Connecting macro to sector: health sciences and wellness

EY-Parthenon Macroeconomics Team and firm industry leadership

June 2023

EY Parthenon

Building a better working world

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Executive summary: considerations across health sciences and wellness

Providers

- Providers continue to face margin pressure as a result of slower consumer spending and increasing labor and supply costs coupled with reimbursements that have not caught up. This is especially acute for labor-intensive provider businesses.
- Overall health care employment has surpassed pre-COVID-19 levels. However, structural personnel shortages remain a long-run risk for health systems.
- Making productivity-enhancing capital investments will be critical to alleviate cost pressures amidst a high-interest-rate environment.

Payers

- Payers will face increasing pressure from provider networks to increase reimbursement. However, there will be a lag in timing due to contract lifecycles.
- As households deplete excess savings and household finances deteriorate, payers may see an increase in urgent or emergent care needs.

Private equity

- Private equity health care activity is down as a result of higher interest rates, increased labor and input costs impacting attractiveness of some target profiles, and a mismatch in valuation perceptions.
- As certain provider assets are hit harder by macroeconomic forces, PE will shift investments to more insulated assets like HCIT and other services (less reliance on patient financing, lower labor costs, etc.).

Life sciences

- Historically, research and development (R&D) activity in biopharma and life sciences has largely been cyclical relative to broader economic currents, suggesting relative resilience in the face of slower private sector activity.
- Lingering elevated inflation is driving up labor, raw material and transportation costs for drug and medical device manufacturers. However, strict regulations are preventing biopharma and MedTech from passing on the increased costs to customers, thereby exerting pressure on margins.
- Forecasted labor shortages include surgeons and other surgical personnel, highlighting the need for procedure-reliant MedTechs to focus on productivity-enhancing technologies and refine product and pricing strategy.

In the current environment, firms must look to transform uncertainty into opportunity, which requires a holistic strategy framework factoring multiple alternative scenarios

Five "no regret" actions to build resilience amid elevated uncertainty

1. Maintain a holistic pricing strategy.
2. Ensure talent resilience and productivity growth.
3. Understand the supply-side drivers.
4. Adapt to the new cost of capital.
5. Align strategies with stakeholder priorities.

Source: EY-Parthenon

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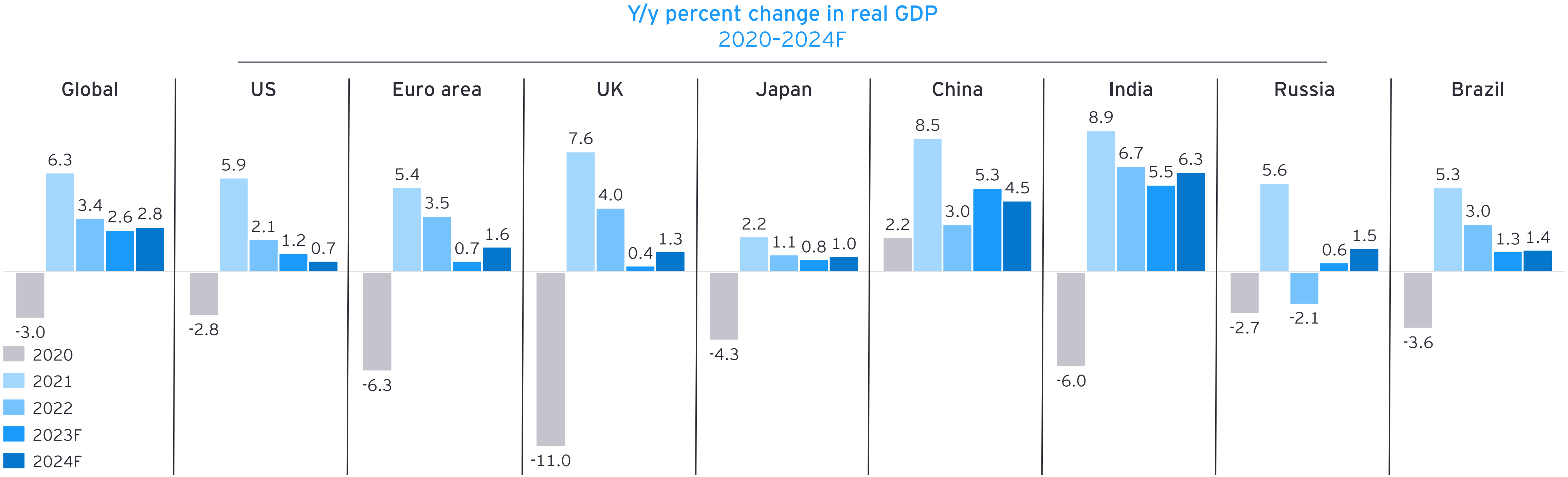
Topics

- Macroeconomic backdrop
- Sector trends and perspectives
  - State of the sector
  - Inflation
  - Labor and talent
  - Financial conditions and transaction activity
- Key EY contacts

Most economies around the world are experiencing a slowdown, but the magnitude and breadth of the slowdown are far from homogenous

