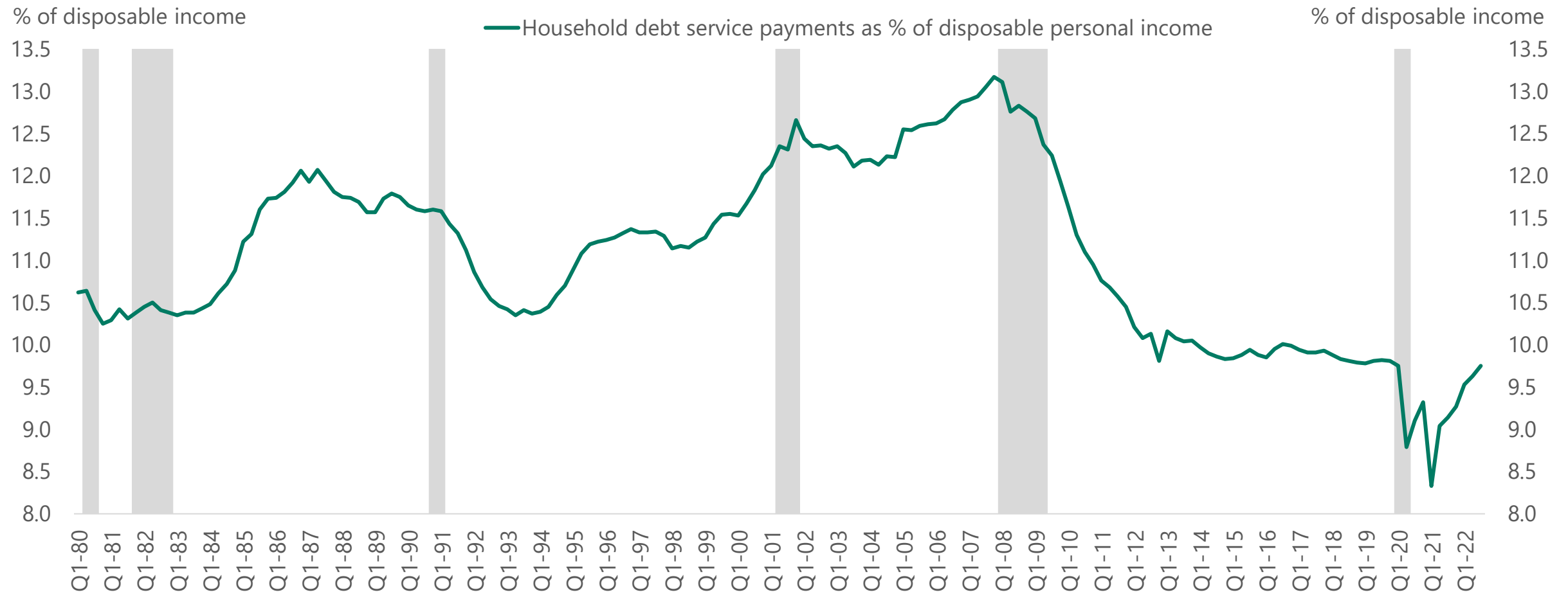
Total employment is now 2.6mn jobs above February 2020 levels



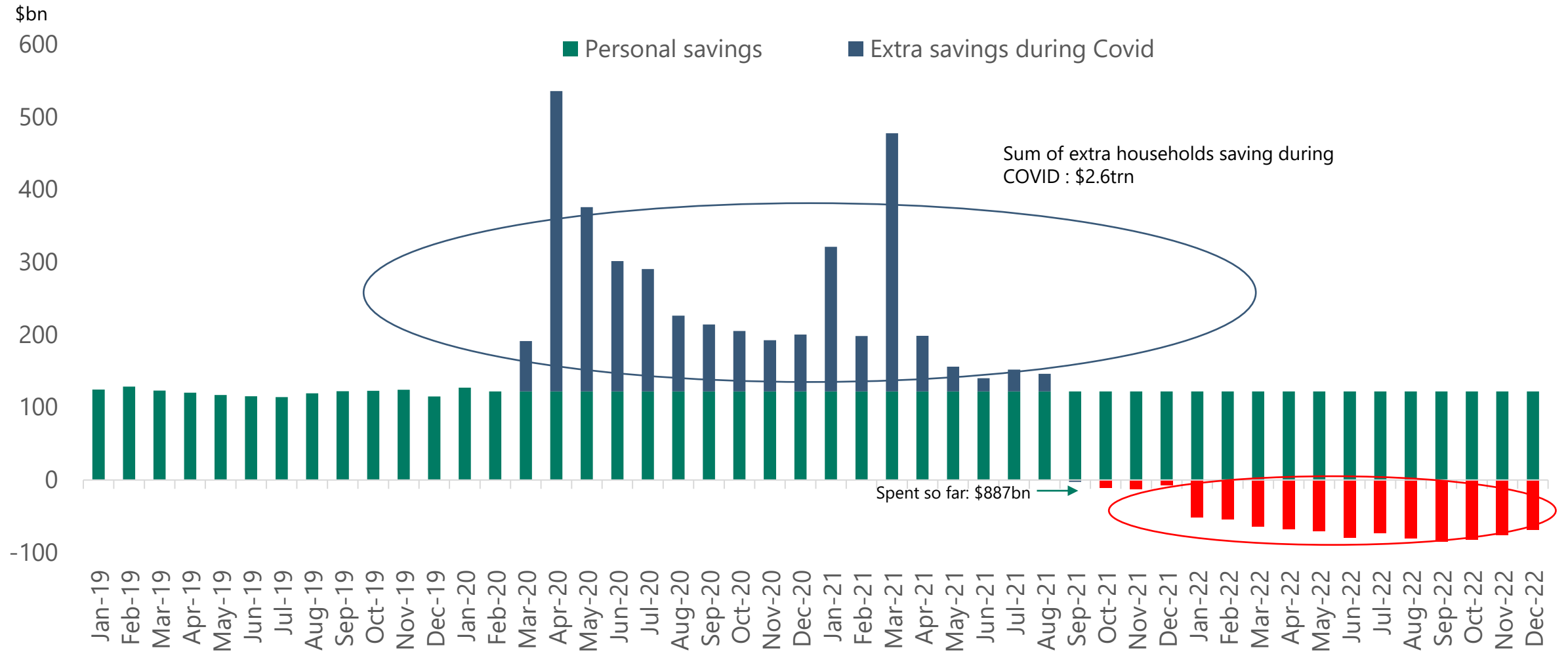
Net worth of the US household sector near record highs



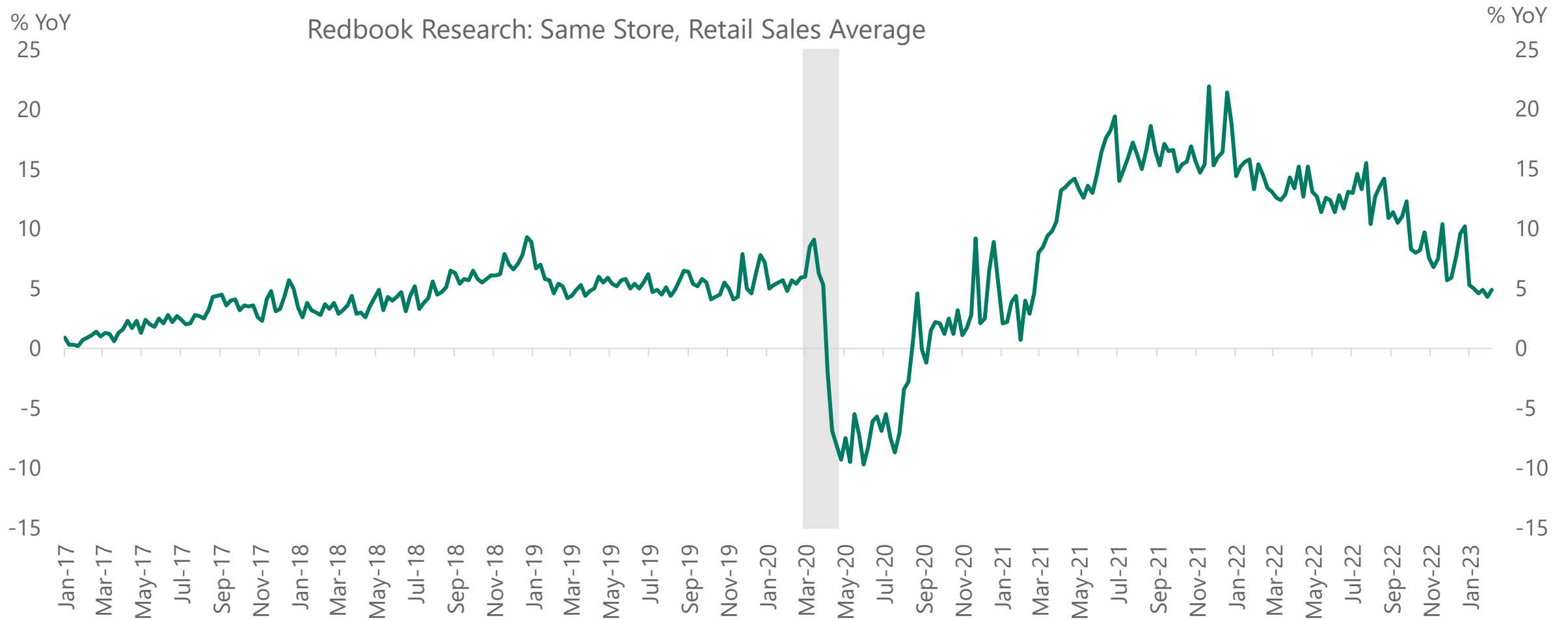
Household debt service payments as a share of income is rising



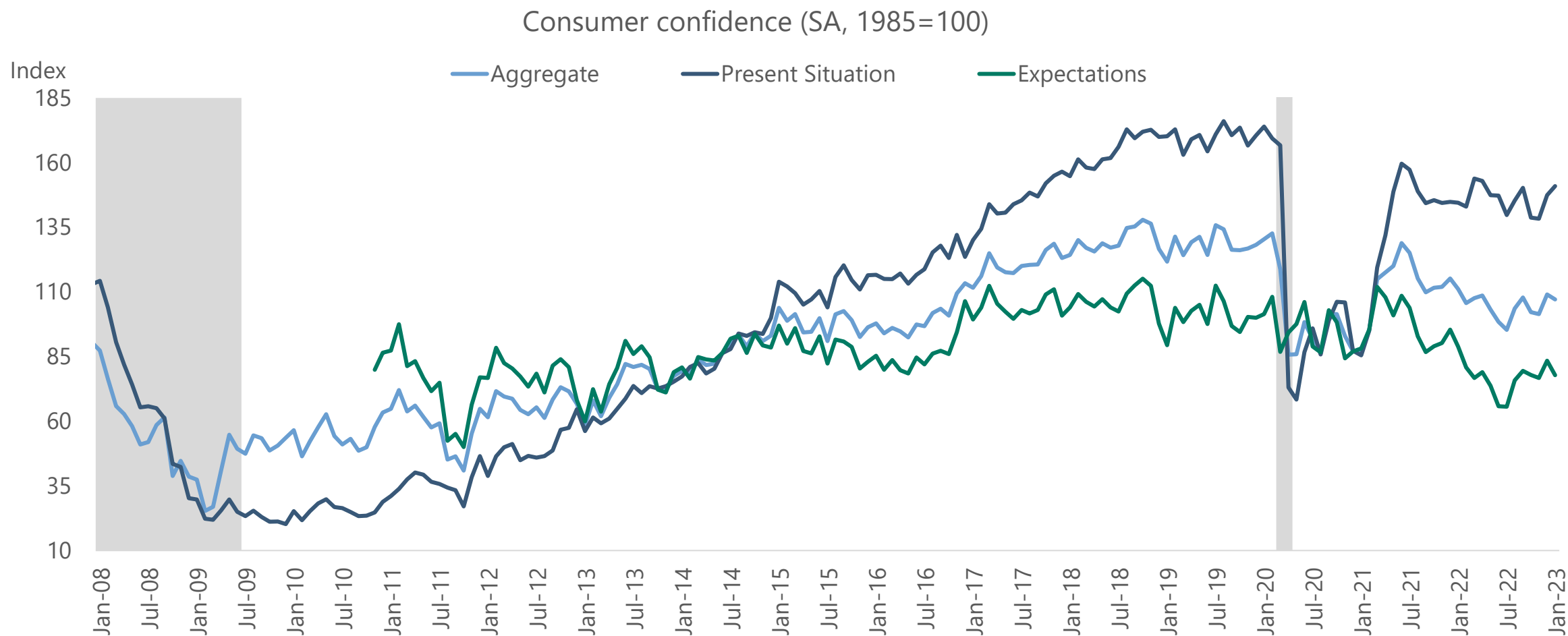
Households are running down their savings, but still about \$1.7trn left



Same-store retail sales slowing down gradually

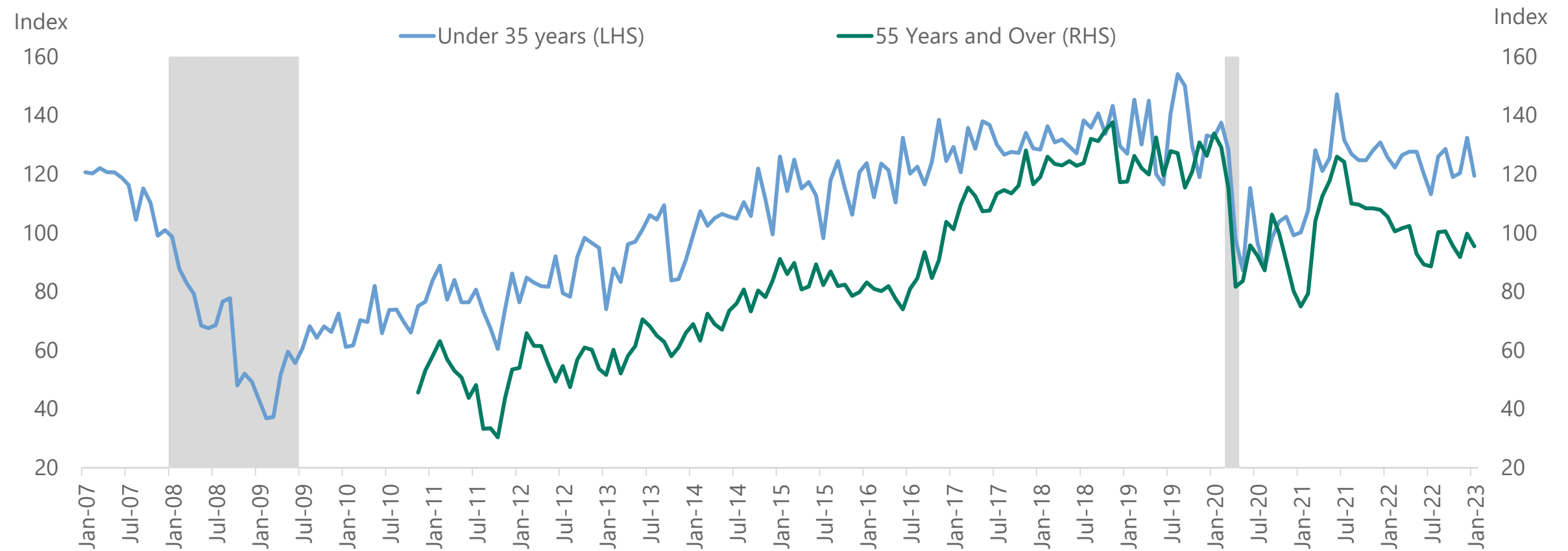


Consumer confidence still solid



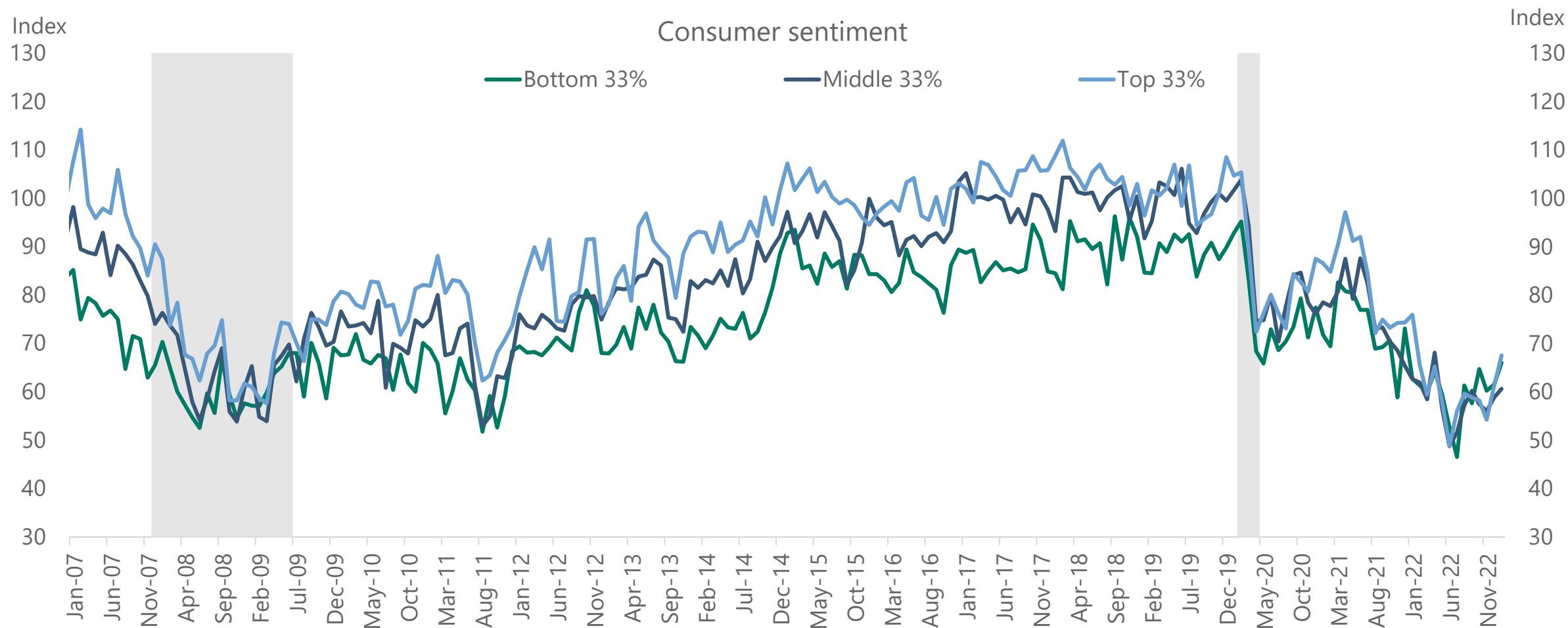
Consumer confidence across generations

Consumer confidence by Age (SA, Index)

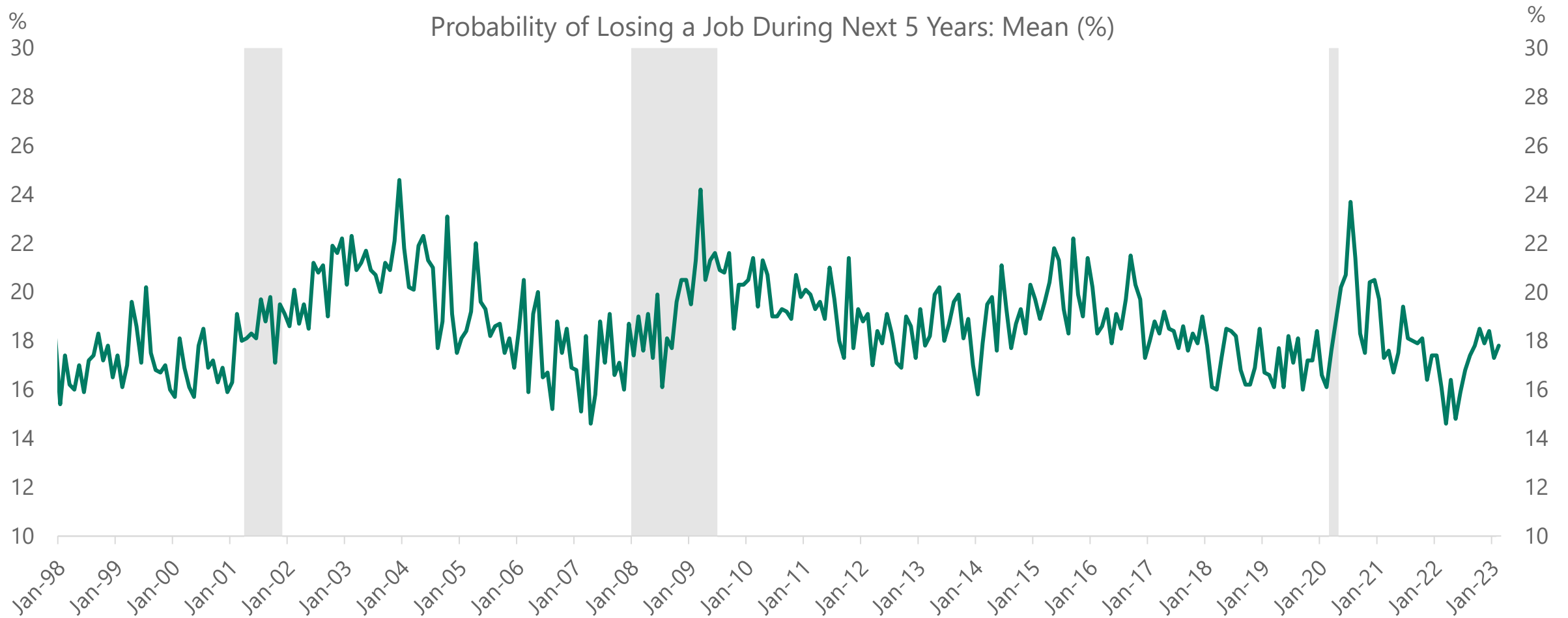


Source: Conference Board, Haver Analytics, Apollo Chief Economist

Consumer sentiment rebounding across the income distribution



Households less worried about losing their jobs

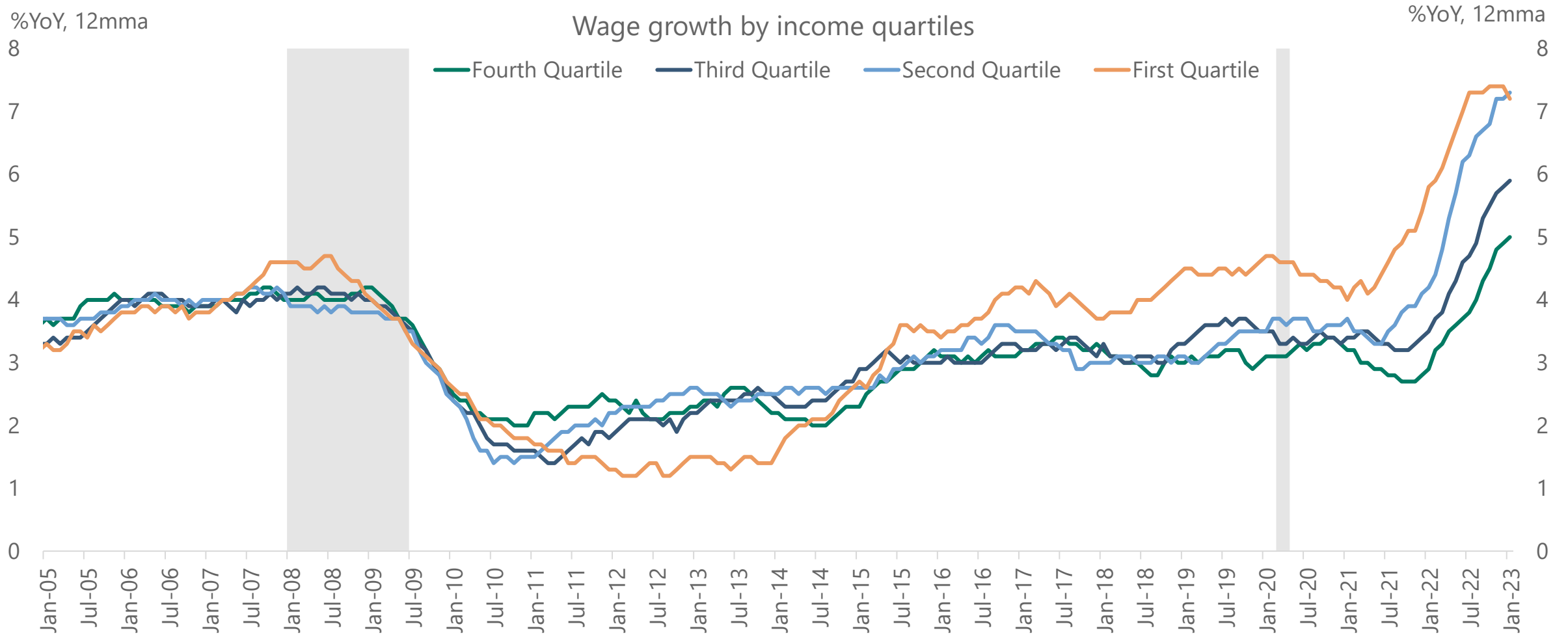


Wage inflation has peaked and is slowing

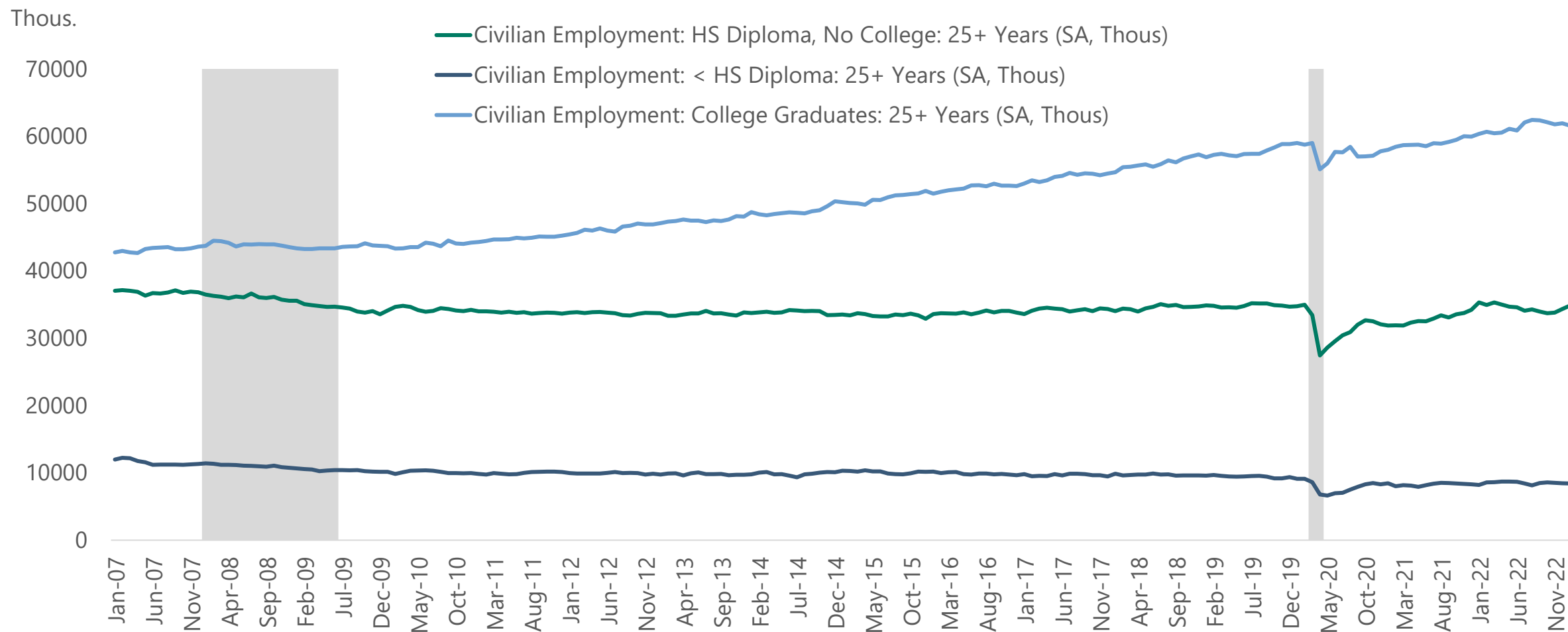


Source: BLS, Apollo Chief Economist. Note: Low wage workers are defined as the bottom third percentile in the wage distribution, mid wage workers as the mid third percentile and high wage workers as top third percentile

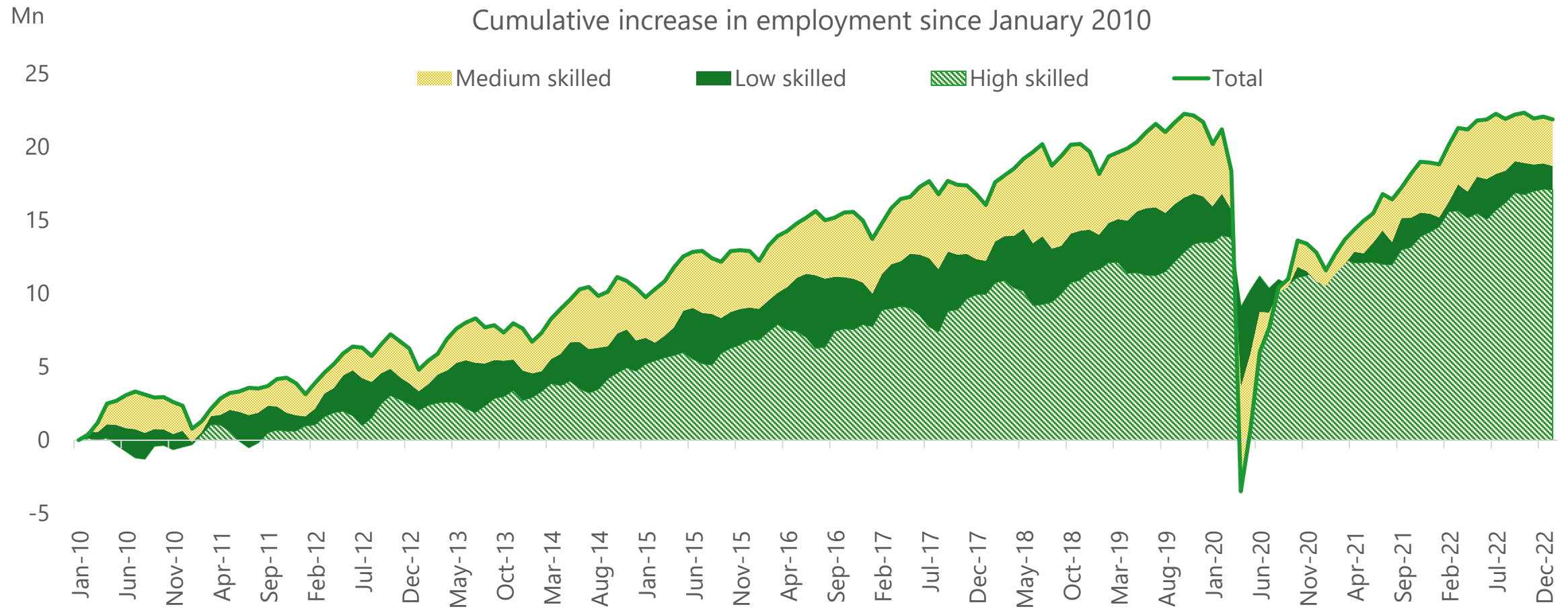
Wage growth peaking across all income quartiles



Employment for workers, by education



The composition of employment by skill is back at pre-pandemic levels



Source: BLS, Haver, Apollo Chief Economist

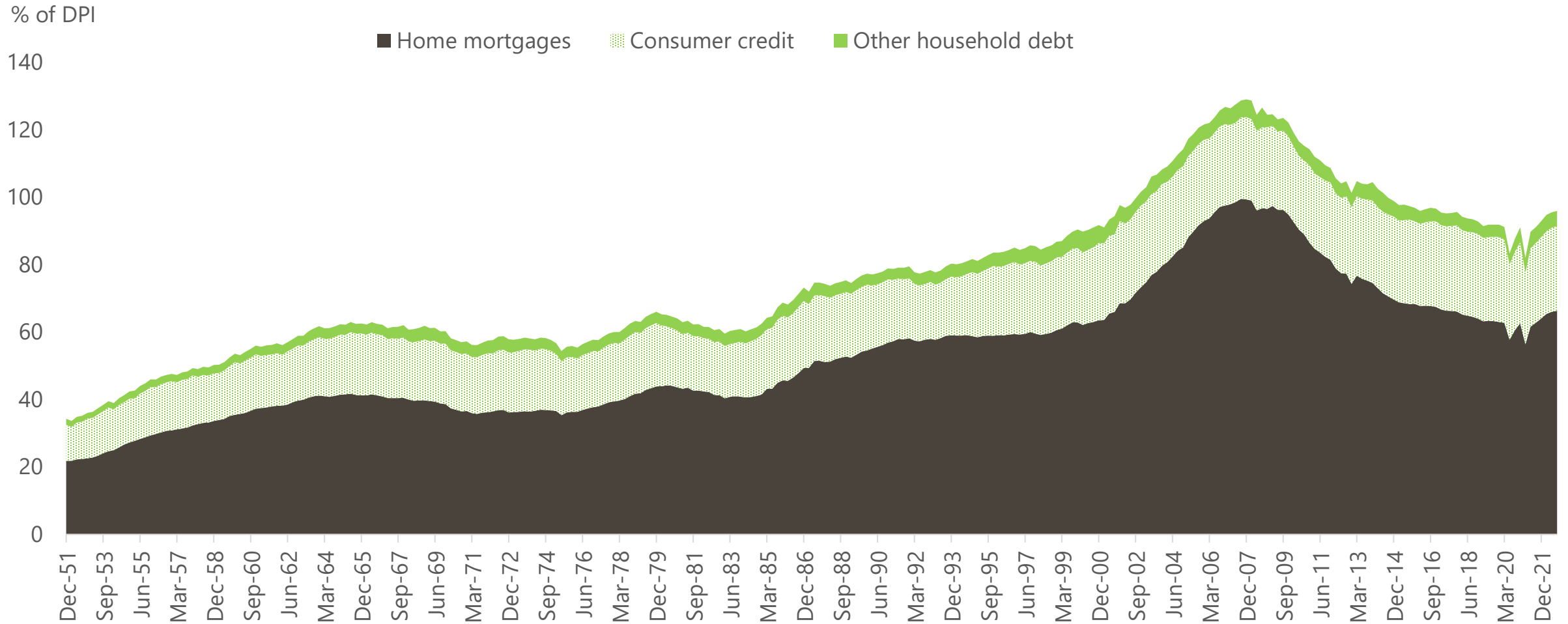
Note: High-skill occupational categories are management and financial operations and Professionals and related occupations; Medium-skill categories are sales and related occupations, office administrative support, construction, installation and repair, production occupations, and transportation and material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

Real income per capita is below the pre-pandemic trend



Health of the household sector balance sheet

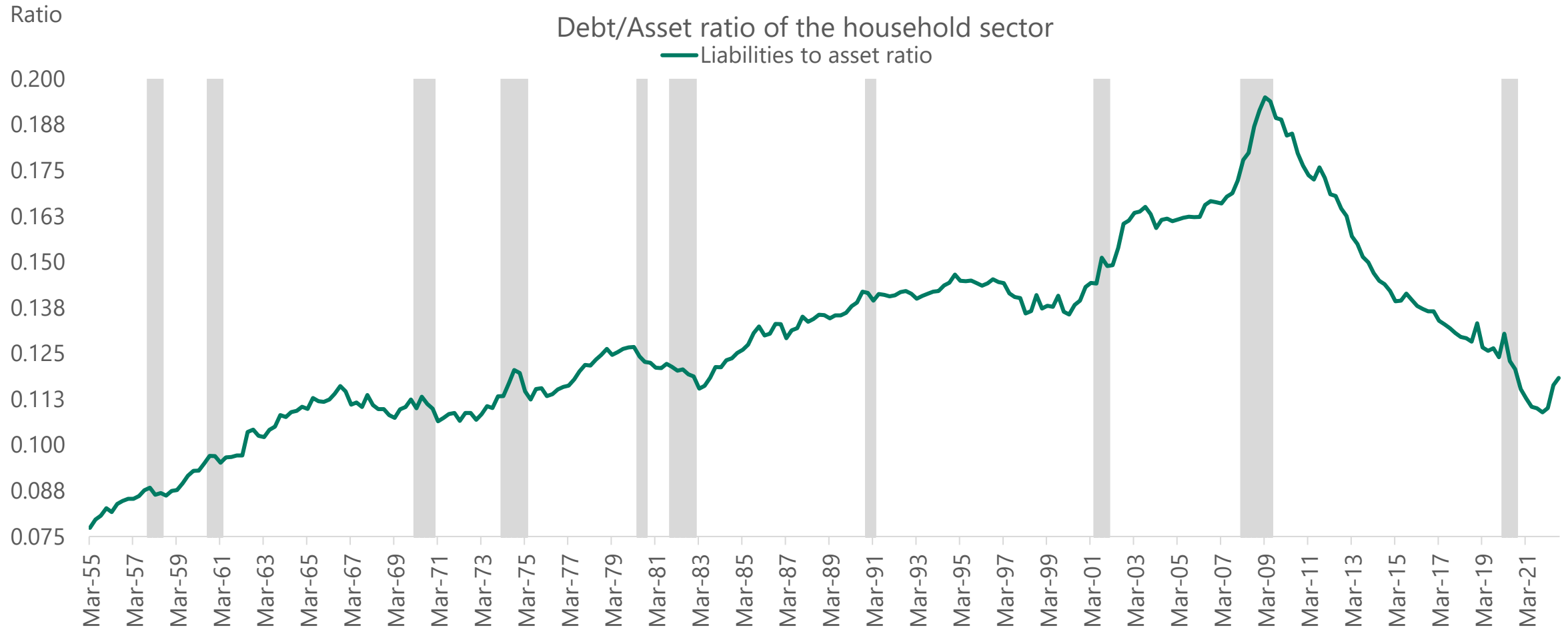
Household sector leverage still significantly below 2007 levels



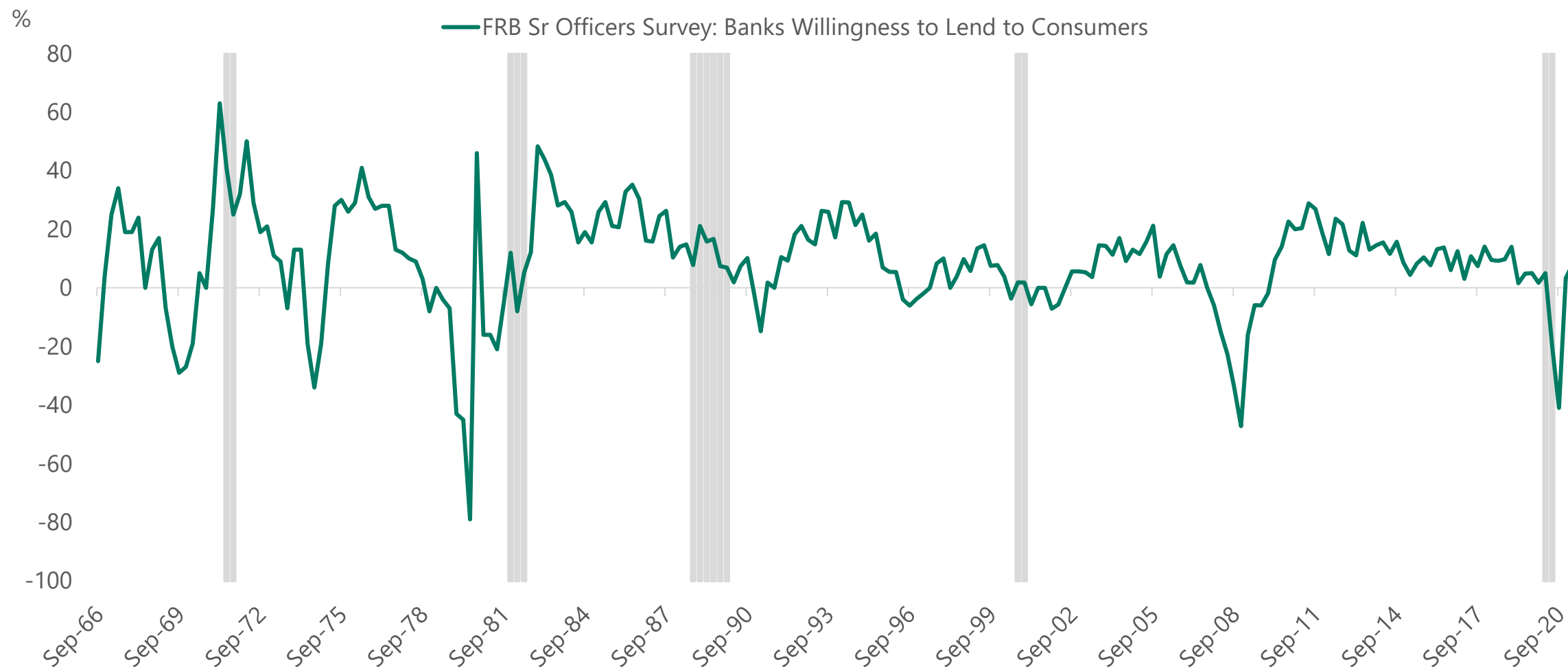
Subprime credit quality starting to deteriorate

Auto Loans					Credit Cards					Mortgages				
+ 60 day delinquency rate					+ 90 day delinquency rate					Distribution of Delinquency				
	Dec. 2022	Nov. 2022	Dec. 2021	Dec. 2019		Dec. 2022	Nov. 2022	Dec. 2021	Dec. 2019		Dec. 2022	Nov. 2022	Dec. 2021	Dec. 2019
Super Prime	0.0%	0.0%	0.0%	0.0%	Super Prime	0.00%	0.00%	0.00%	0.00%	Current	95.1%	95.3%	96.1%	93.3%
Prime plus	0.01%	0.01%	0.01%	0.01%	Prime plus	0.01%	0.01%	0.01%	0.01%	30-59 DPD	2.7%	2.6%	2.1%	3.6%
Prime	0.16%	0.12%	0.12%	0.16%	Prime	0.19%	0.19%	0.15%	0.21%	60-89 DPD	1.3%	1.3%	1.1%	1.9%
Near prime	0.55%	0.56%	0.47%	0.47%	Near prime	1.10%	1.10%	0.91%	1.25%	90+	0.7%	0.7%	0.7%	1.0%
Subprime	12.2%	12.2%	11.08%	8.4%	Subprime	19.5%	19.3%	15.2%	20.2%	Foreclosure	0.1%	0.1%	0.1%	0.2%
Total	1.99%	1.91%	1.60%	1.49%	Total	2.21%	2.12%	1.46%	2.19%					