Global snapshot



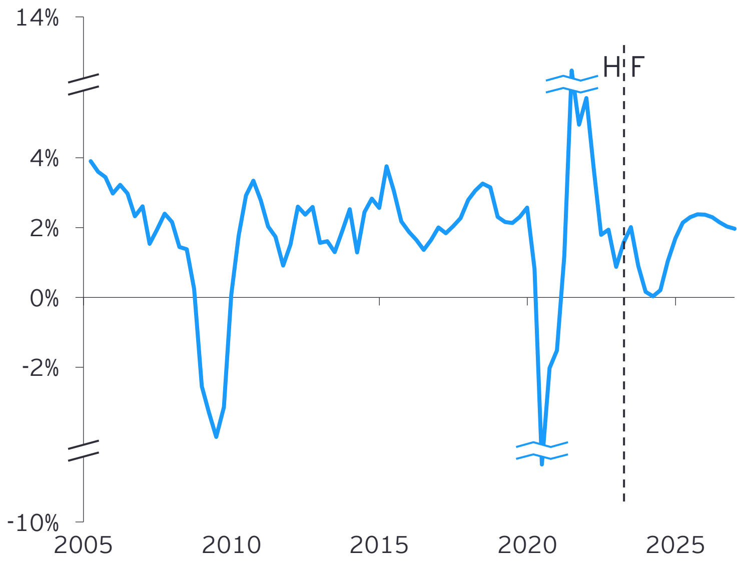
- Global economic activity is slowing, but the nature of the slowdown across major economies is far from homogenous. We anticipate global GDP growth will slow to 2.6% in 2023 — the slowest pace outside of a recession since 2001 — and only accelerate modestly to 2.8% in 2024. Below-trend growth is expected across most advanced economies in 2023-24, with localized recession in Europe, near stall-speed growth in the UK and weakening momentum in the US. We anticipate mainland China real GDP growth around 5%, but the downside risks to growth are notable given the weakening of manufacturing and consumer spending activity.
- Global inflation is on a downward trajectory, but core inflation (excluding food and energy) remains elevated, and central banks continue to view the risks of overtightening being less than the risks of undertightening and allowing for inflation and inflation expectations to remain permanently anchored at a higher level.

Source: EY-Parthenon

Our baseline anticipates a modest GDP contraction in the coming quarters, with the unemployment rate creeping up toward 4% and inflation cooling toward 3%

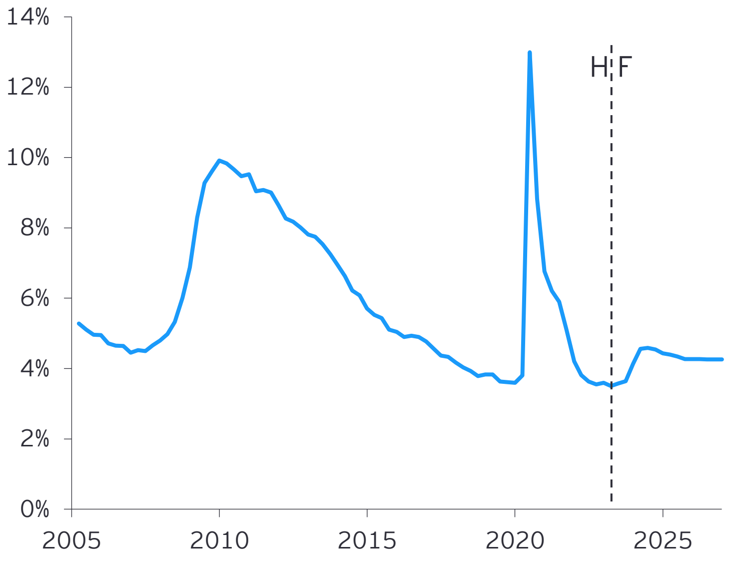
US outlook

US y/y real GDP
2005-2026F



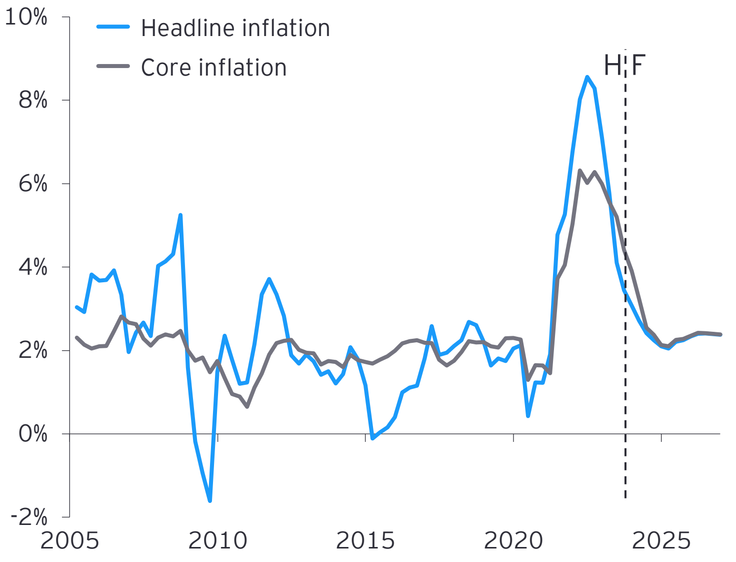
GDP growth
2022: 2.1%
2023F: 1.2%
2024F: 0.7%