Household liabilities to assets trending upward

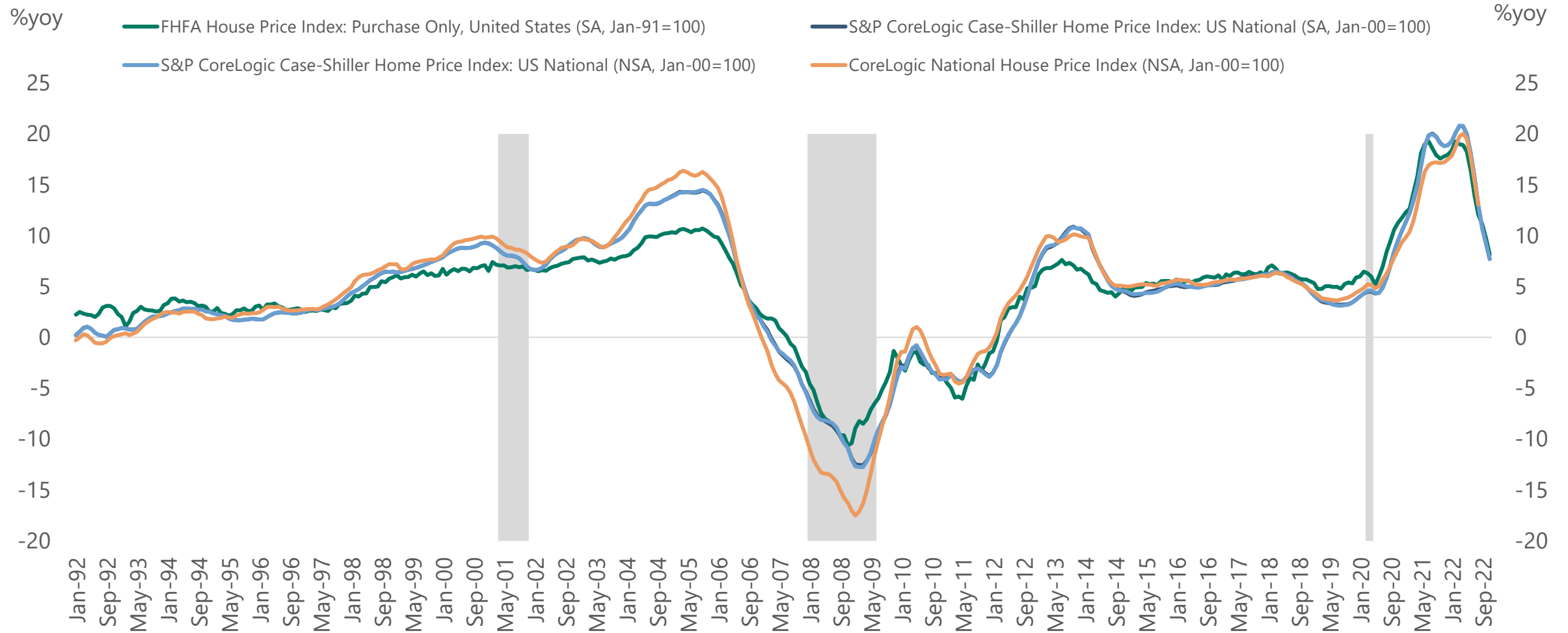


Banks less willing to lend to consumers

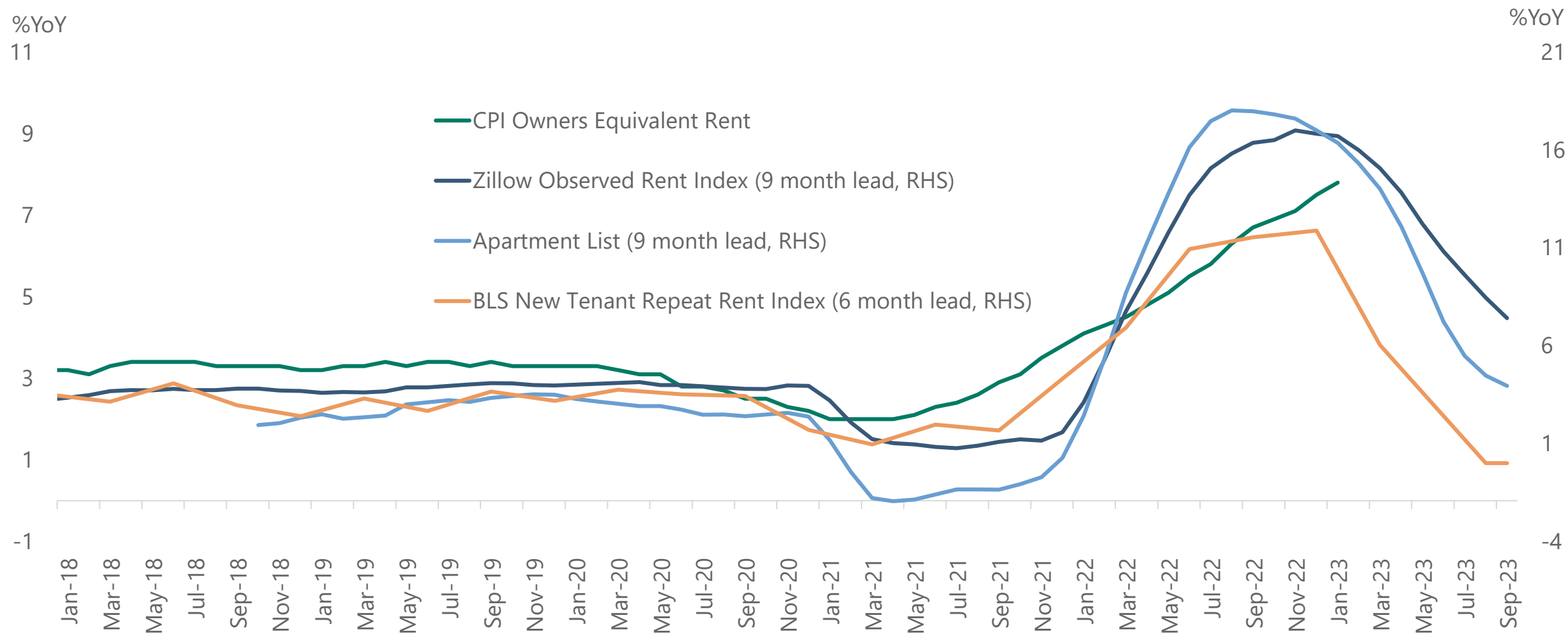


Outlook for spending on housing

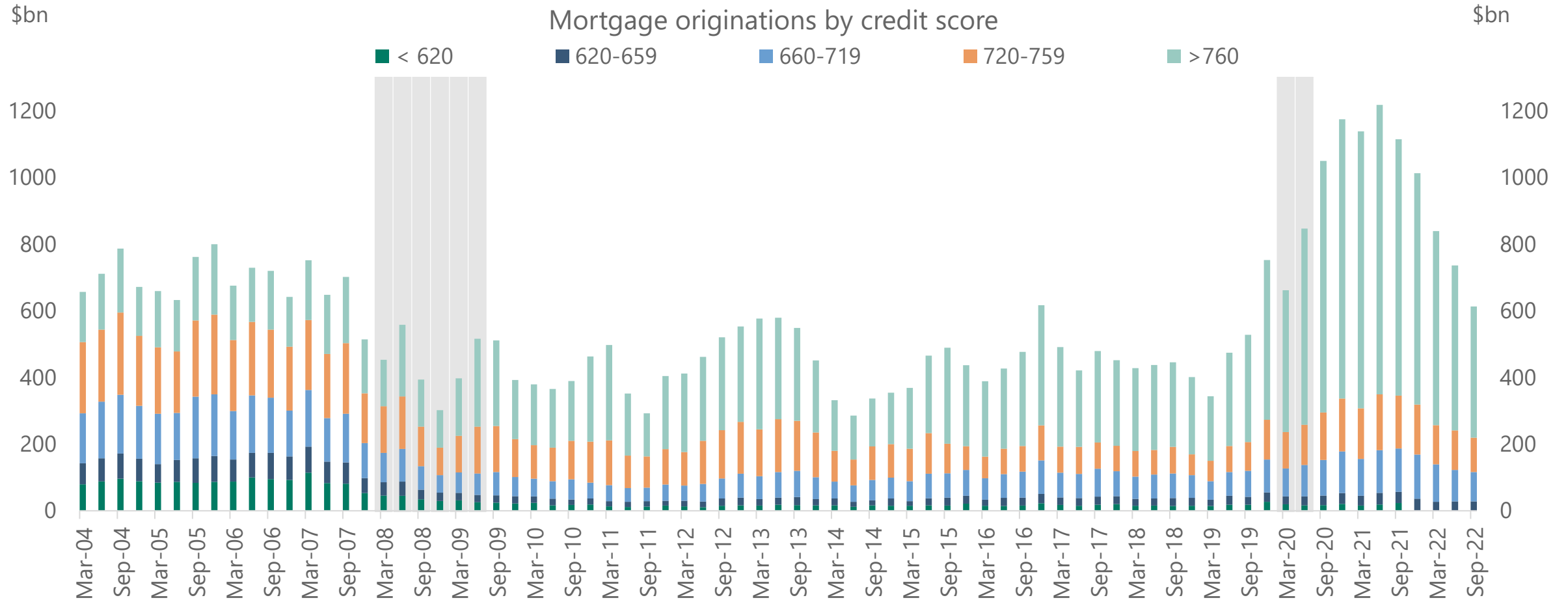
Home price inflation coming down



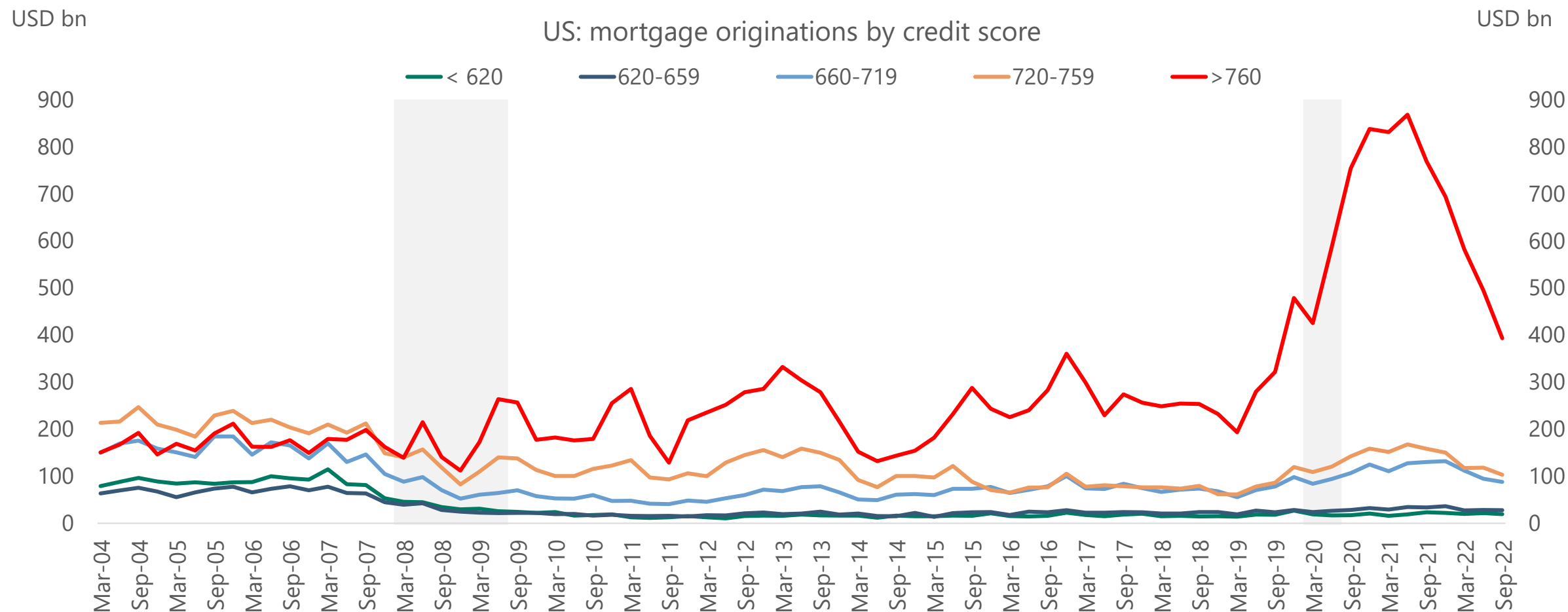
Housing inflation likely to come down



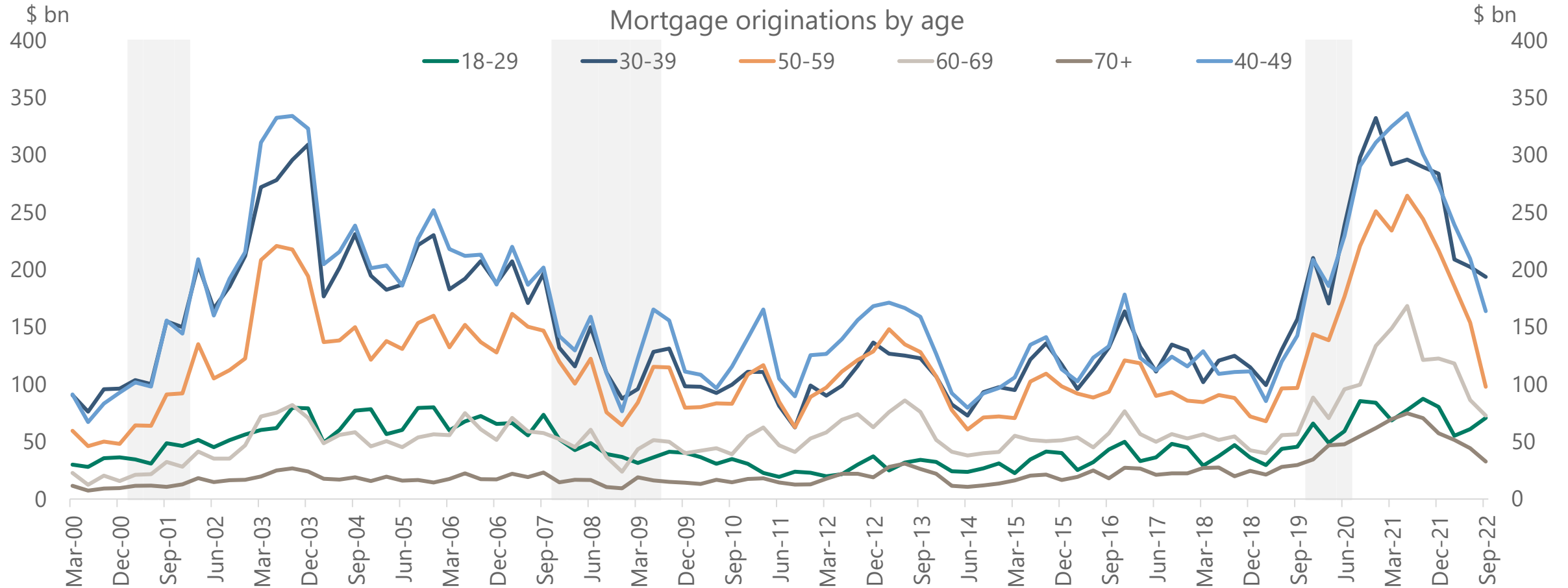
Purchase and refi activity during the pandemic driven by households with top credit scores



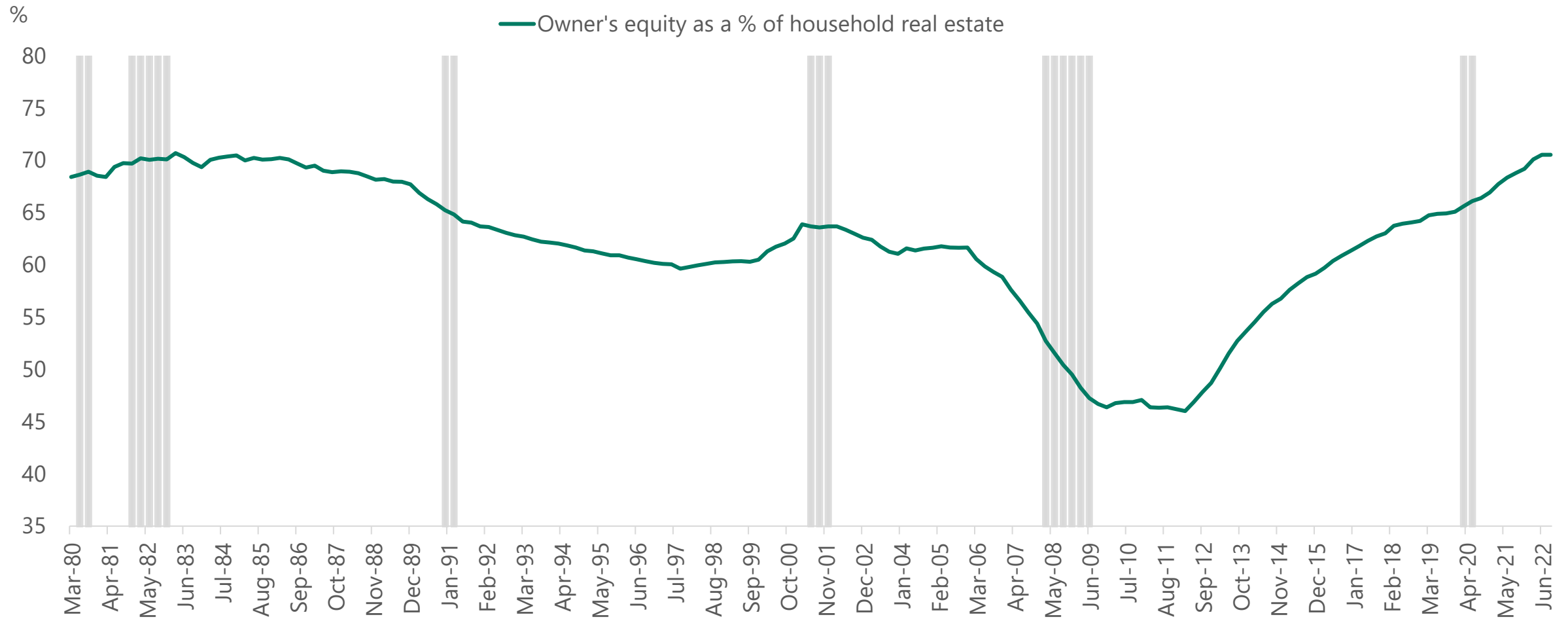
US mortgage credit originations by credit score



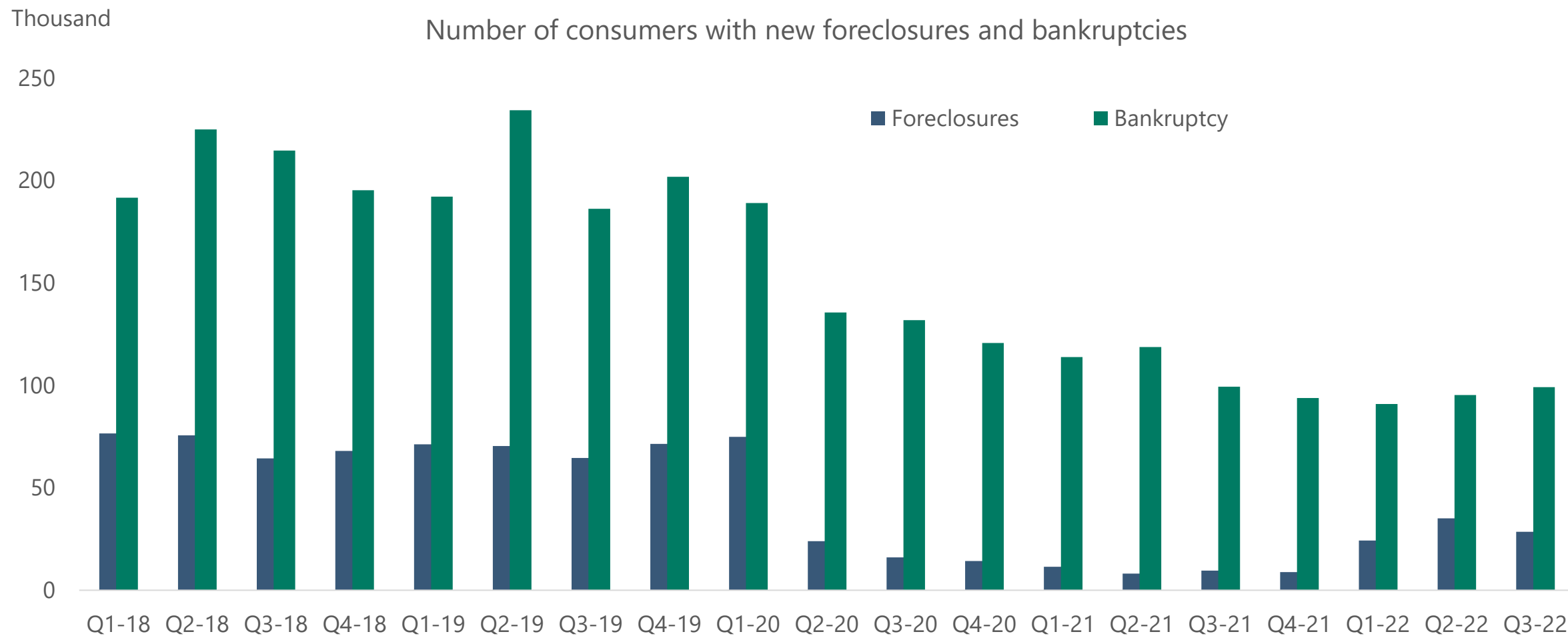
Mortgage origination falling across age groups



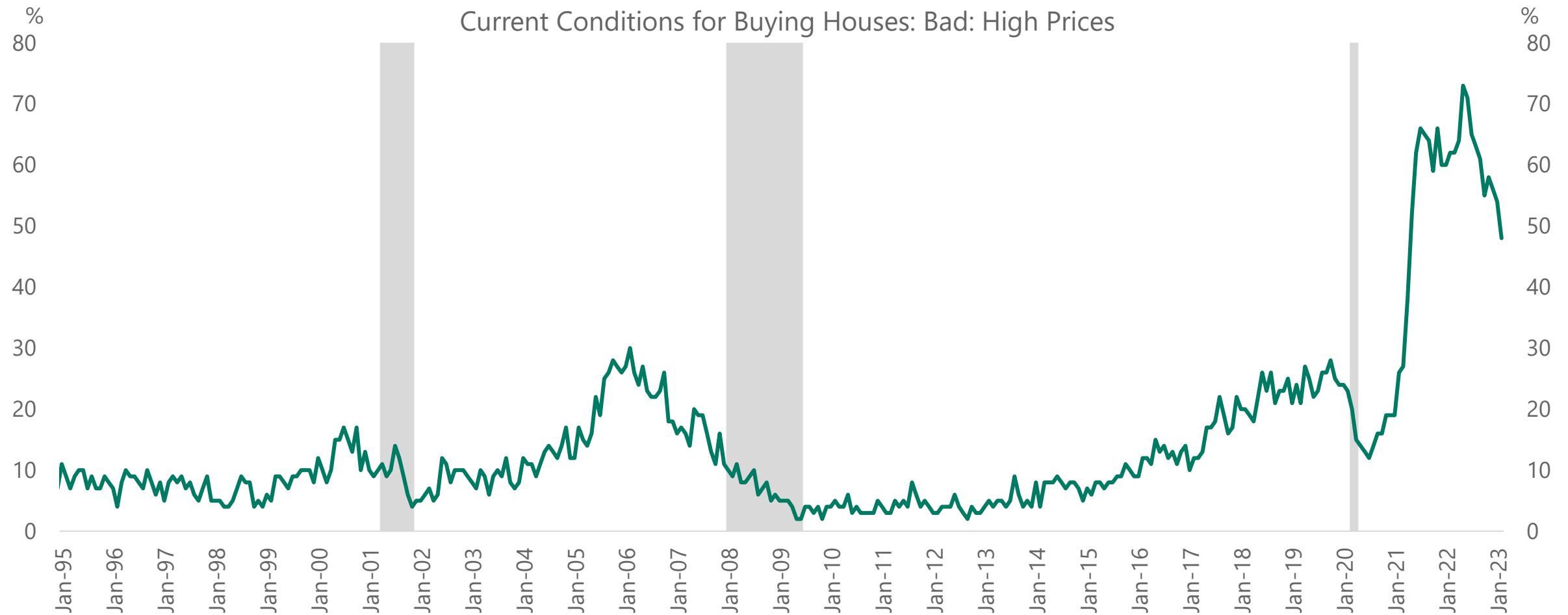
Households have less debt in their homes: Homeowner's equity at highest level in decades



Foreclosures starting to rise, bankruptcies still declining

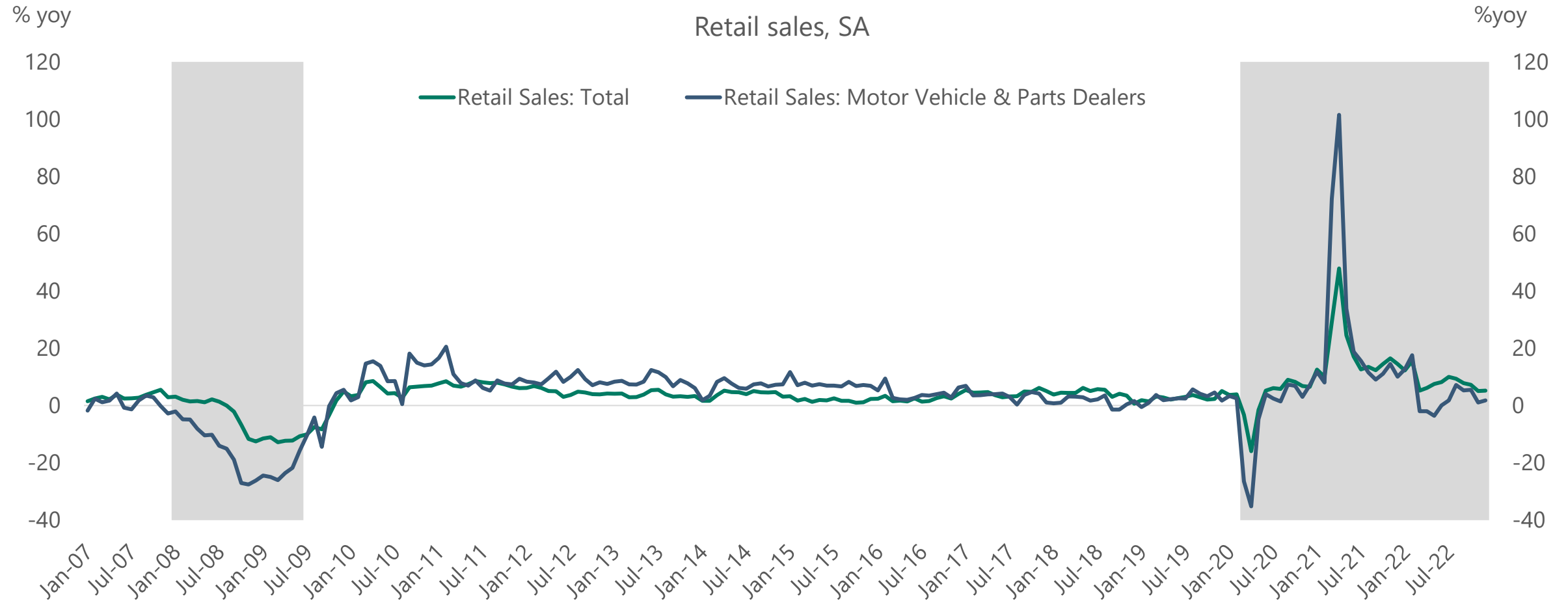


Consumers' outlook for house prices improving

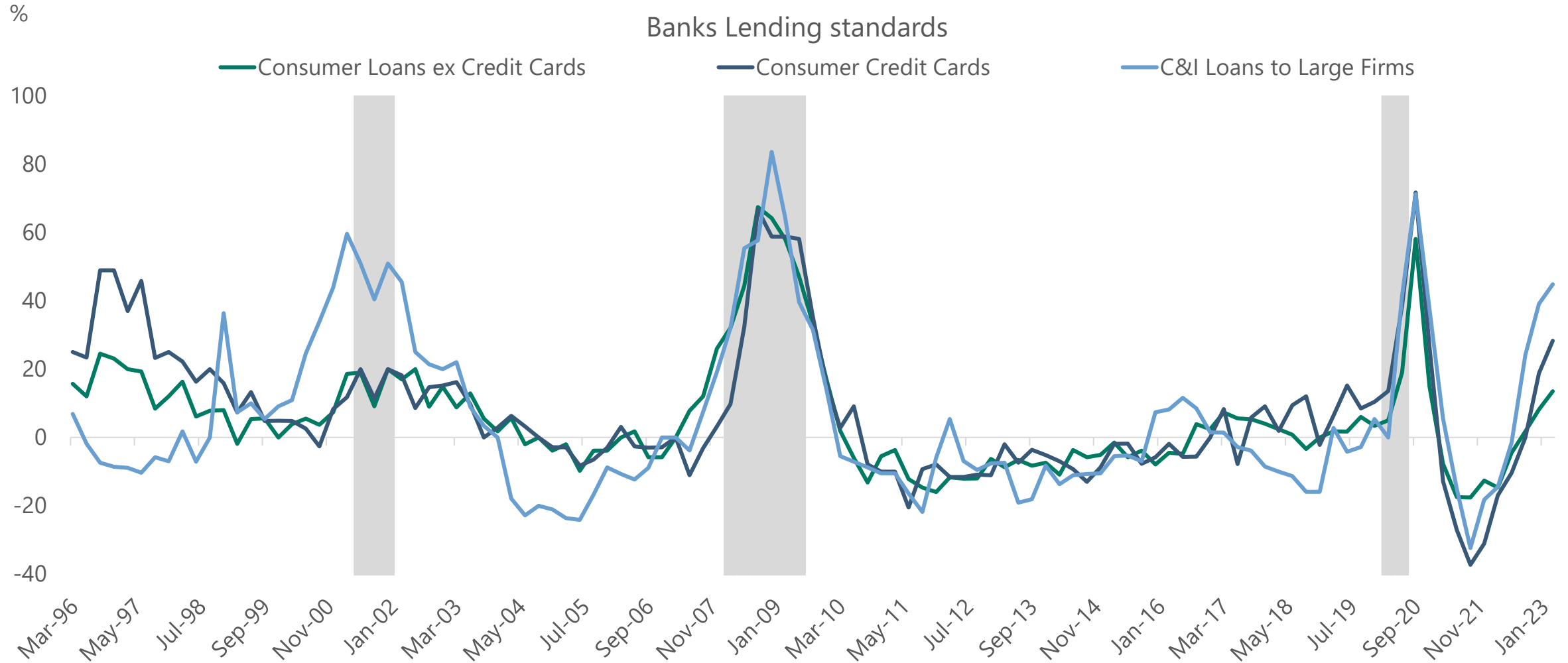


Outlook for spending on cars

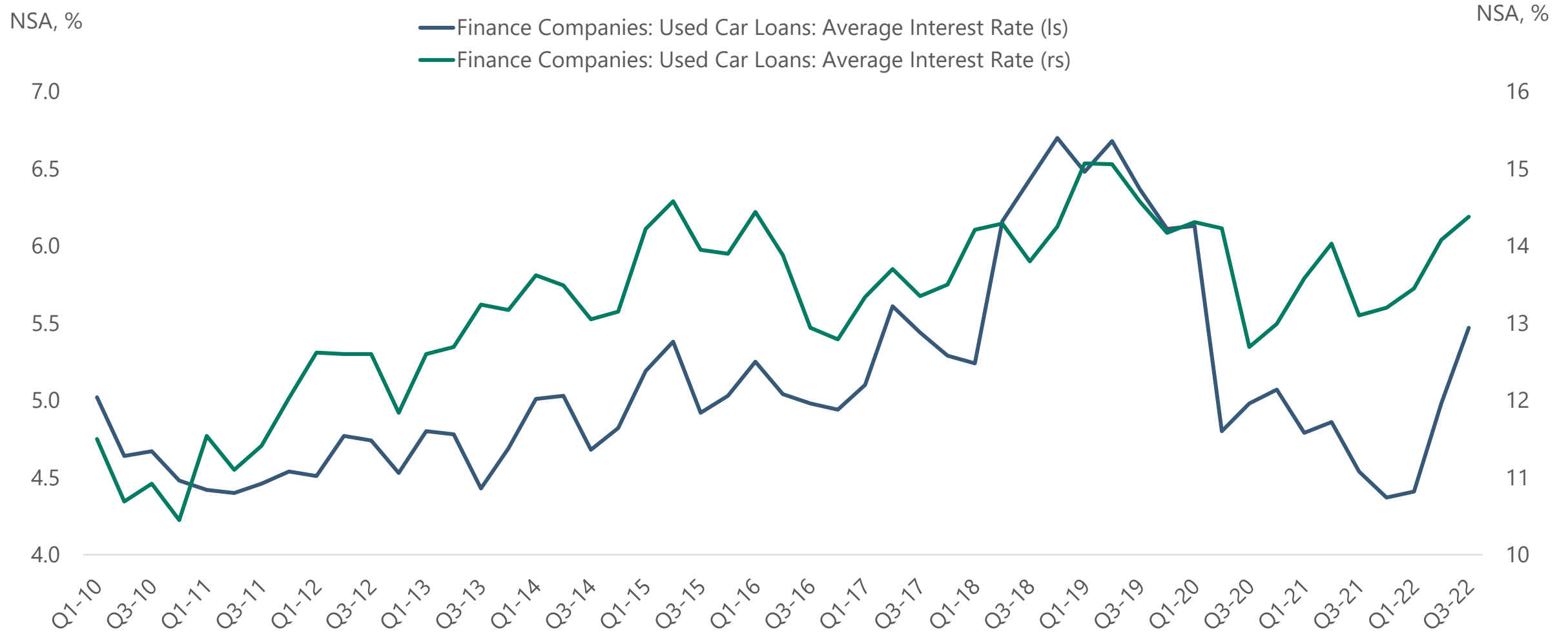
Motor vehicle sales affected by high car prices



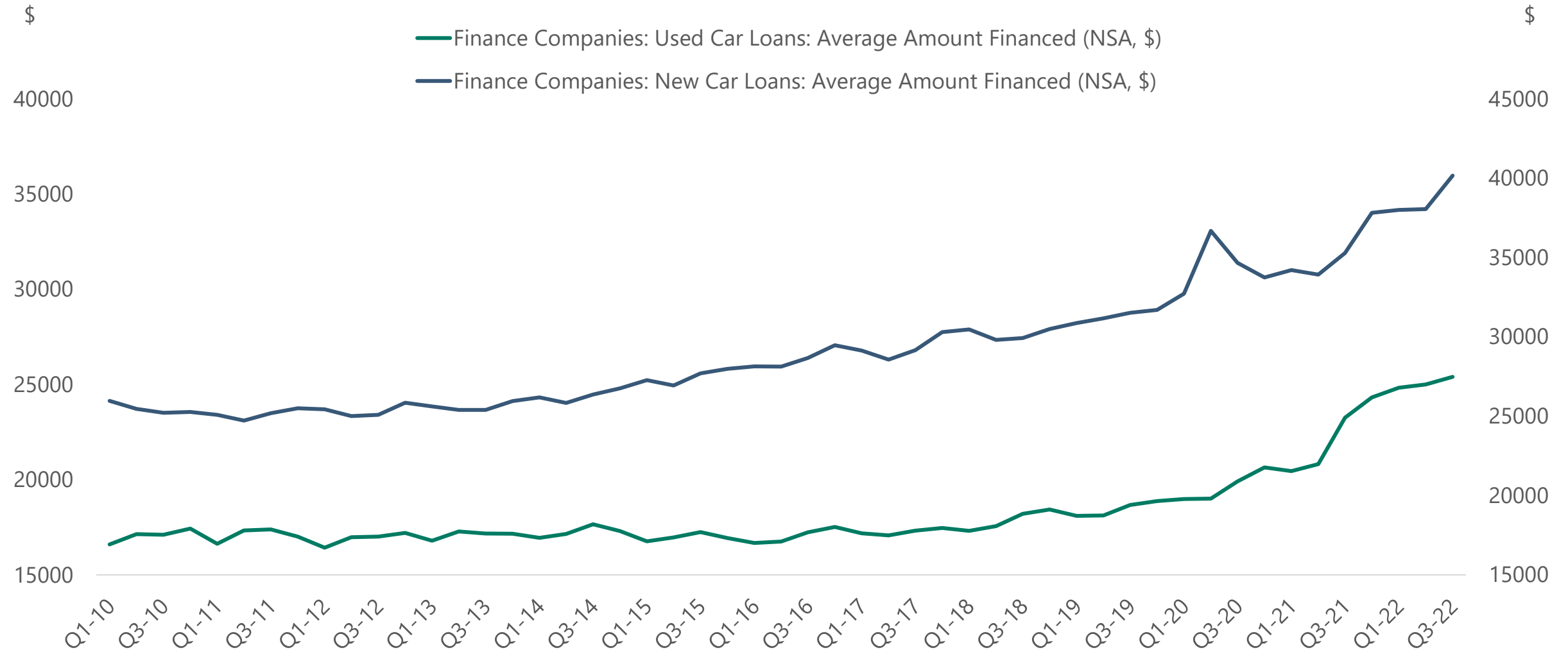
Lending standards tightening



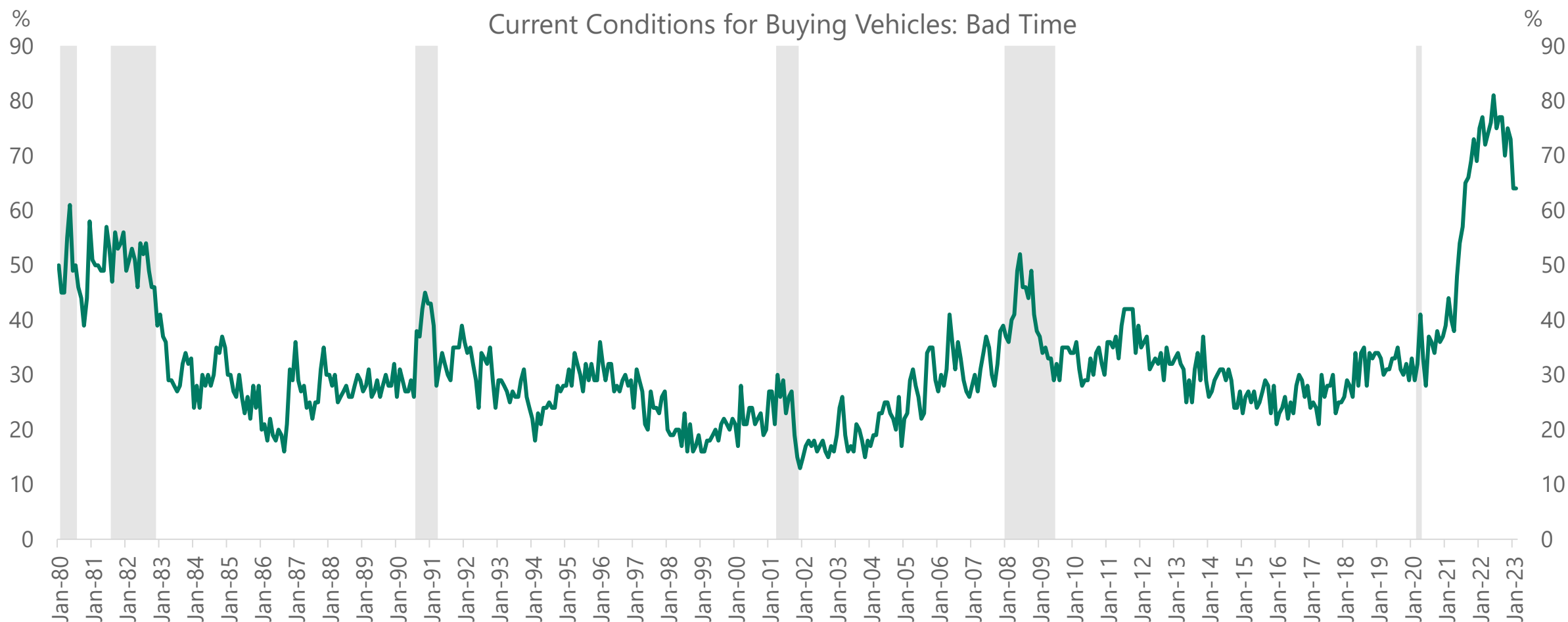
Interest rates on auto loans have increased less than the Fed funds rate



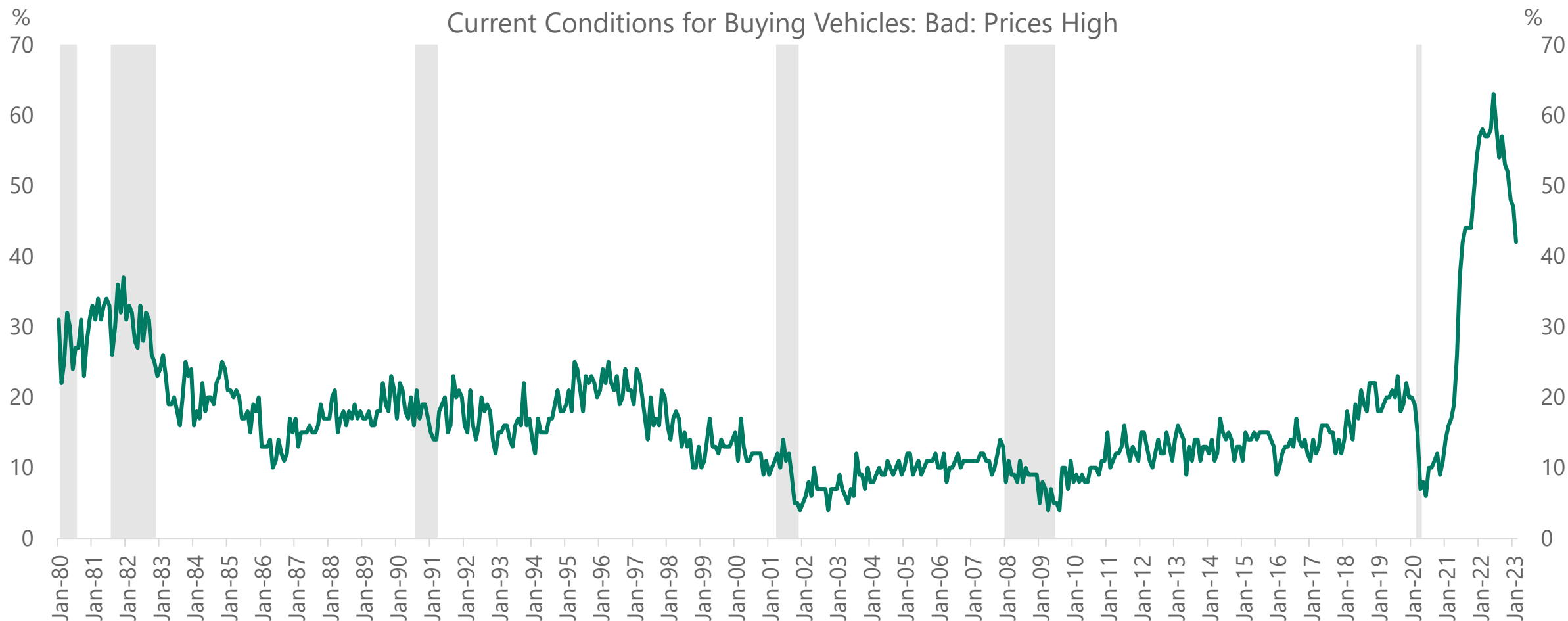
Average amount financed for new and used car loans