US unemployment rate
2005-2026F



Unemployment rate
Q4 2022: 3.6%
Q4 2023F: 4.1%
Q4 2024F: 4.4%

US y/y percent change in CPI
2005-2026F



Core CPI inflation (y/y)
Q4 2022: 6.0%
Q4 2023F: 3.9%
Q4 2024F: 2.1%

Key risks: financial market turmoil, banking stress, Fed policy tightening, global recession

Source: EY-Parthenon

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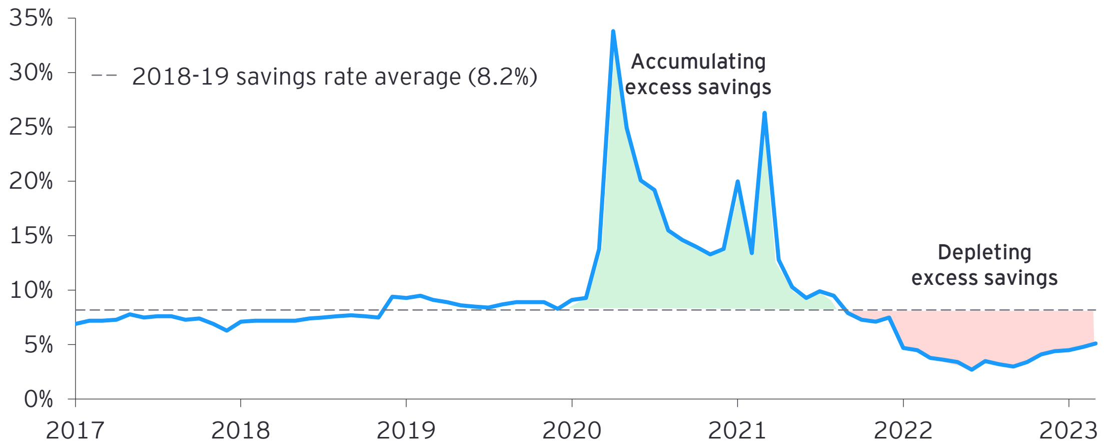
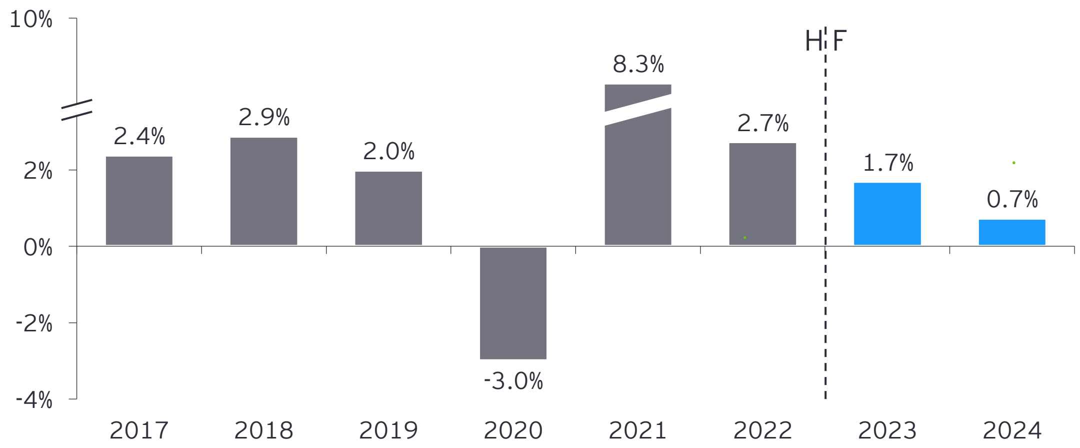
Persistent inflation is depleting excess savings, resulting in slowed growth of consumer expenditures; as a result, out-of-pocket health care spend will likely decrease

US personal savings rate
January 2017-March 2023



- Even as the personal savings rate edges higher, it remains below its pre-pandemic trend, which points to a continued depletion of the excess savings accumulated during the pandemic. We estimate that they have declined about 55% to $1.1 trillion on aggregate and that excess savings for lower-income families have largely been depleted. As such, excess savings should no longer be viewed as an alternate source of income supporting spending.