Sentiment improving among car buyers

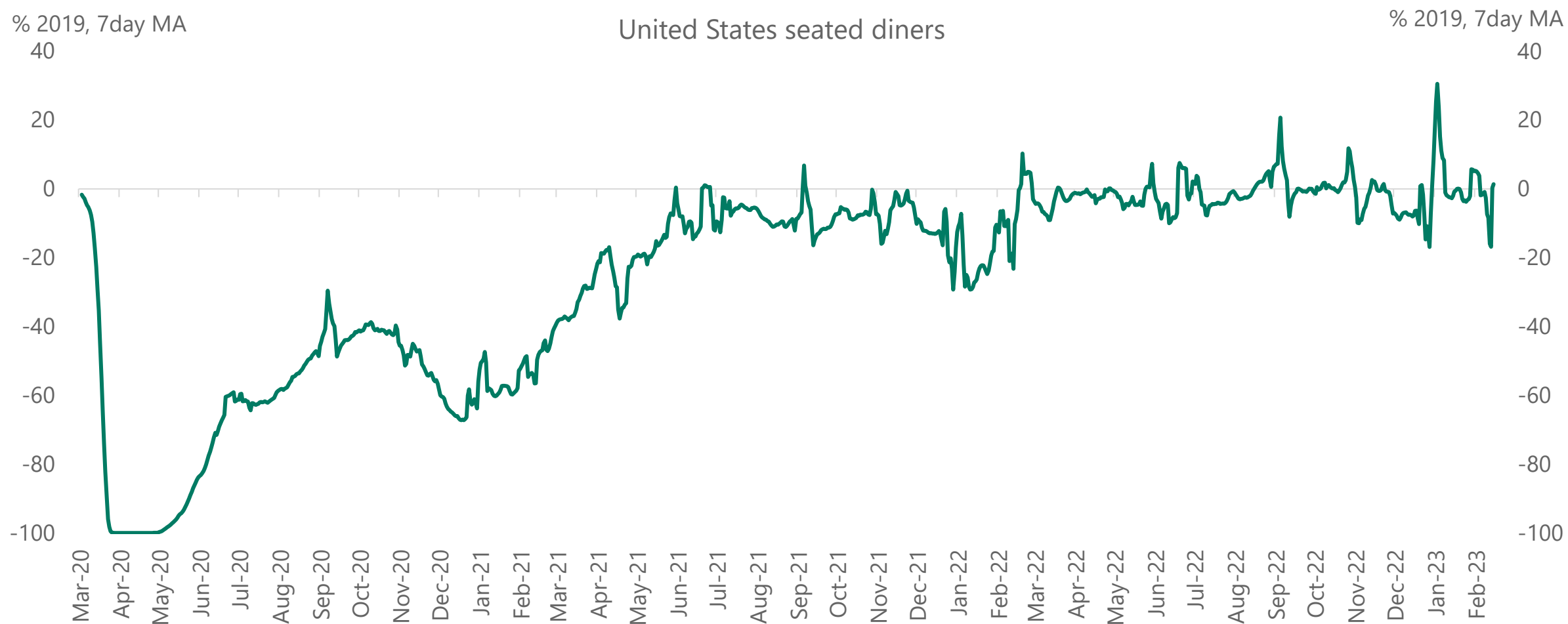


Declining car prices is helping demand

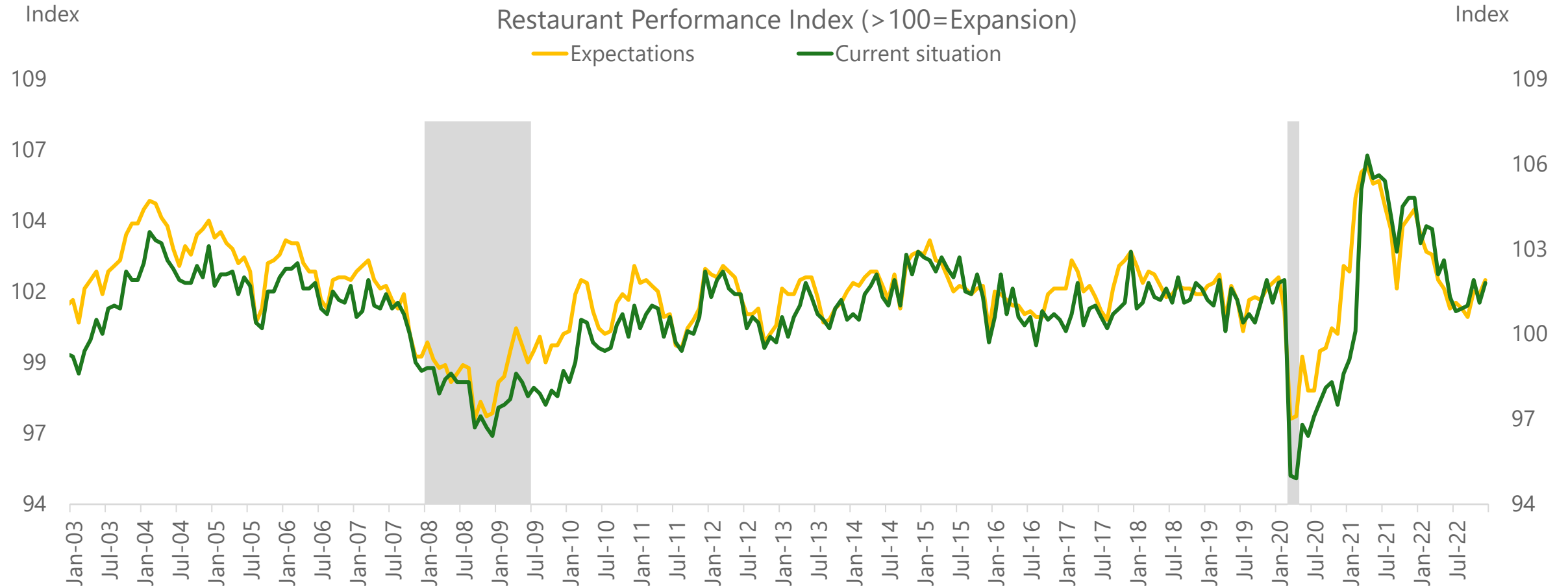


Outlook for spending on restaurants

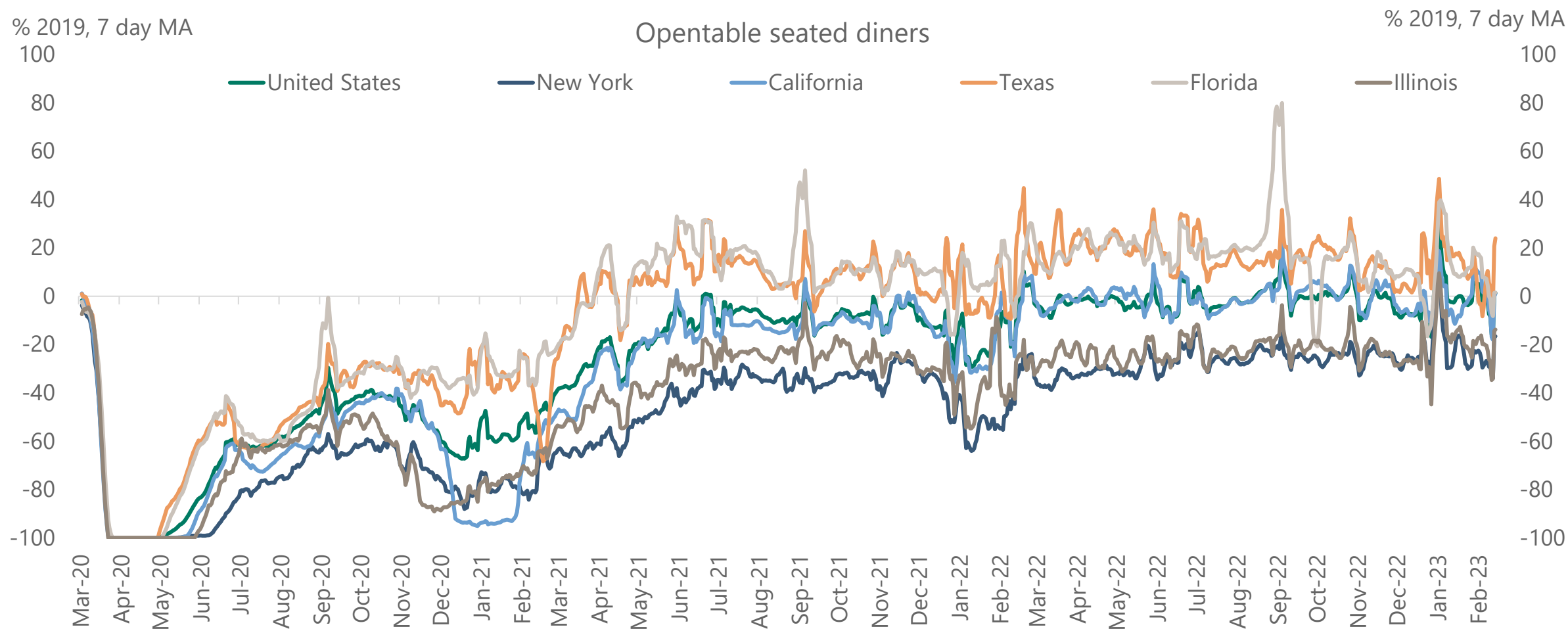
United States restaurant bookings



Restaurant demand rebounding



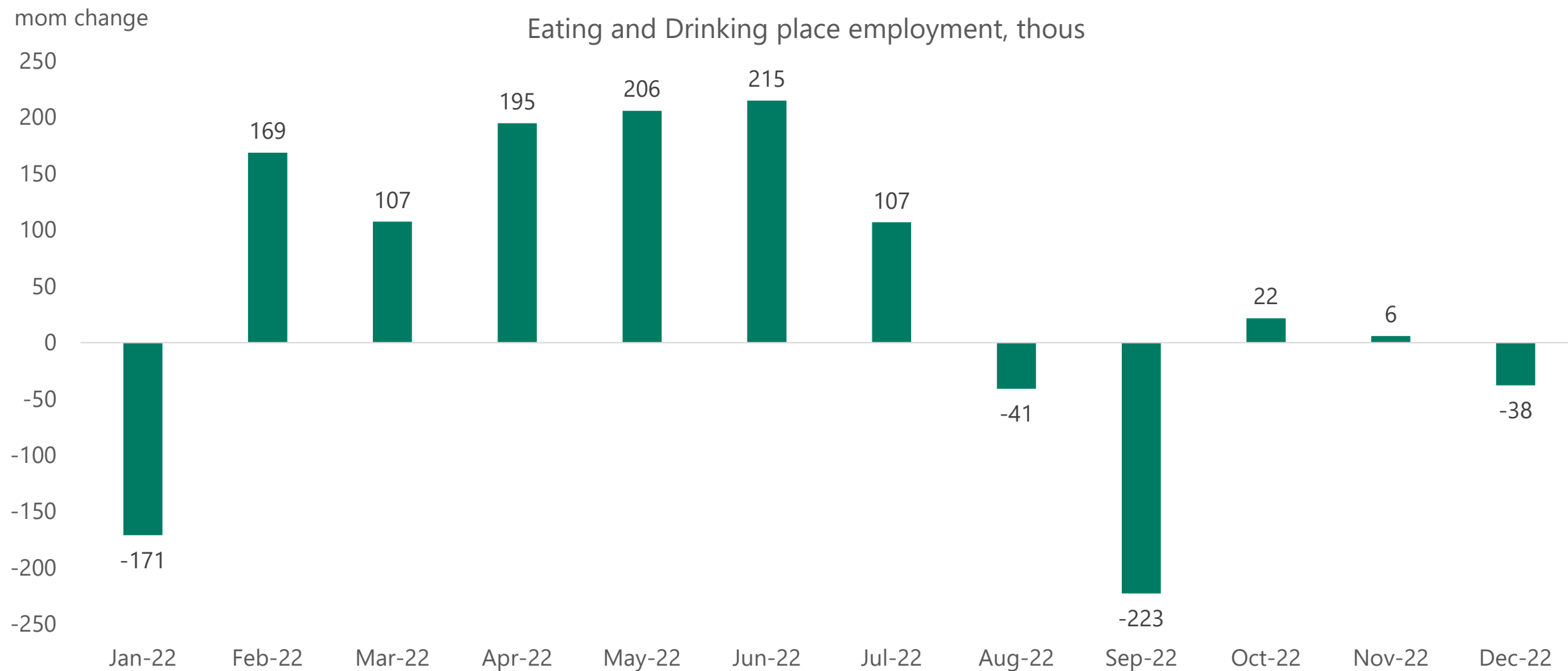
Restaurant bookings still strong



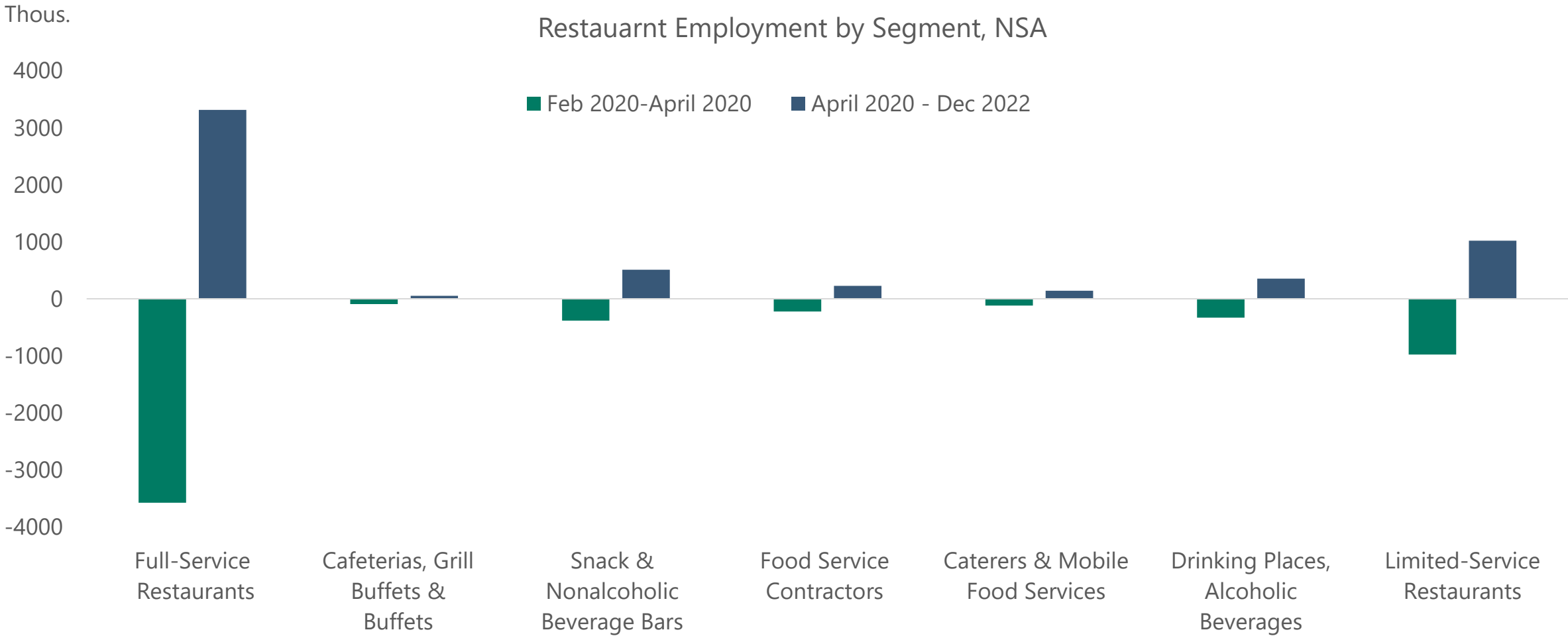
Employment in restaurants and bars approaching pre-pandemic levels



Hiring at Eating and Drinking places

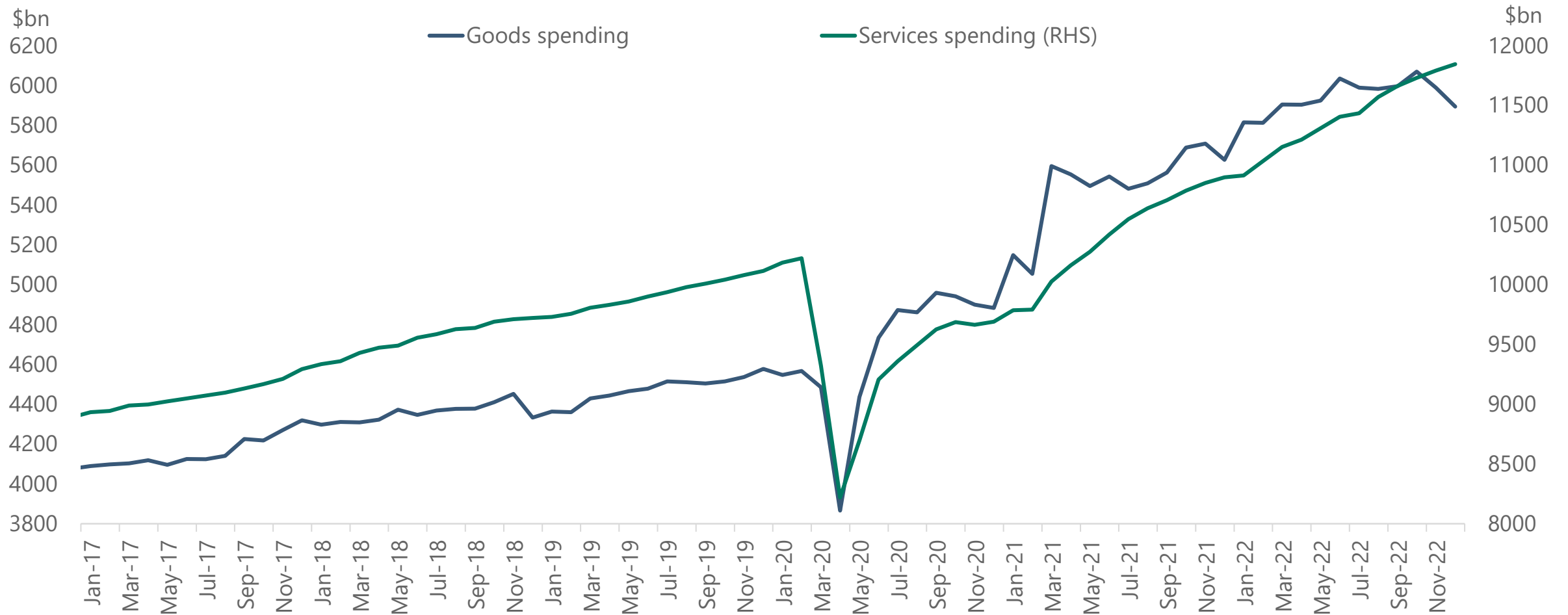


Growth in restaurant employment, by type of restaurant



Source: BLS, Haver, Apollo Chief Economist

Service sector spending significantly above pre-pandemic levels



Stock prices for restaurants and bars



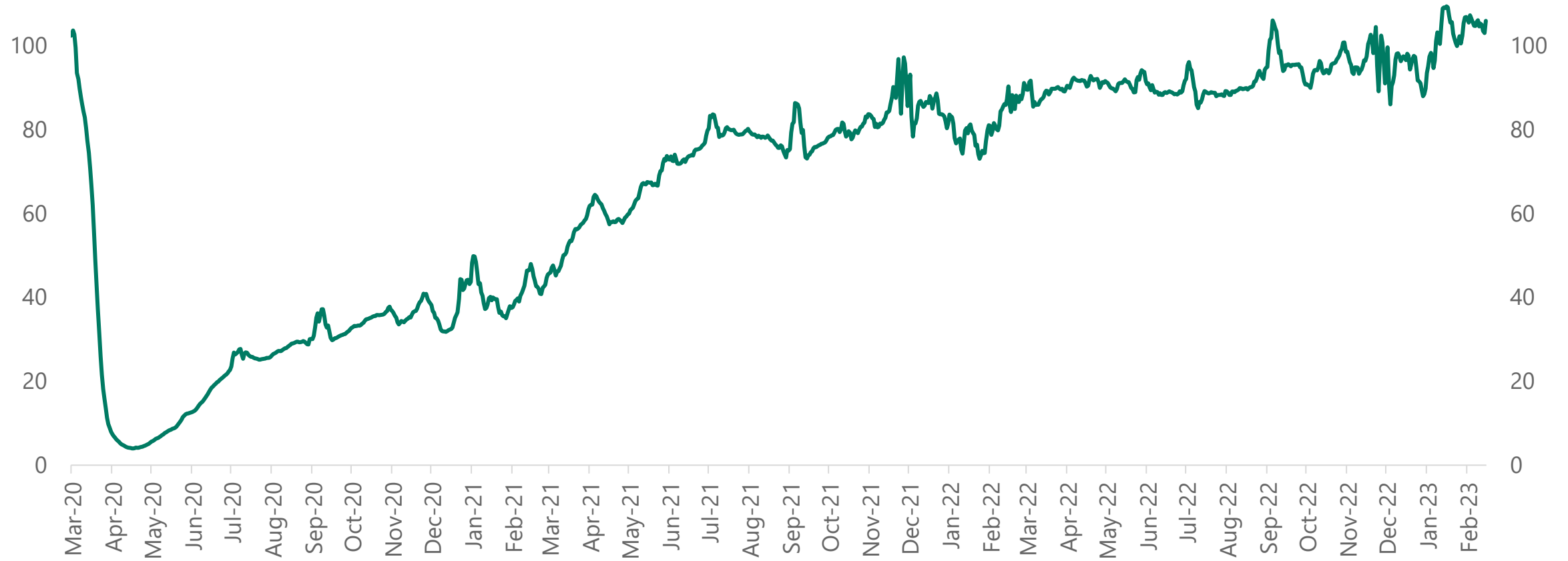
Outlook for spending on travel

TSA: US air travel still strong

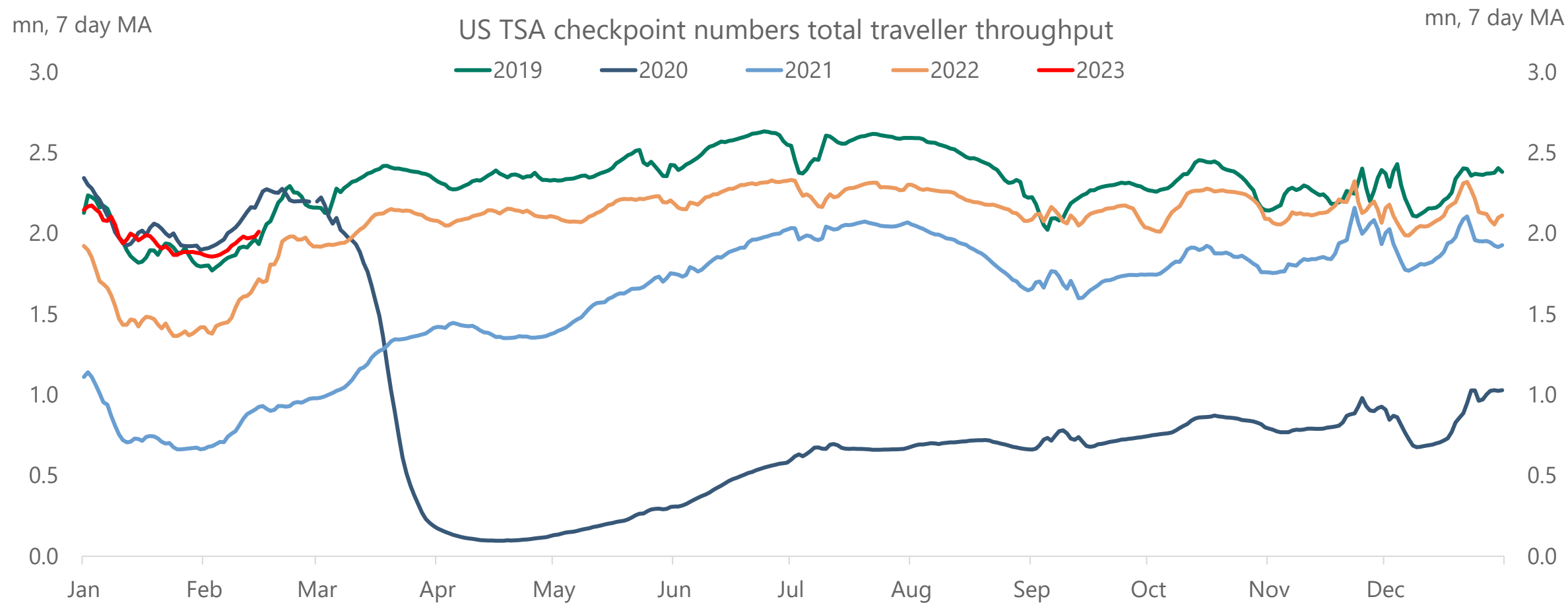
% of 2019, 7 day MA

US TSA checkpoint numbers total traveller throughput

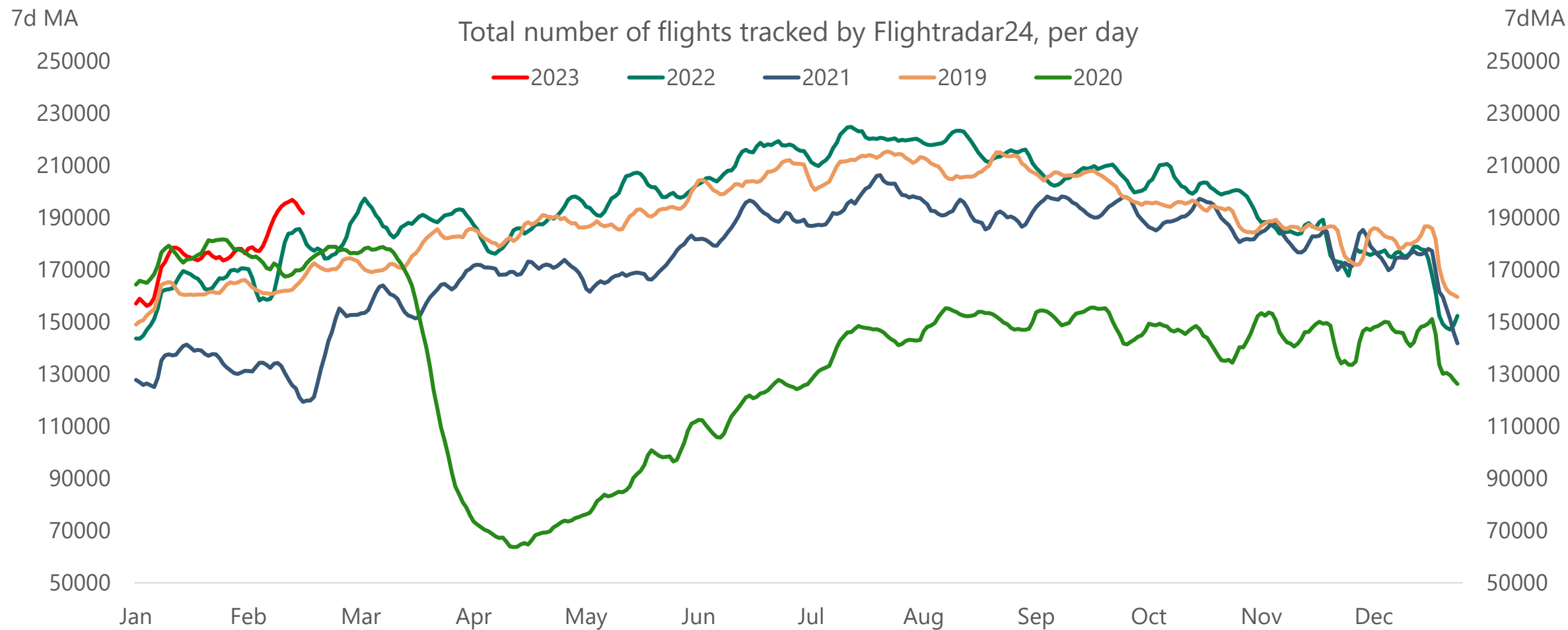
% of 2019, 7 day MA



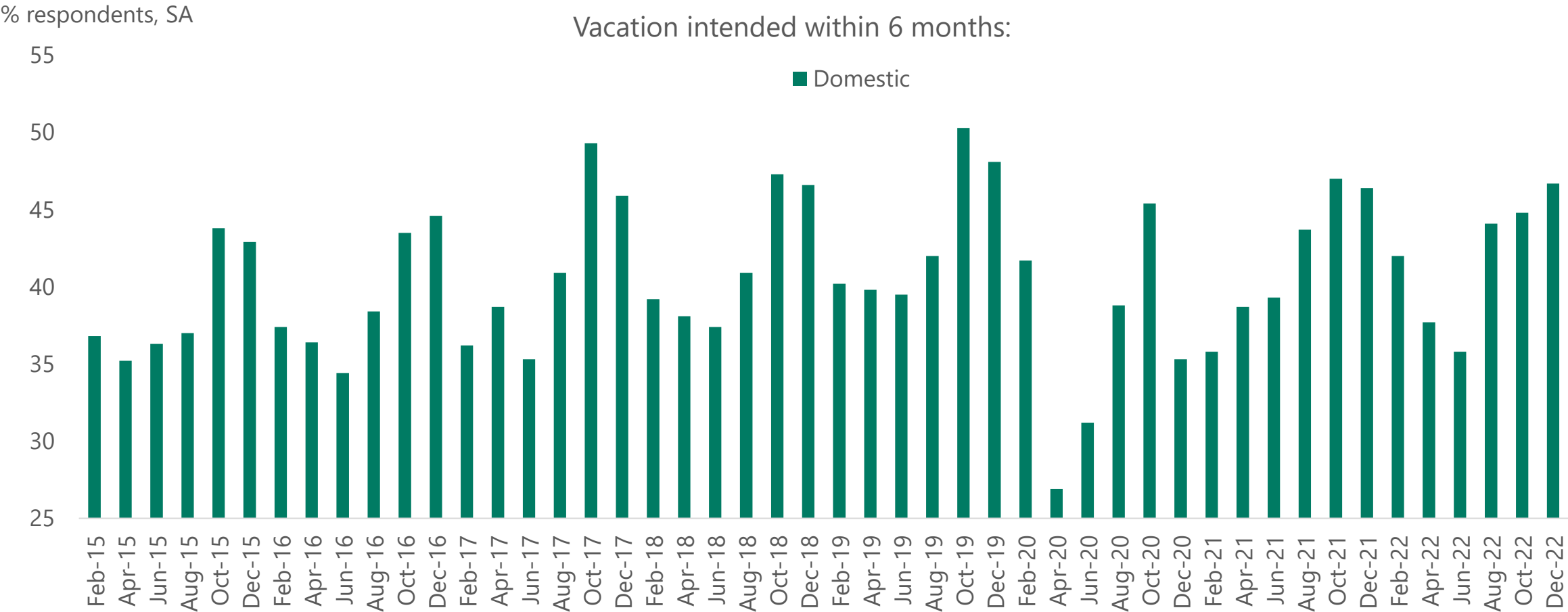
US air travel still strong



Global air traffic still high



Vacation intentions: Within the US



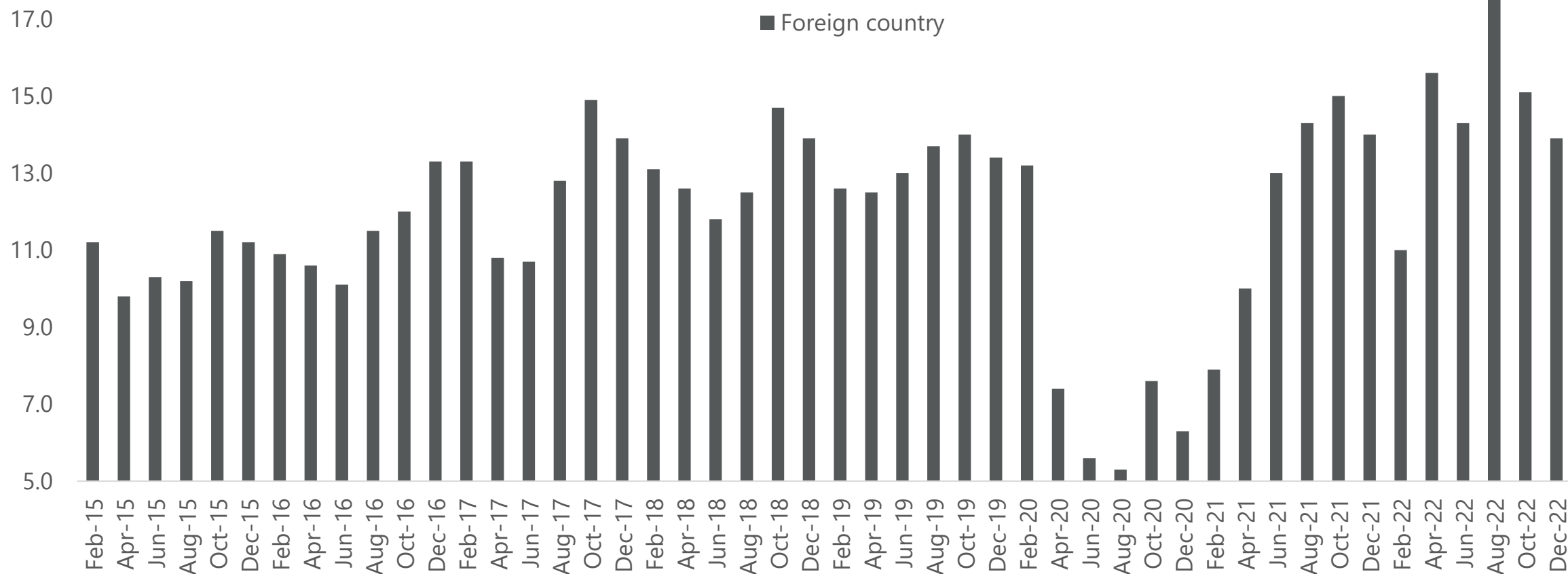
Source: Conference Board, Apollo Chief Economist