US y/y percentage change in real personal consumer expenditures
2017-2024F

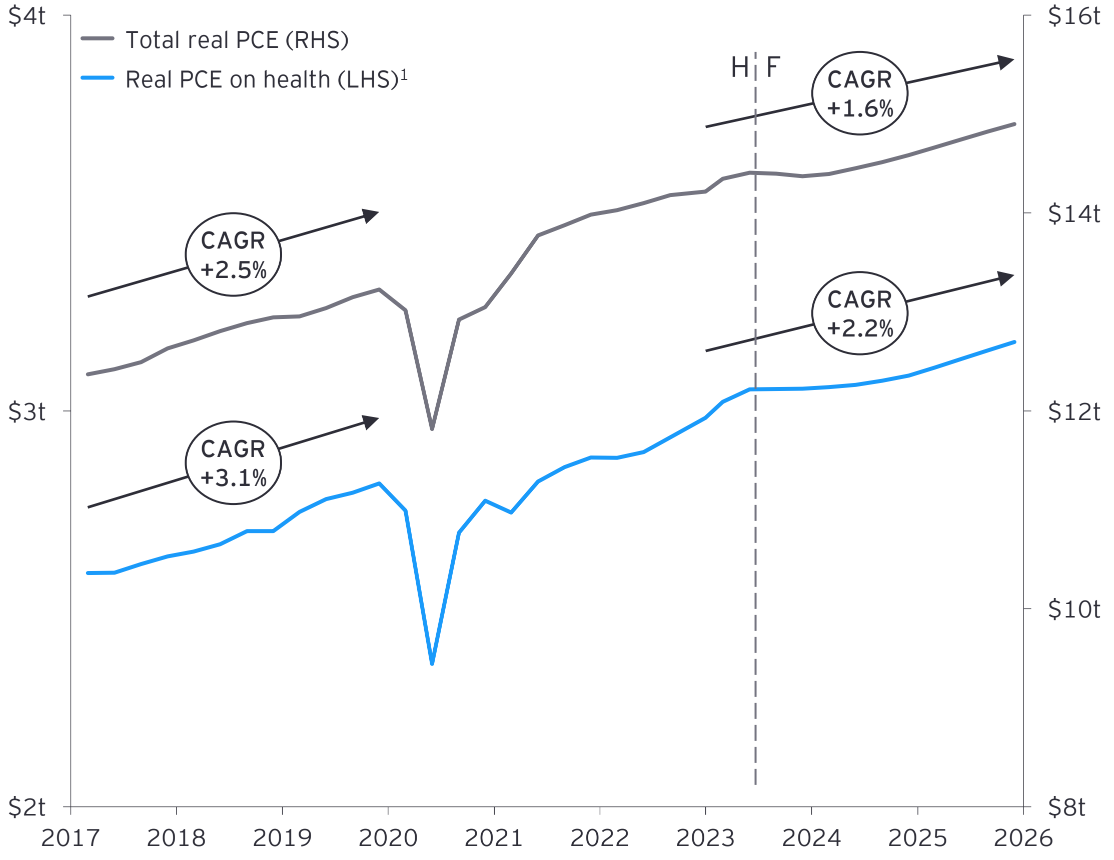


- Recent data on household spending and credit growth points to a K-shaped consumer spending pattern, with low- and median-income families exercising more spending restraint and families at the higher of the income spectrum still spending, albeit with more discretion.
- Looking ahead, further softening in the job market in coming months — the last remaining leg propping up the consumer — will weigh on income growth and likely trigger a slowdown in personal consumption.

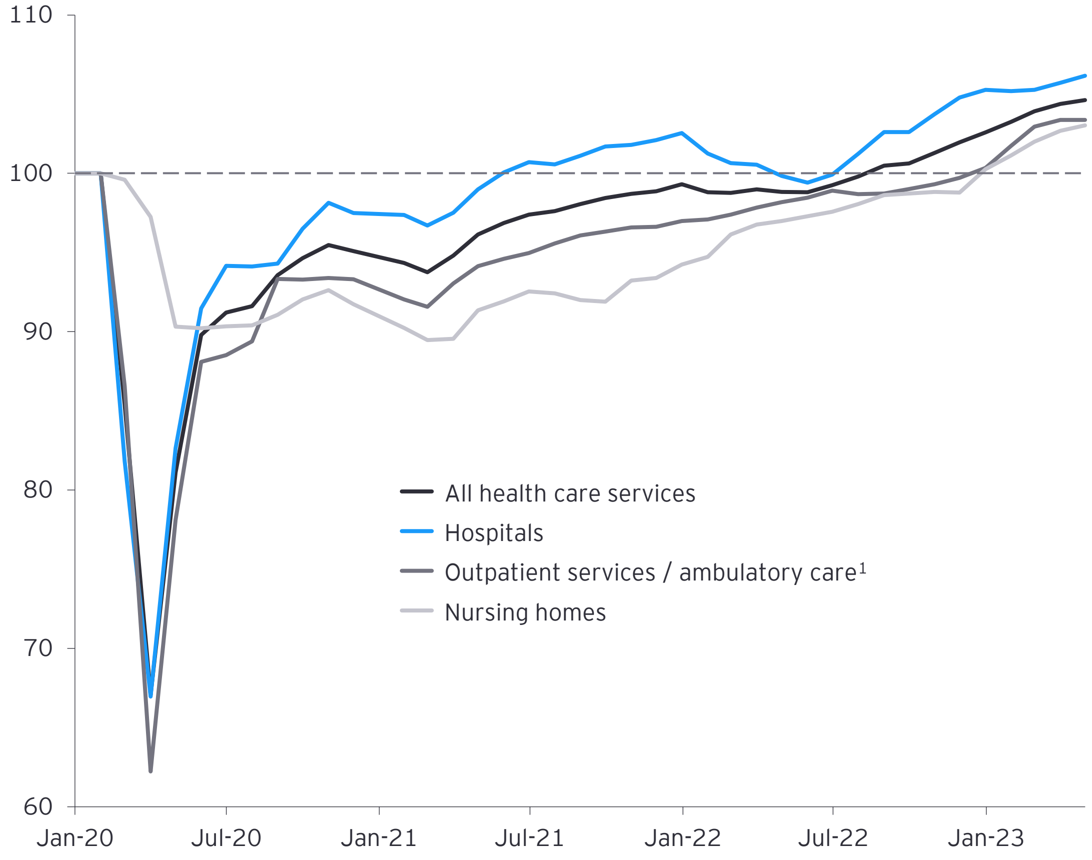
Source: U.S. Census Bureau; Bureau of Economic Analysis (BEA); EY-Parthenon

Health care spend is expected to constitute a larger share of overall consumer spend; hospital services will continue to outpace other types of care

US total real personal consumption expenditures
2017–2025F



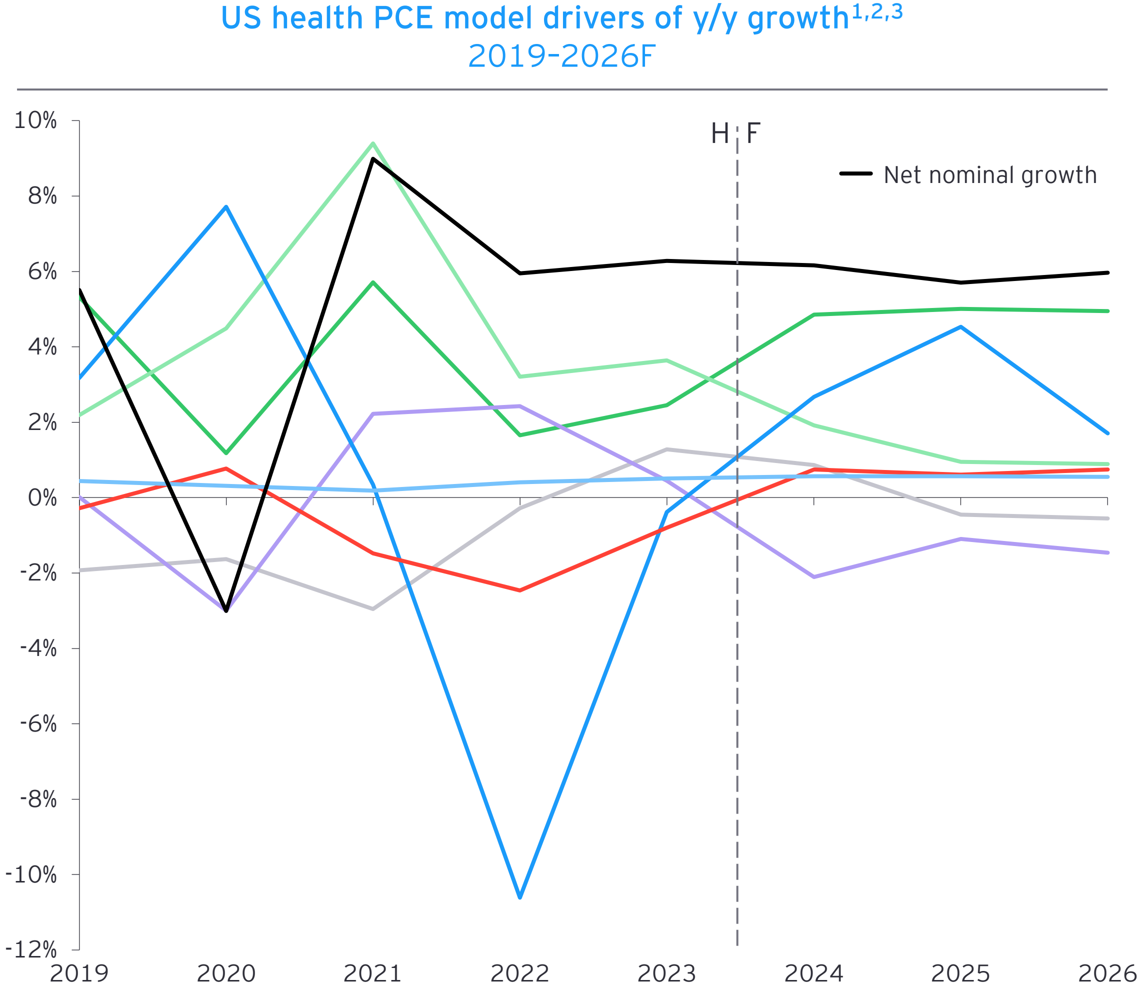
US real spending on health care services categories
January 2020–April 2023 (February 2020 = 100)



1. Personal consumption expenditures on health, including medical products (e.g., pharmaceuticals, appliances), outpatient services, and hospital and nursing home services.