Vacation intentions to a foreign country

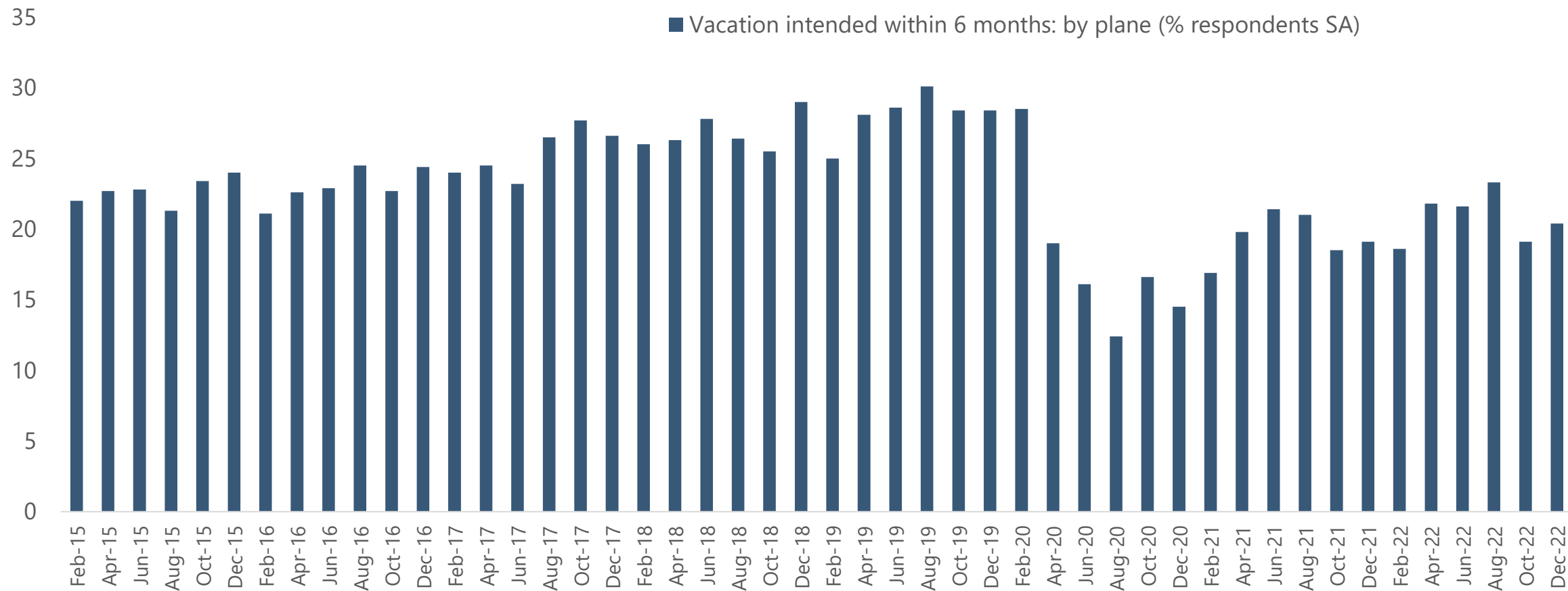
% respondents, SA

Vacation intended within 6 months:

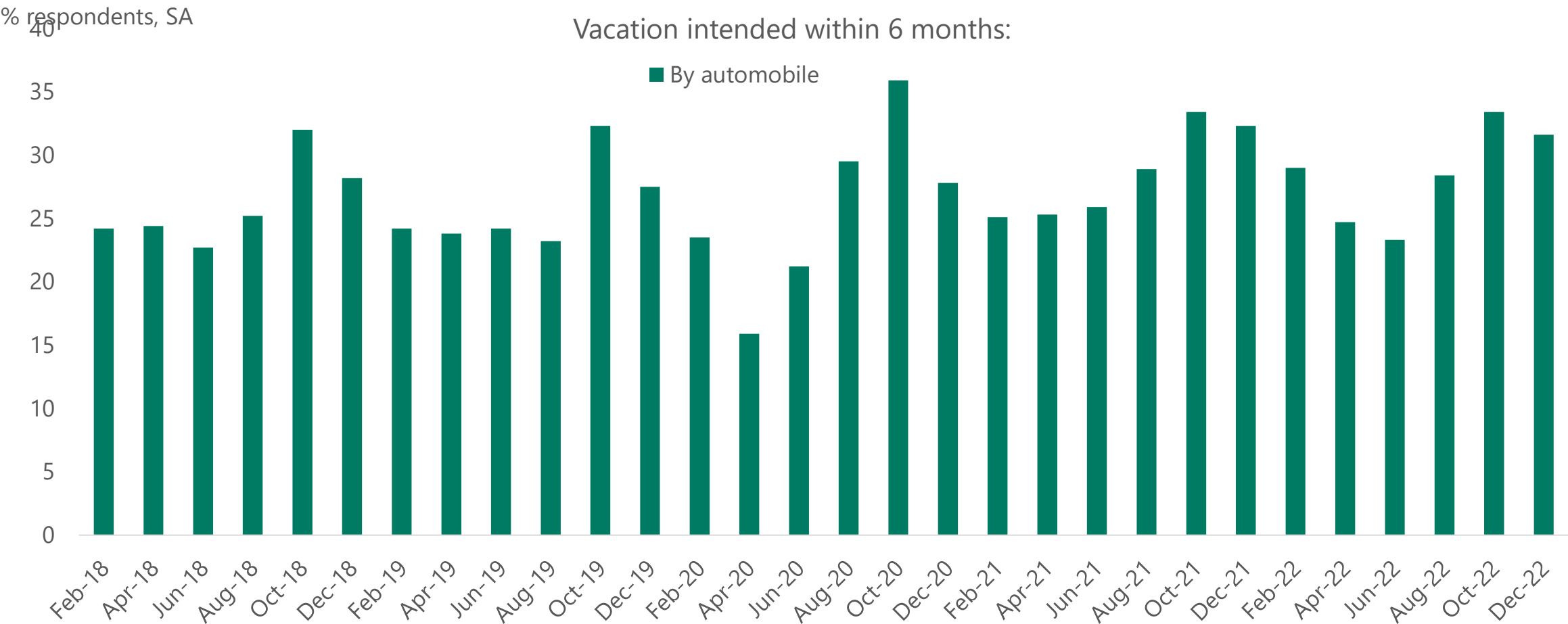
■ Foreign country



Vacation intentions: By plane

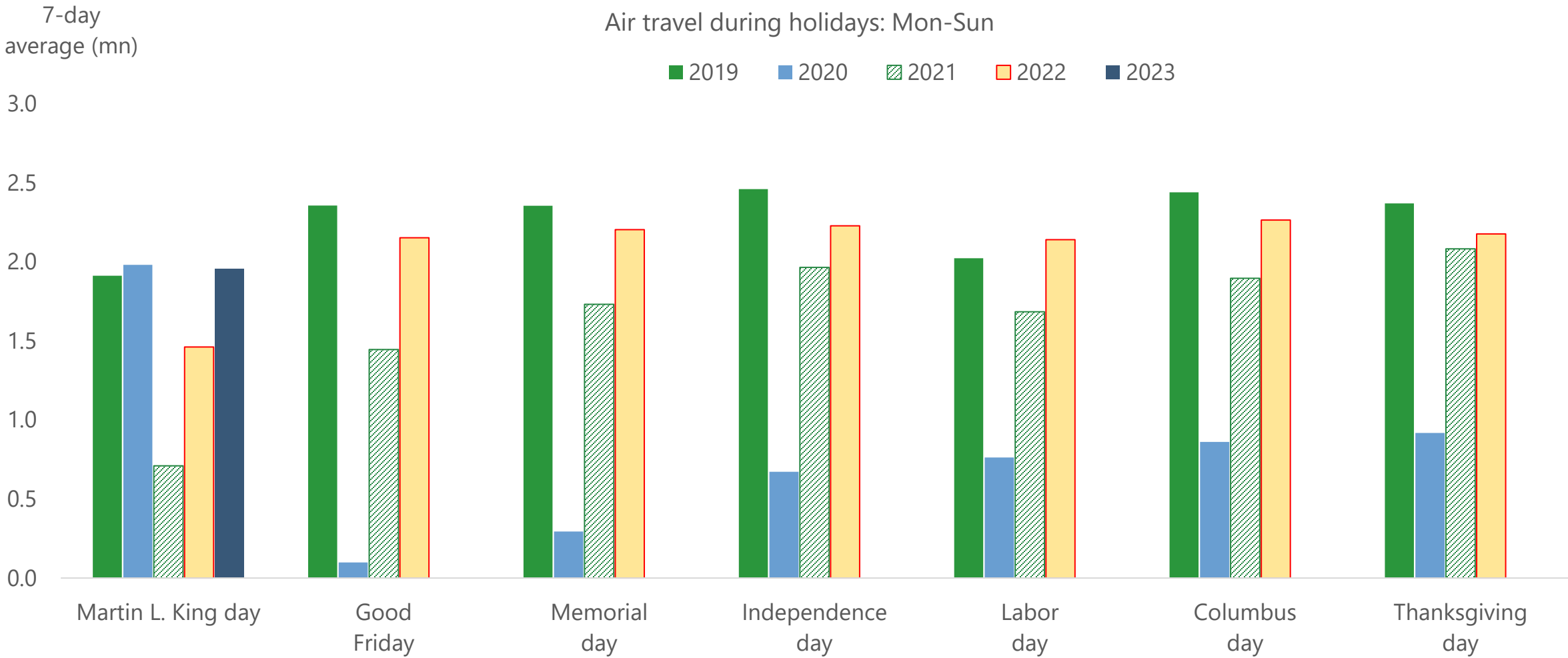


Vacation intentions: By car



Source: Conference Board, Apollo Chief Economist

Air travel during holidays back to pre-pandemic level



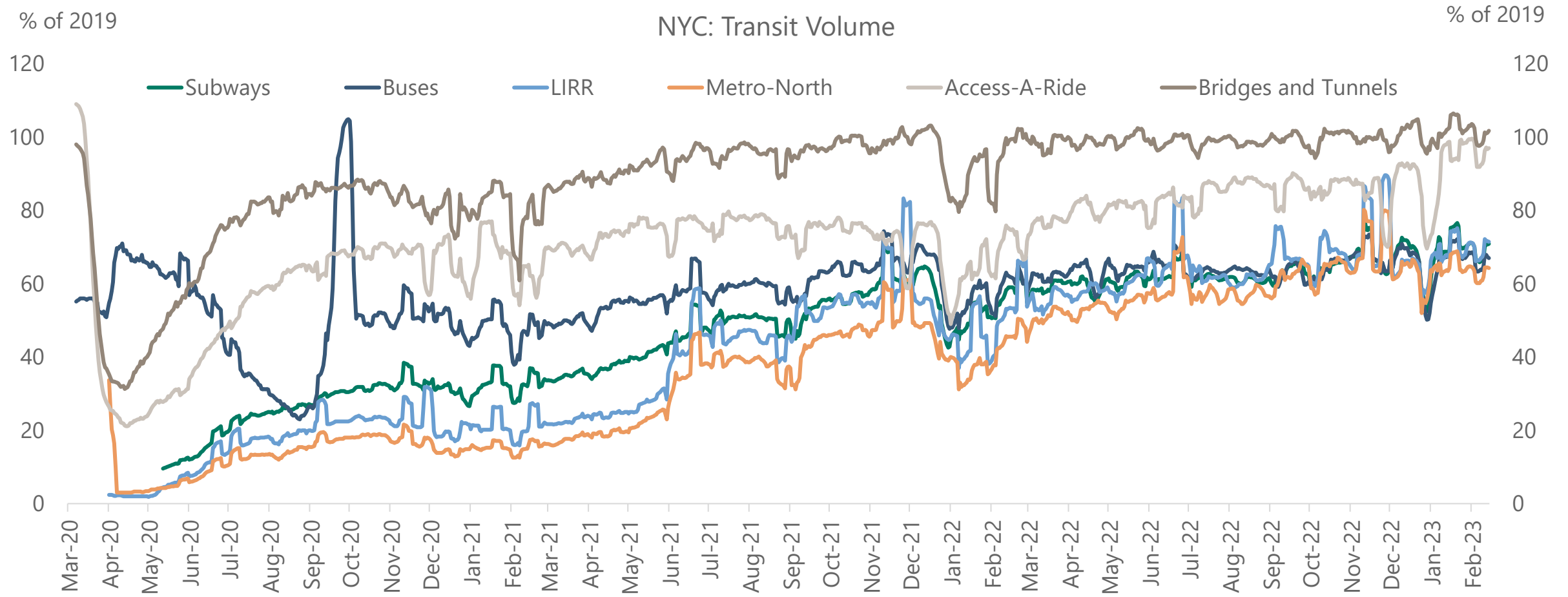
Source: TSA, Apollo Chief Economist

Las Vegas visitor volumes have fully recovered

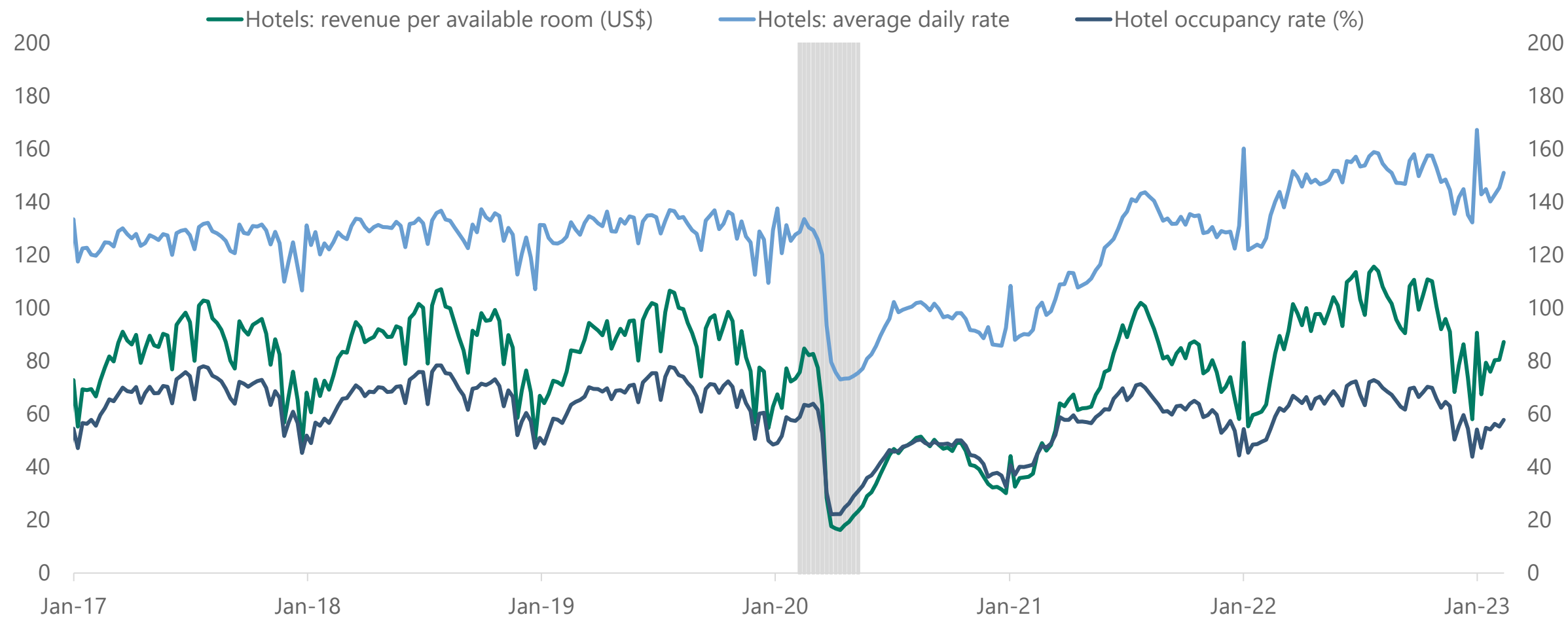


Source: Las Vegas Convention and Visitors Authority, Apollo Chief Economist

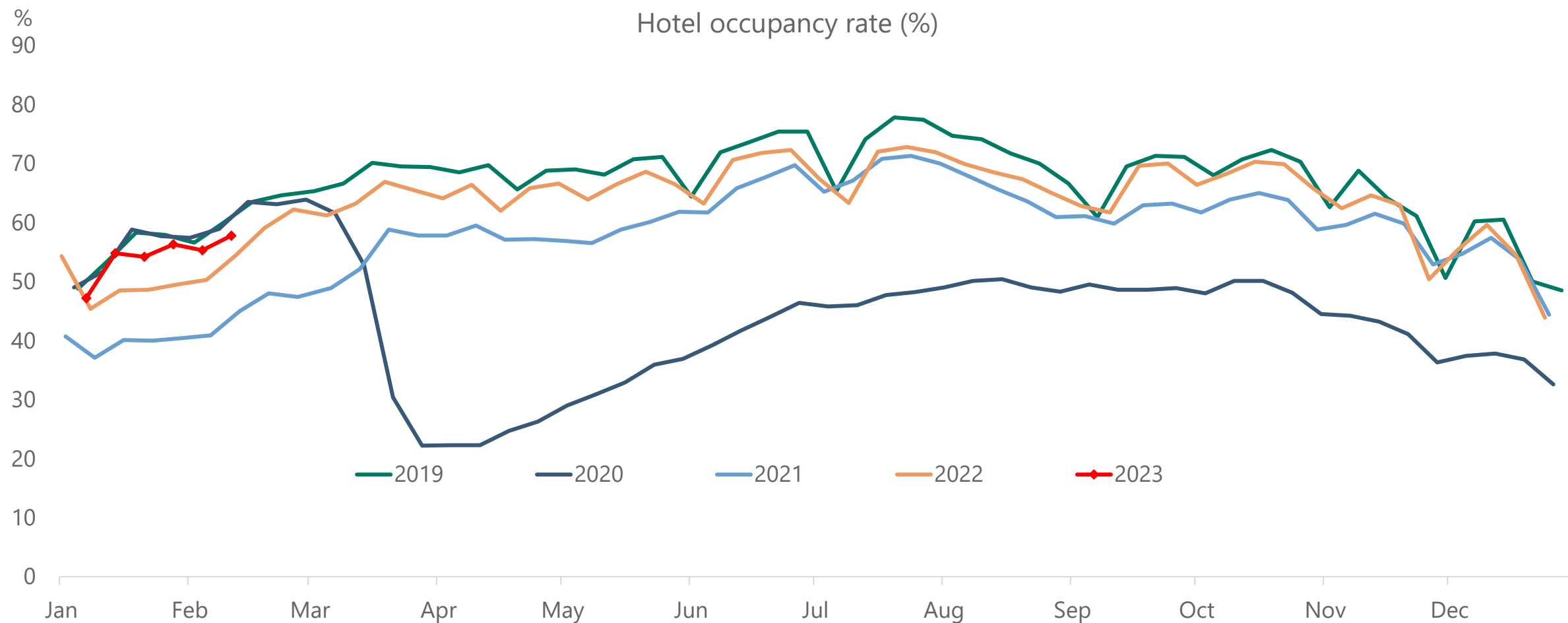
NYC mobility indicators improving



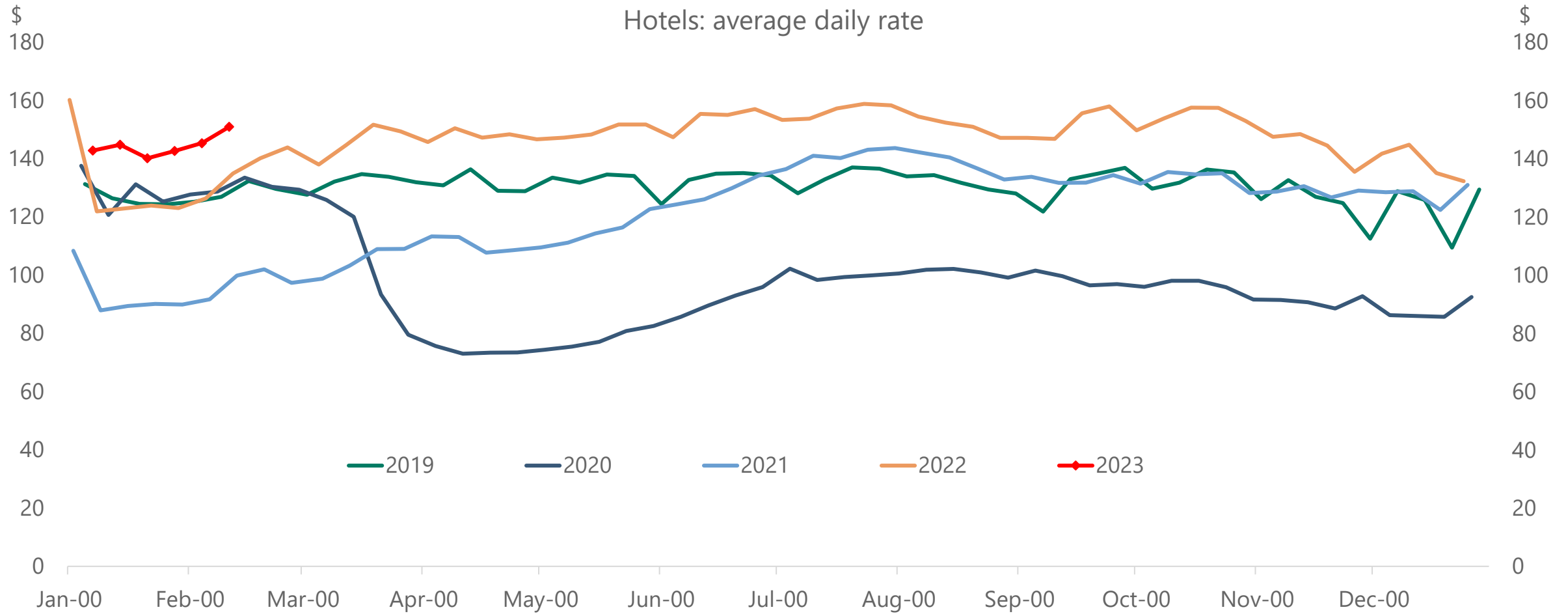
Weekly data for hotel demand still strong