Source: BEA; EY-Parthenon

Developments in Medicaid eligibility, population changes and disposable income are key non-inflation drivers of the consumer health care spending outlook

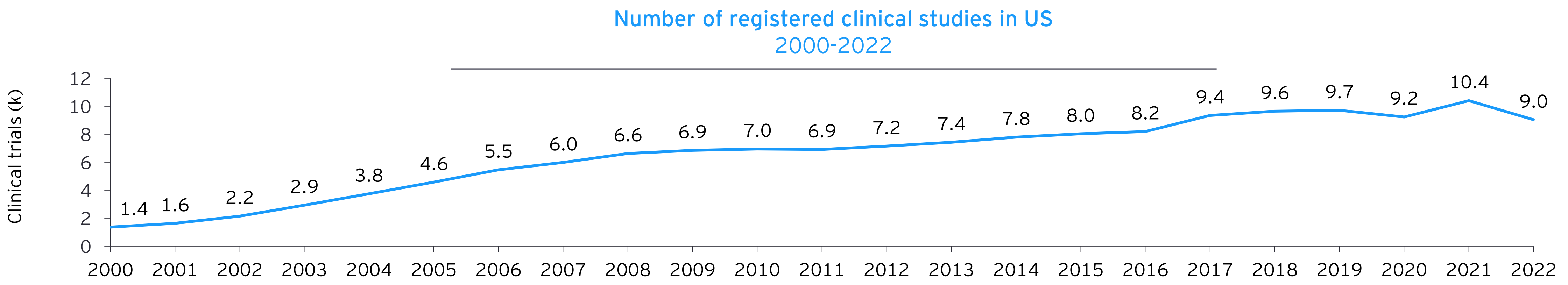


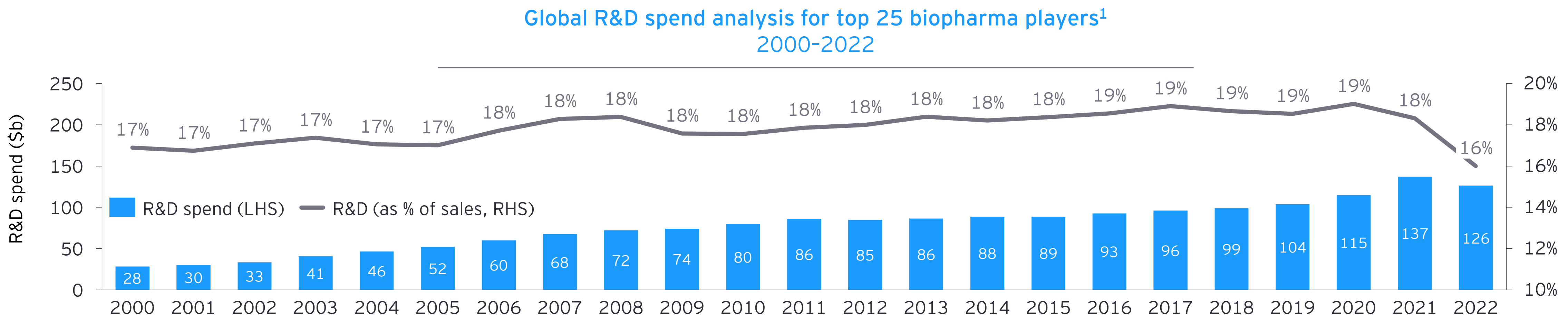
Driver	Perspective
Population	▸ US population is largely steady, experiencing <1% growth annually.
Birthrate	▸ US birthrates experienced contraction ahead of COVID-19 before showing positive movement as of late. Births are expected to flatten with population movement.
Real Medicare spend per capita	▸ Strong Medicare spending growth has been observed over the last ~5 years and is expected to continue with the aging of the population.
Real Medicaid spend per capita	▸ During COVID-19, the public health emergency paused Medicaid redetermination, resulting in Medicaid enrollment growth. Looking ahead, we see a slowdown in the pace of Medicaid spending growth.
Real employer health insurance spend per capita	▸ Employer insurance spend grew post-COVID-19 amidst a tight labor market, competitive perk packages and higher insurance costs. This is expected to cool in coming quarters.
Health care services and goods inflation relative to broader consumption inflation	▸ Health care services and goods inflation has been relatively muted compared with broader inflation measures. Pricing growth between 2.3% and 3.0% p.a. is expected moving forward. ▸ However, a potential for mismatch between pricing to consumers/patients and reimbursement rates vs. the cost to providers highlights the challenges and importance of margin management.
Real disposable income per capita	▸ Real disposable income was boosted by generous benefits during the pandemic but has since slowed materially as COVID-19 benefits have been sunset. Inflation remains elevated and wage growth is slowing.

1. Shown drivers subject to various transformations within forecast model (e.g., moving average, lags).
2. COVID-19 impact not included in shown drivers.
3. Personal consumption expenditures on health, including medical products (e.g., pharmaceuticals, appliances), outpatient services, and hospital and nursing home services.