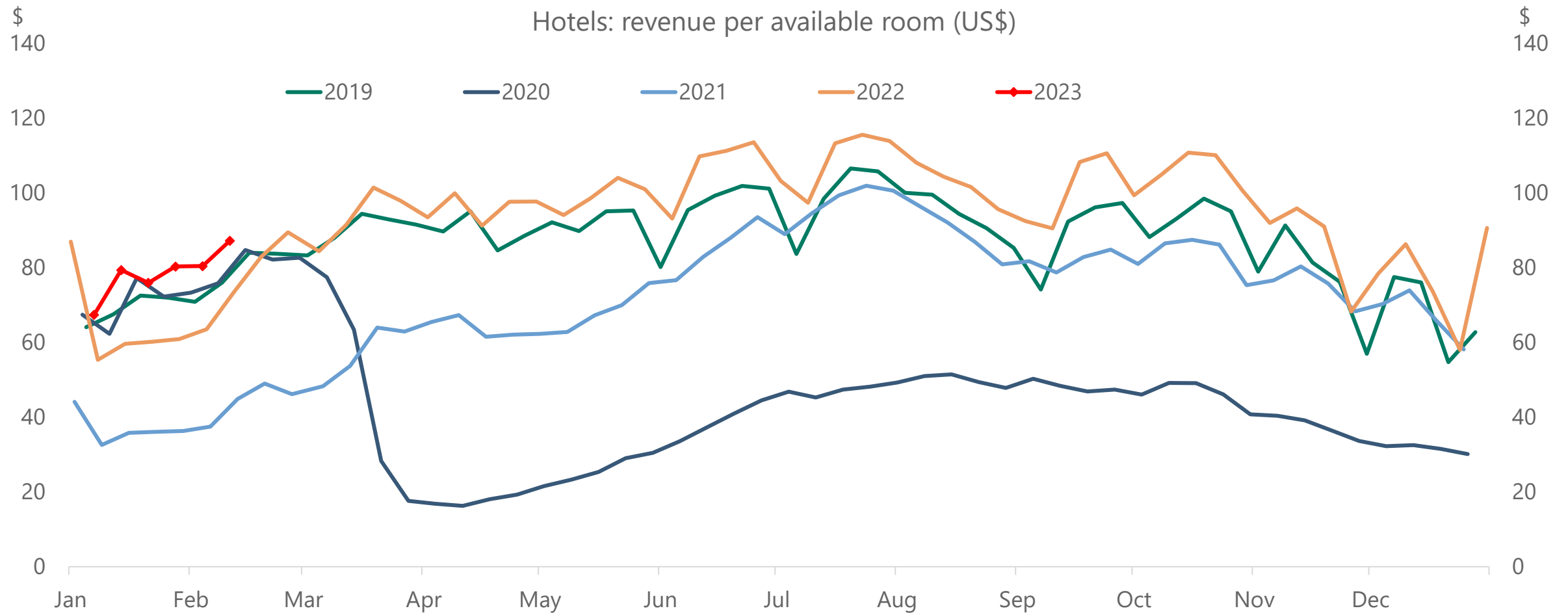
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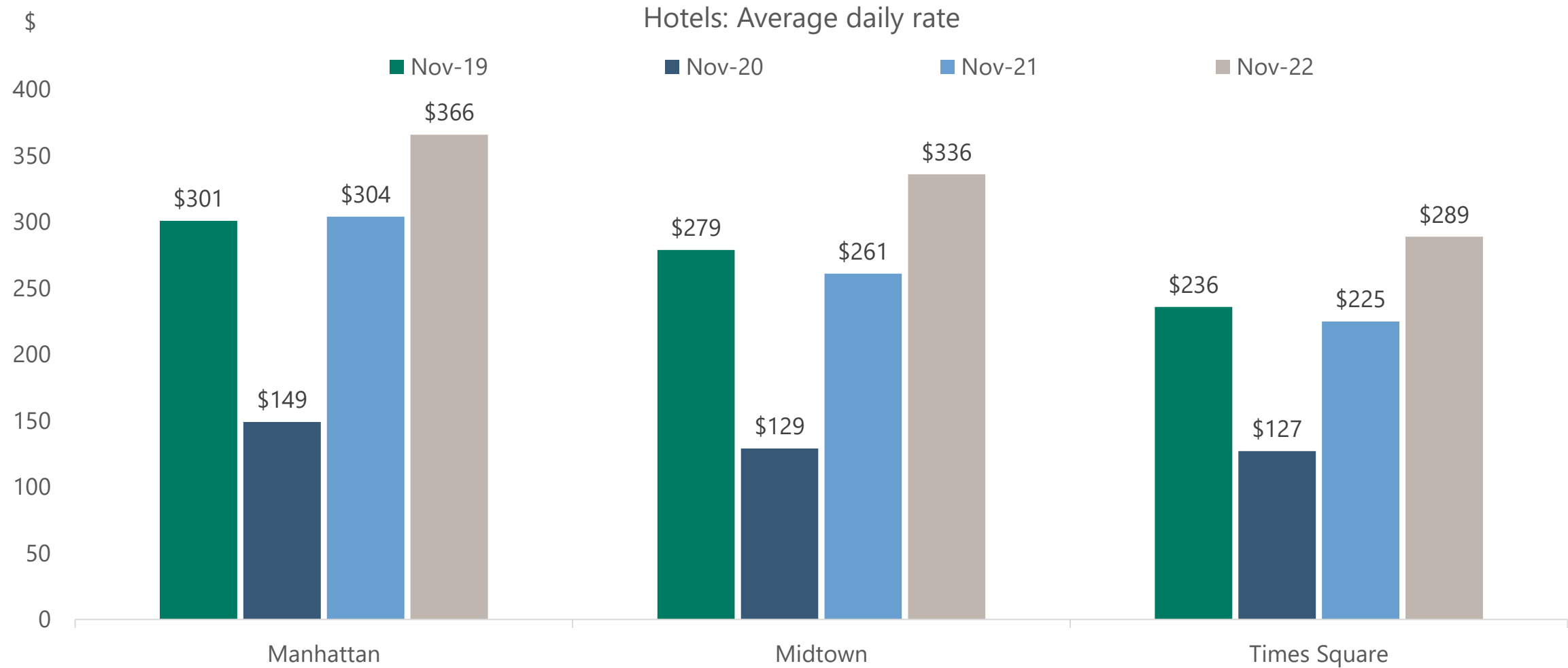
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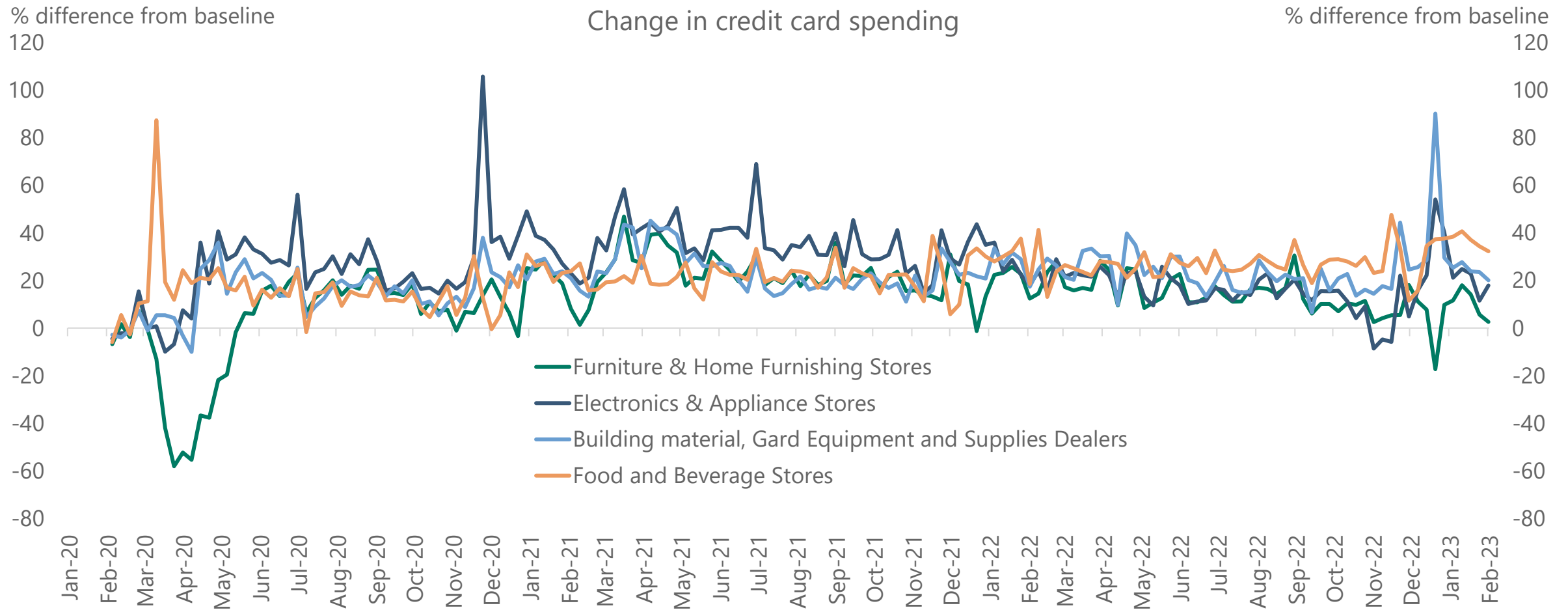
Hotel prices are now above pre-pandemic levels



Source: Timessquarenyc.org, Apollo Chief Economist

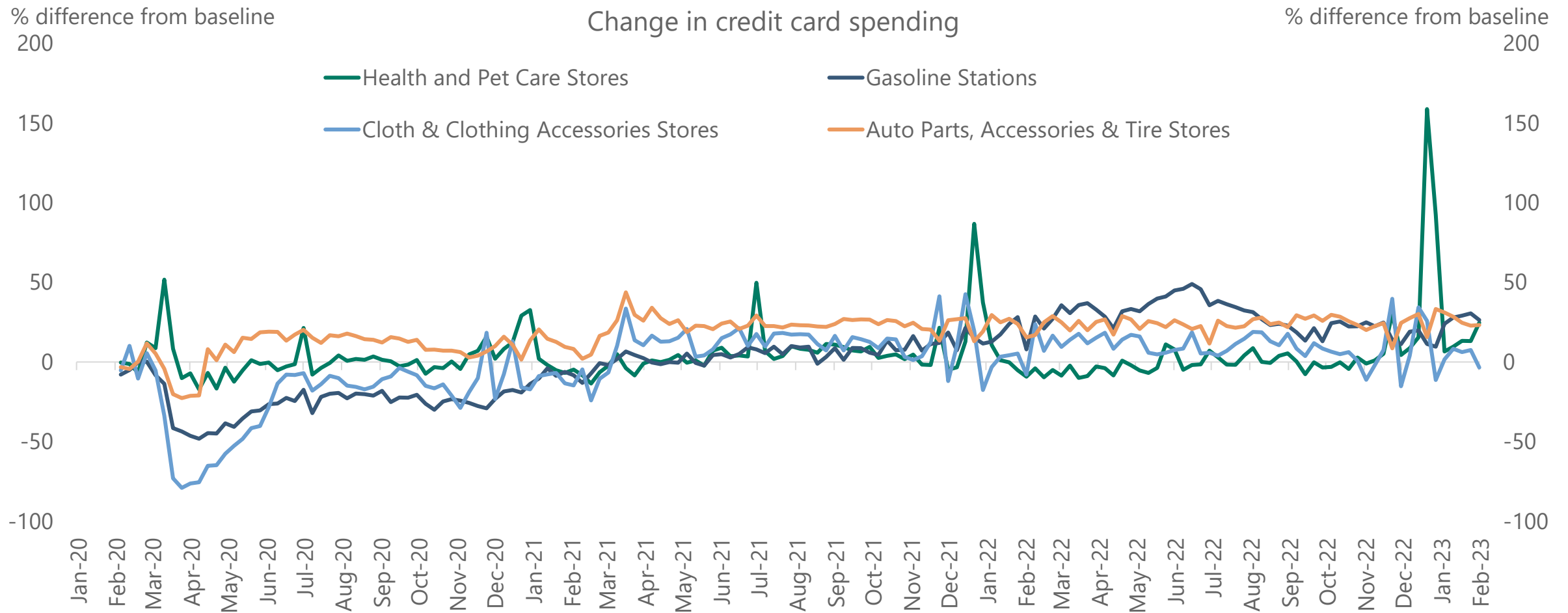
Outlook for spending on
other consumer goods

US consumer still strong, some weakness emerging in furniture sales



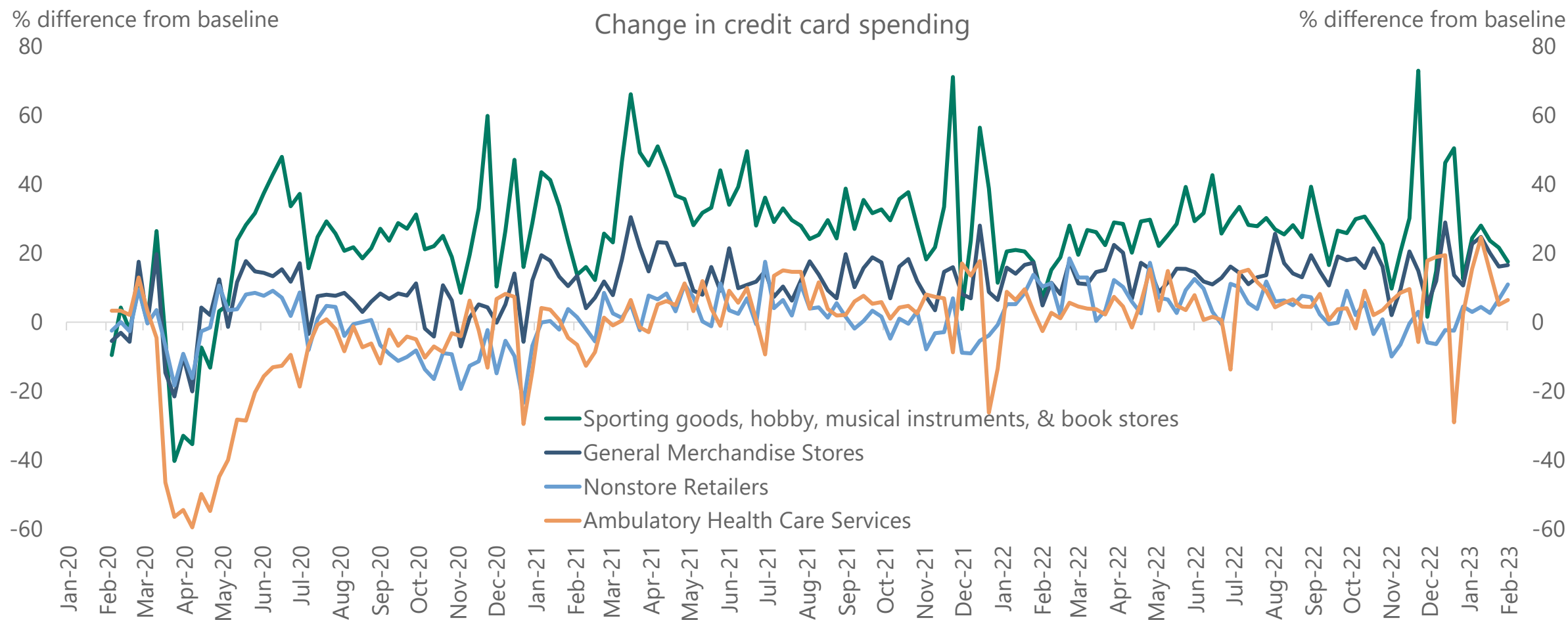
Source: BEA, Haver analytics, Apollo Chief Economist. Note: The weekly values represent the predicted percentage difference from the typical level of spending (prior to the pandemic declared by the World Health Organization on March 11, 2020) after adjusting for day-of-week, month, and year effects,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

US consumer still strong



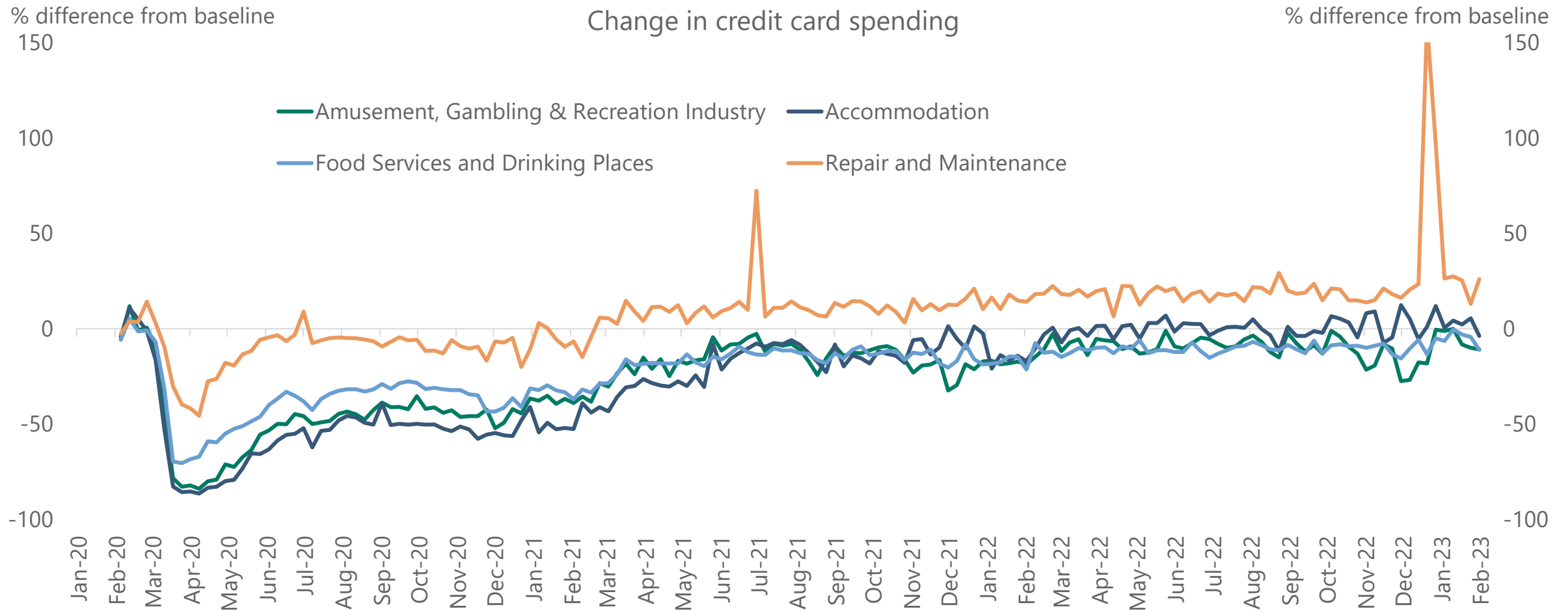
Source: BEA, Haver analytics, Apollo Chief Economist. Note: The weekly values represent the predicted percentage difference from the typical level of spending (prior to the pandemic declared by the World Health Organization on March 11, 2020) after adjusting for day-of-week, month, and year effects,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

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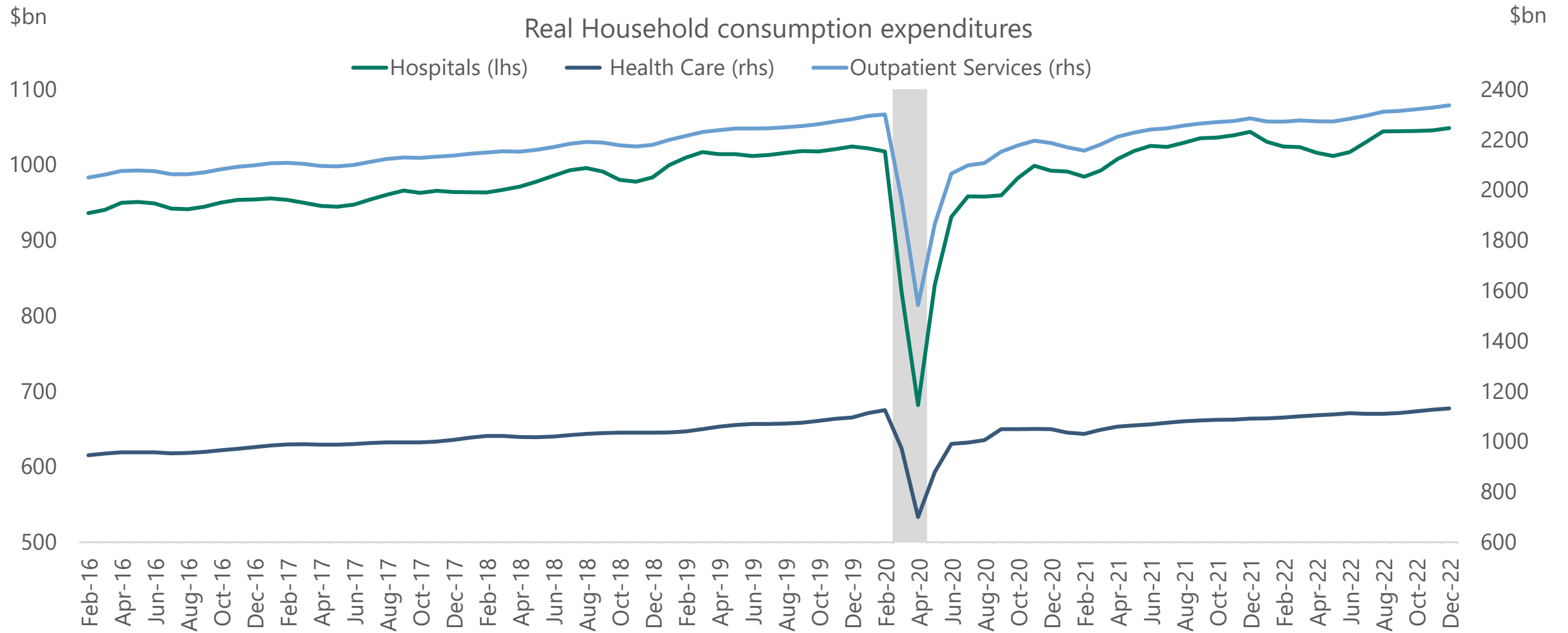
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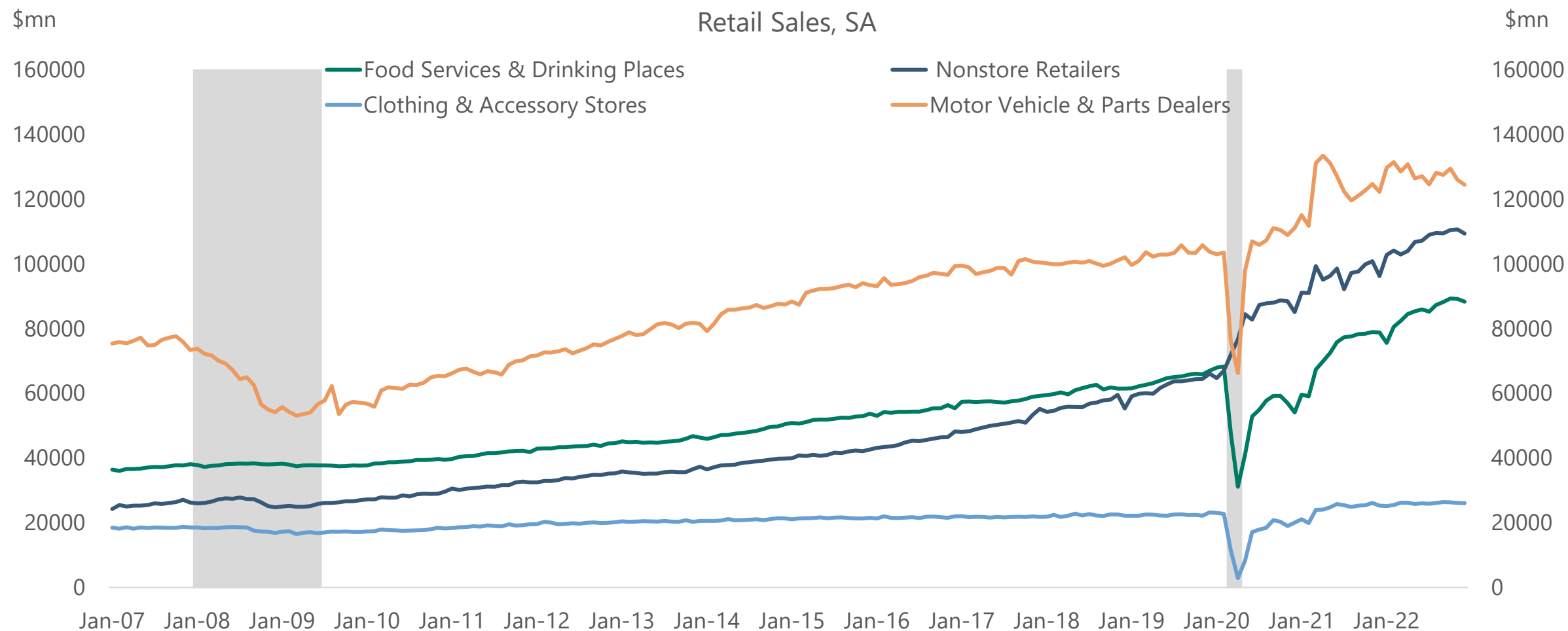