Source: EY-Parthenon

R&D spend and clinical trial activity levels were not affected during recessionary periods; in such periods, biopharma has continued to invest in new drug development





1.Top 25 biopharma are determined based on their reported pharmaceutical sales in 2022.
Source: ClinicalTrials.gov; Capital IQ; Evaluate Pharma; EY-Parthenon analysis

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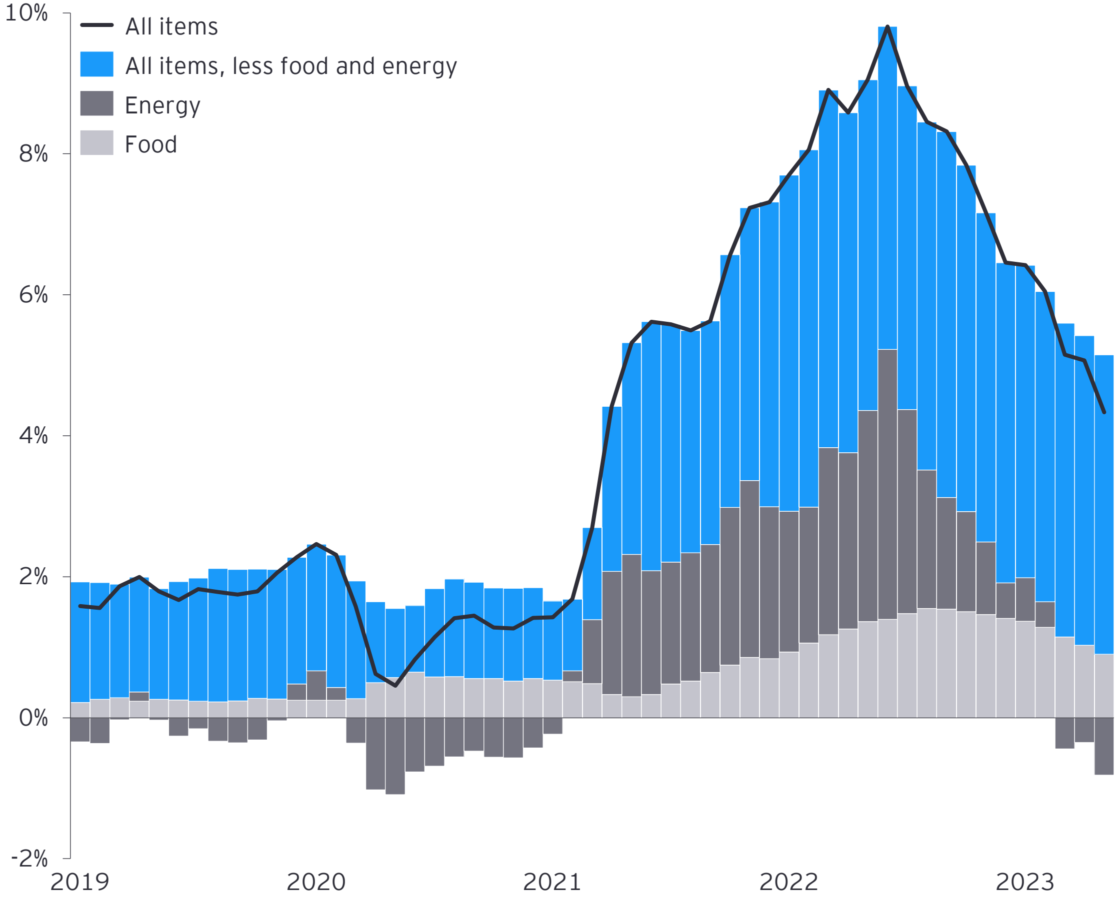
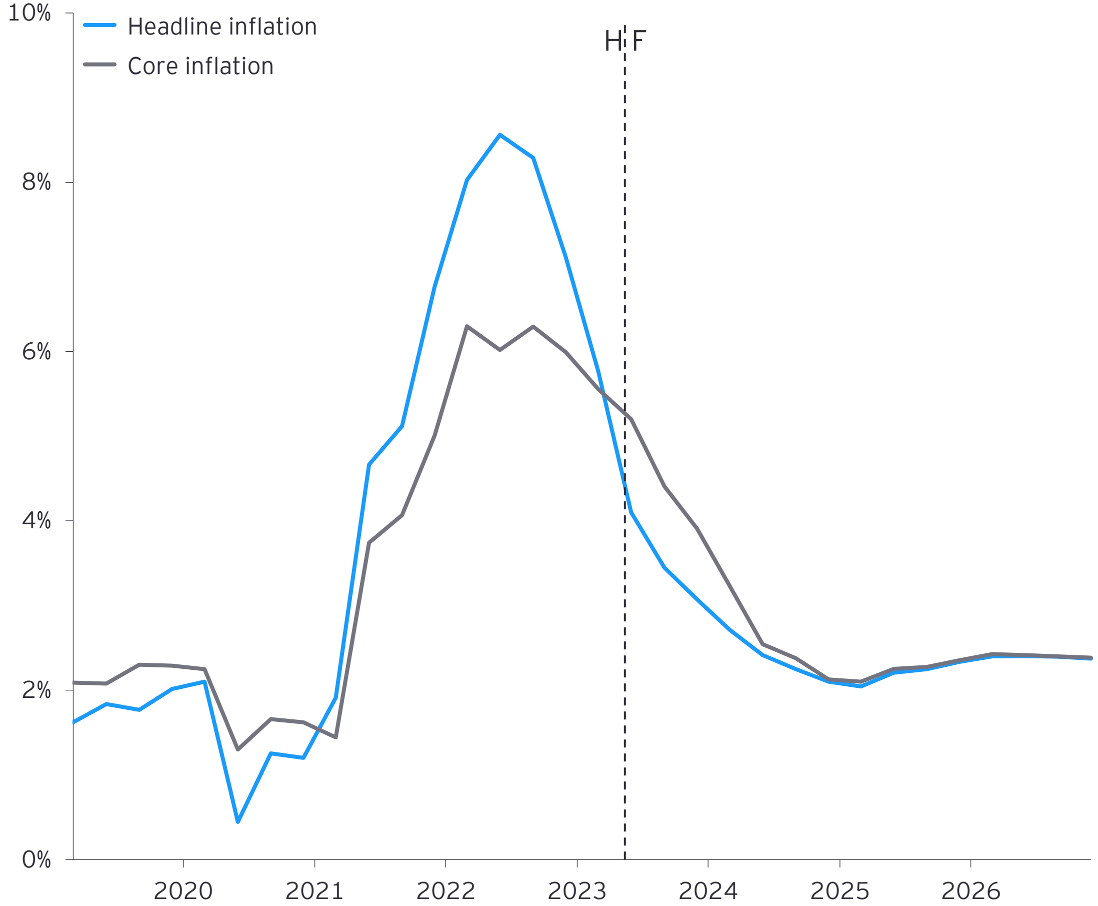
Sequential price momentum points to disinflationary dynamics, but it won't be a smooth process, as core inflation remains persistently elevated