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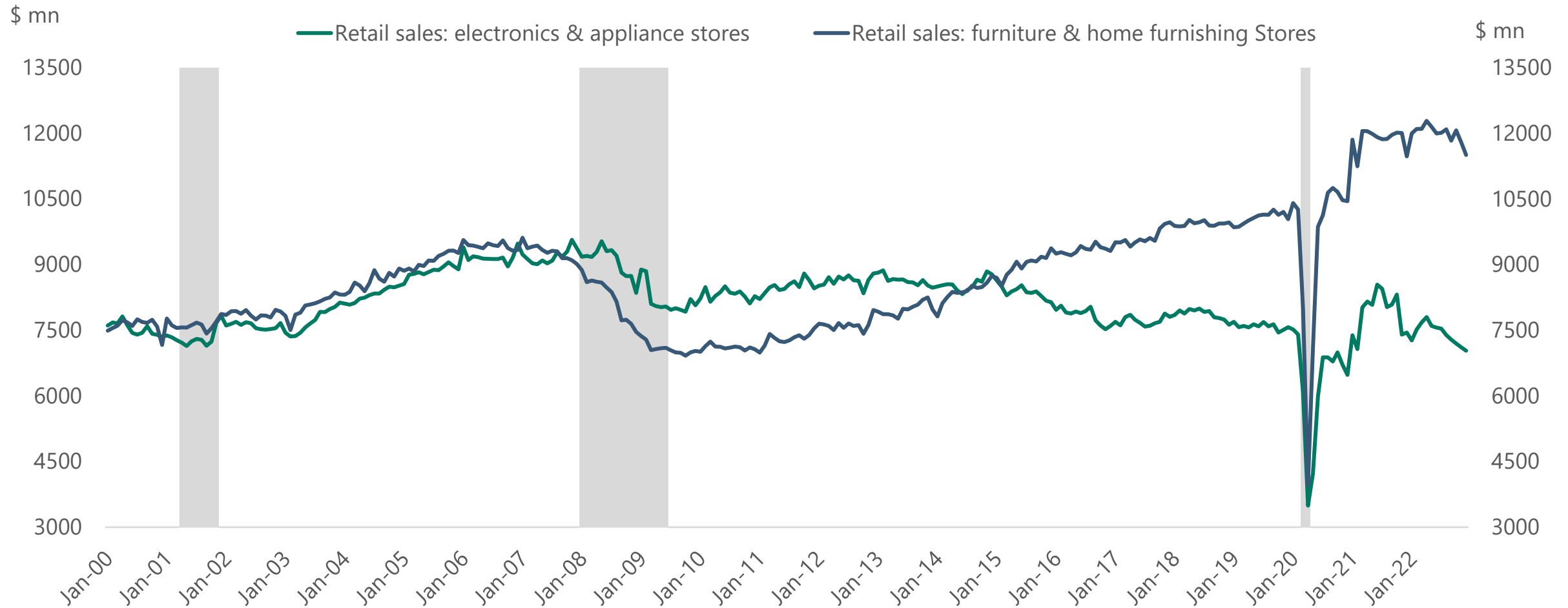
Health care spending at pre-pandemic trend



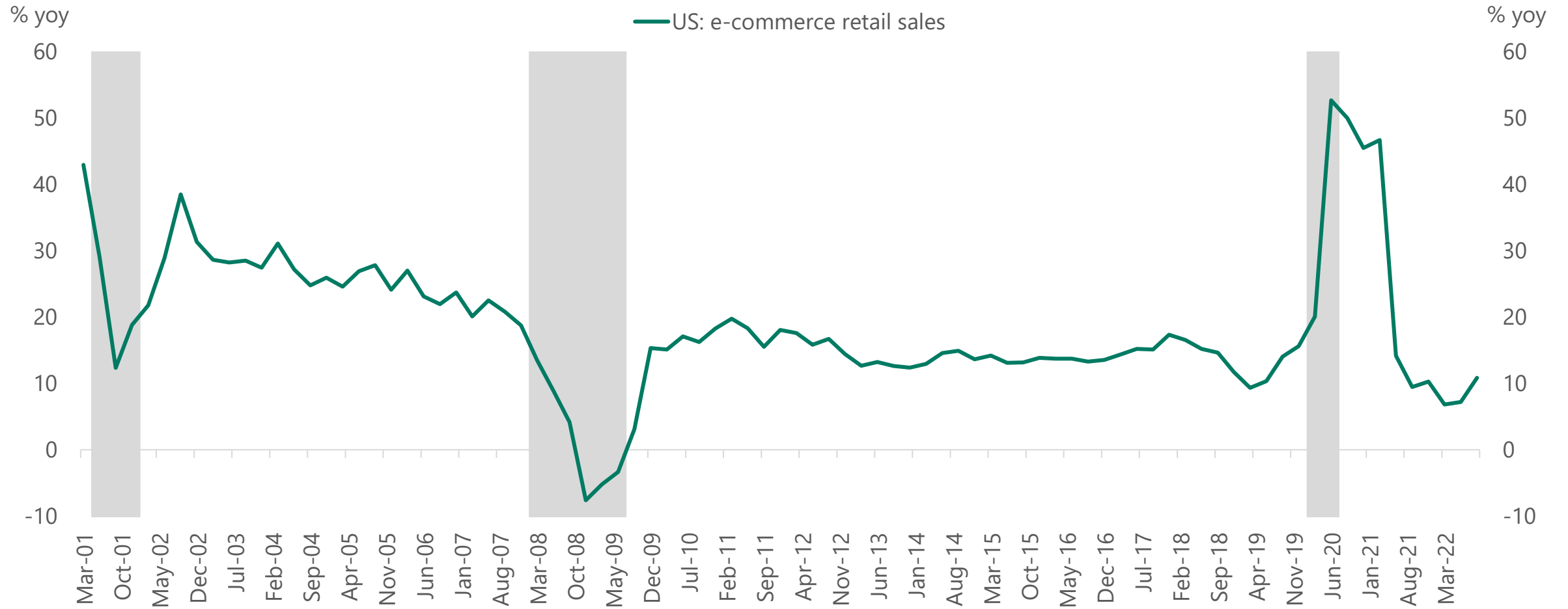
Retail sales across different spending categories



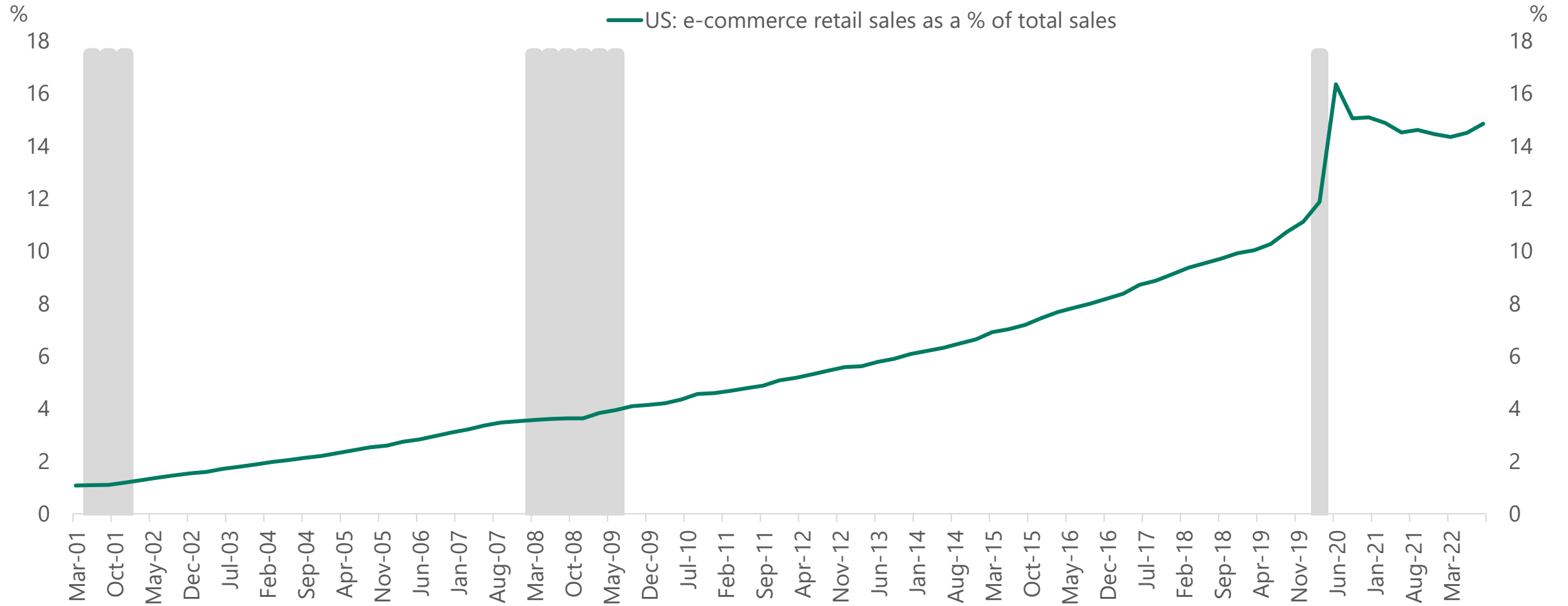
Some slowdown in sales of Furniture and Electronics and appliances, likely because these items require financing



E-commerce retail sales stabilizing



Online shopping as a share of total consumer spending coming back to trend



Conclusions

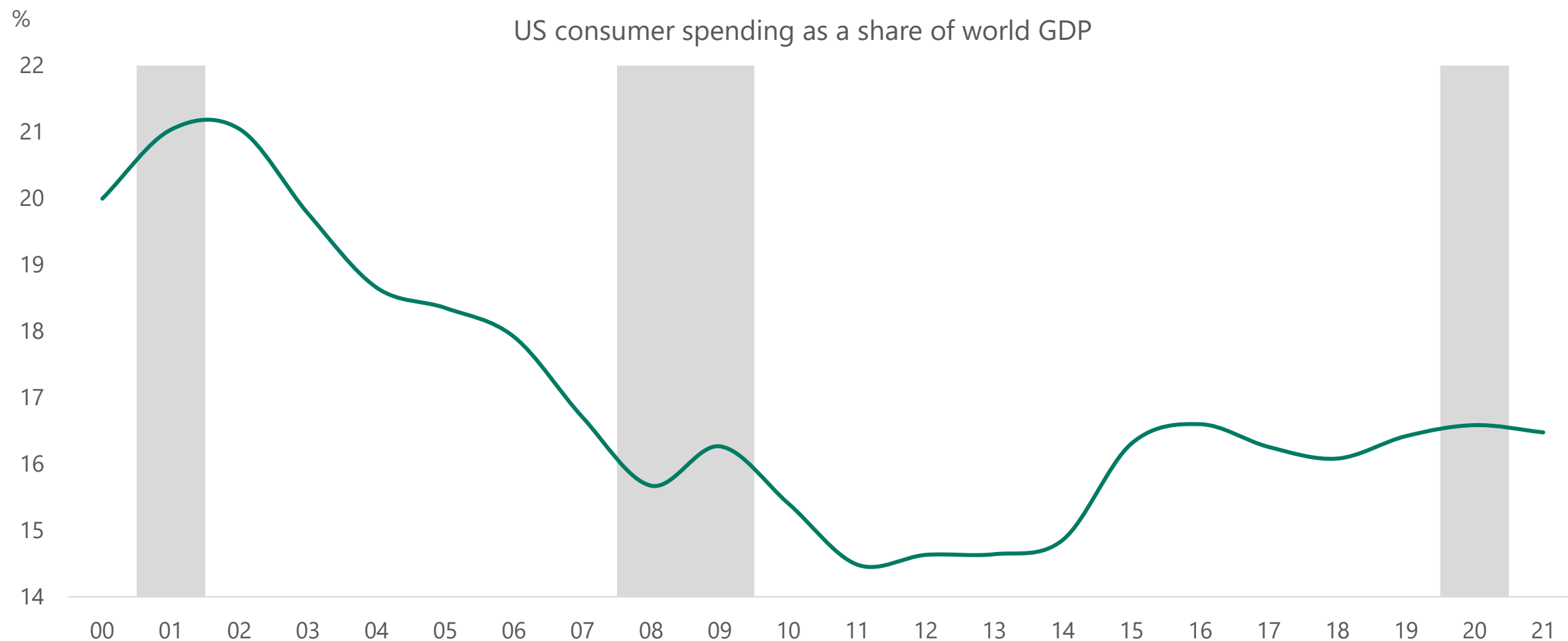
Key conclusions

Consumer spending growth remains solid, driven by:

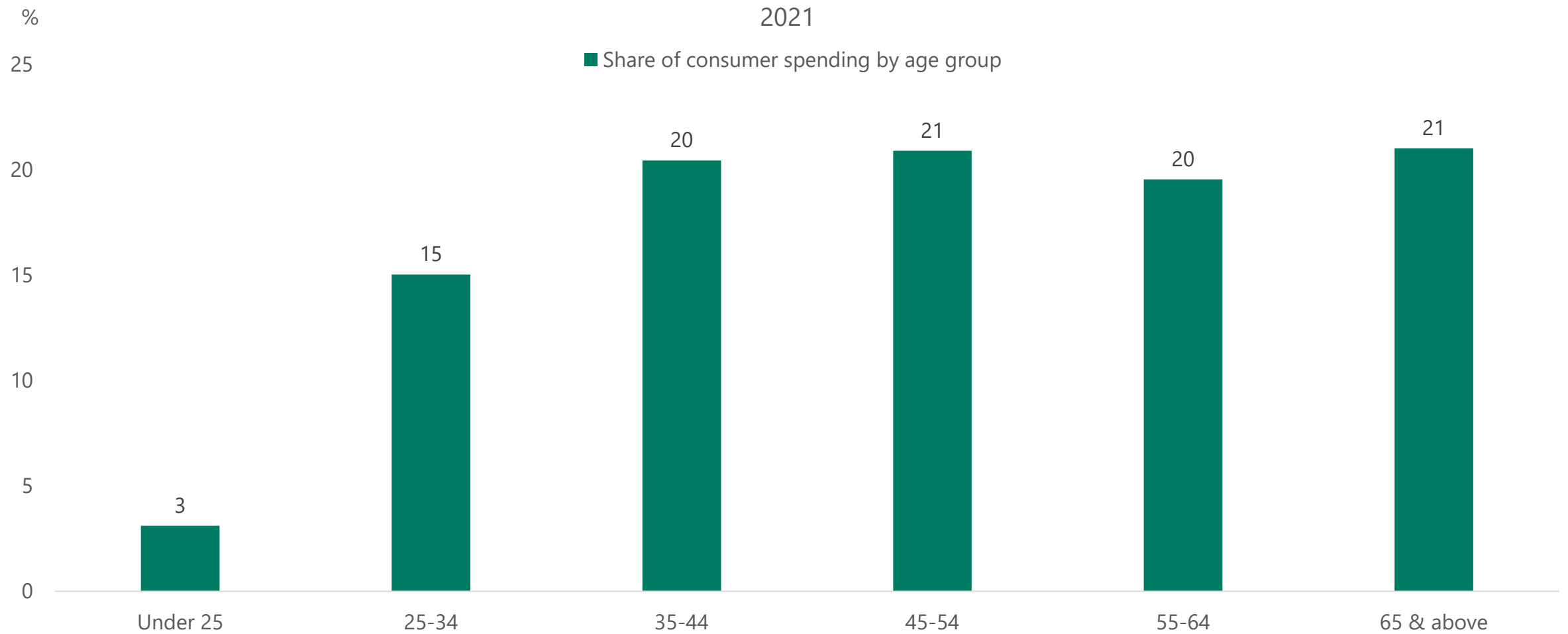
- 1) The virus subsiding and more people going to restaurants, flying on airplanes, and staying at hotels**
- 2) Robust wage growth**
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- 4) High levels of excess savings and elevated levels of wealth, driven by high home prices and high stock prices**

Risks to the outlook for the consumer are higher interest rates, a rise in unemployment, and high inflation making many purchases such as cars, gas, and homes too expensive.

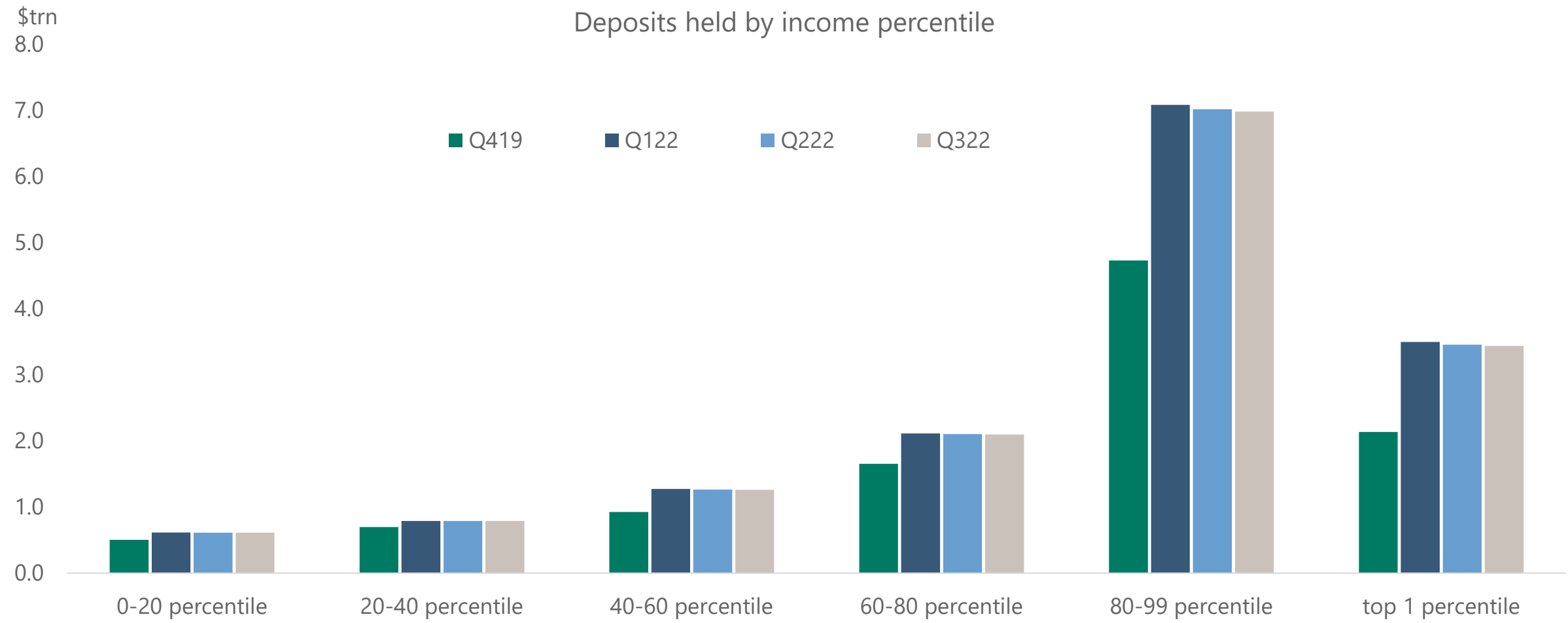
US consumer makes up 16.5% of global GDP



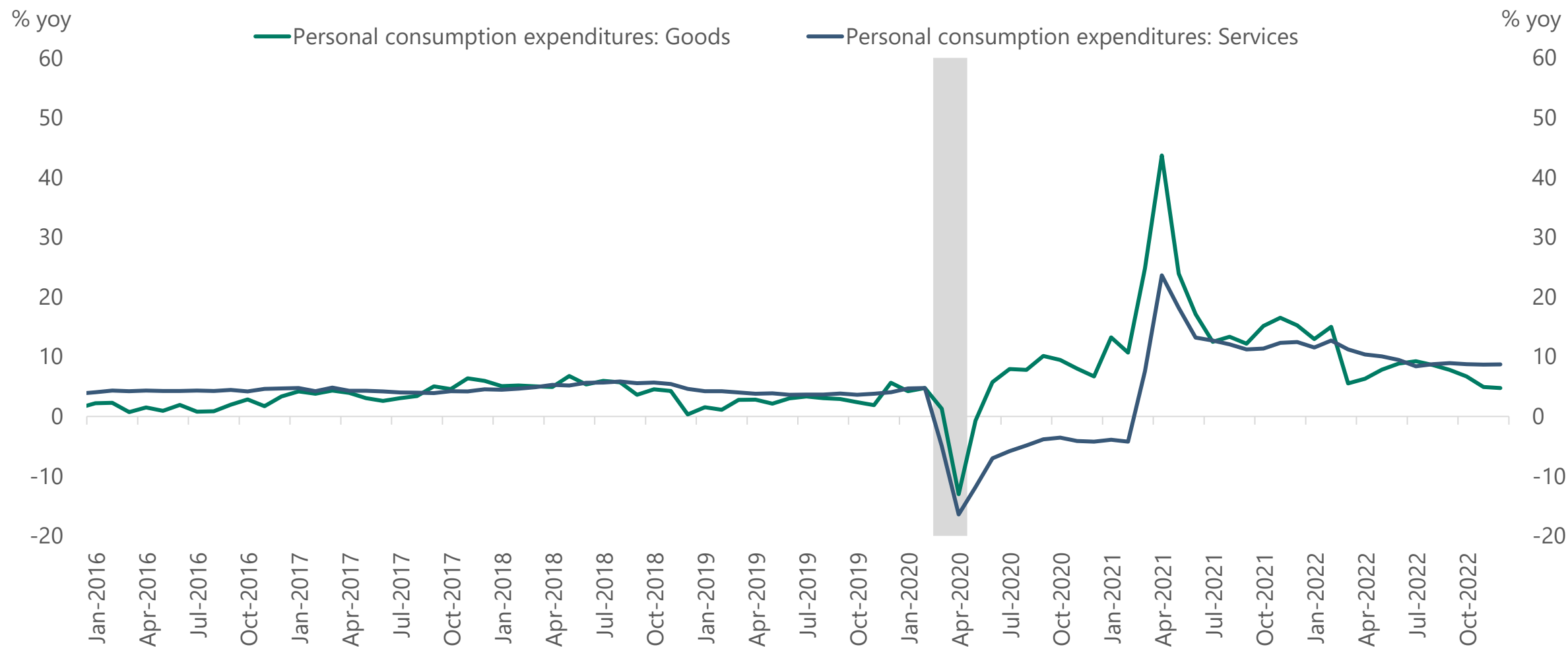
People age 55 and above account for 41% of total consumer spending



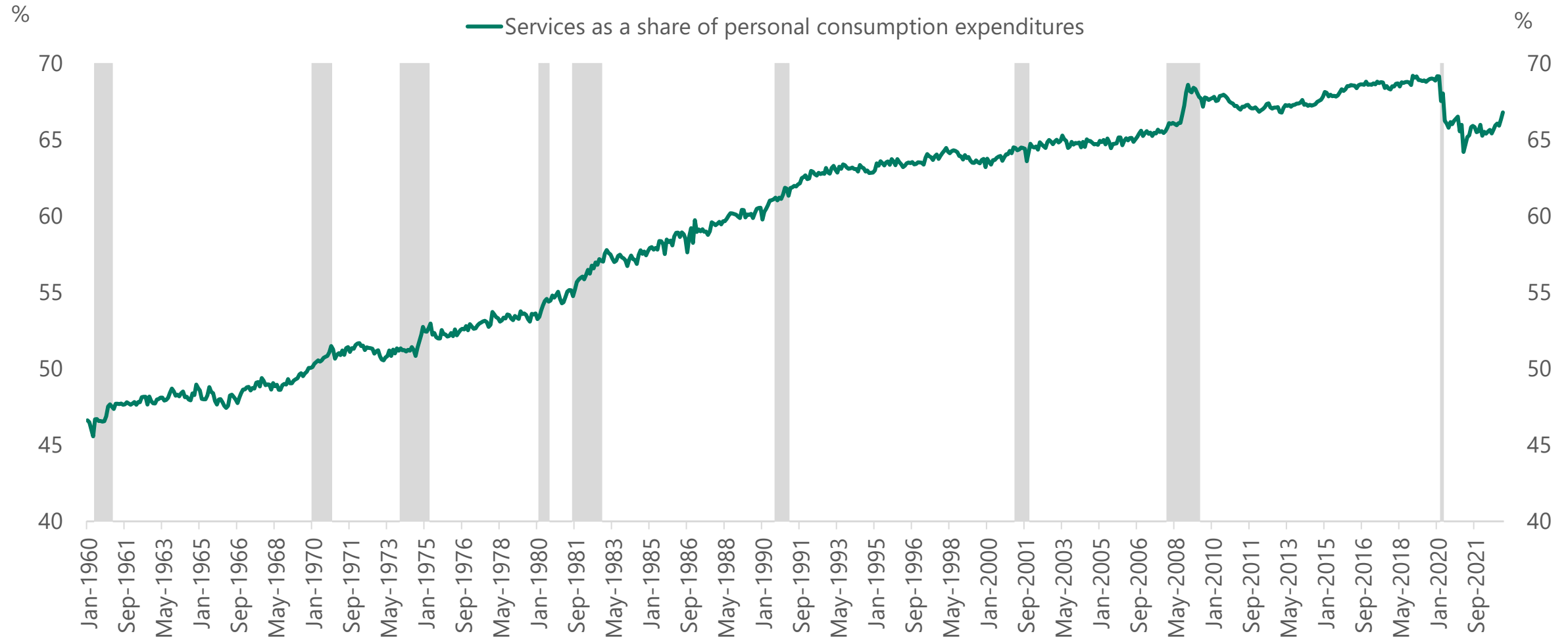
Household savings across different income groups



Change in personal consumption expenditures on goods and services



Spending on services declined during pandemic





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.