US y/y percentage change in CPI contribution by category
January 2019-May 2023



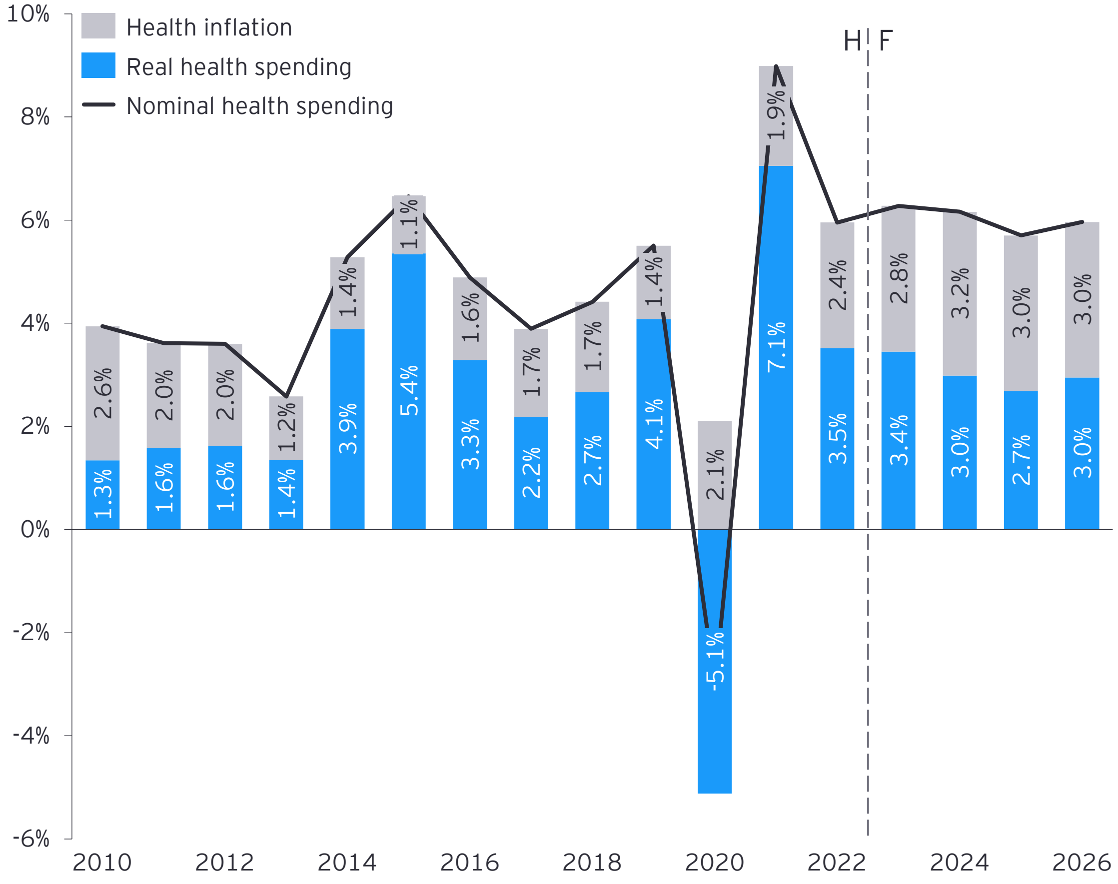
US y/y percentage change in CPI
Q1 2019-Q4 2026F



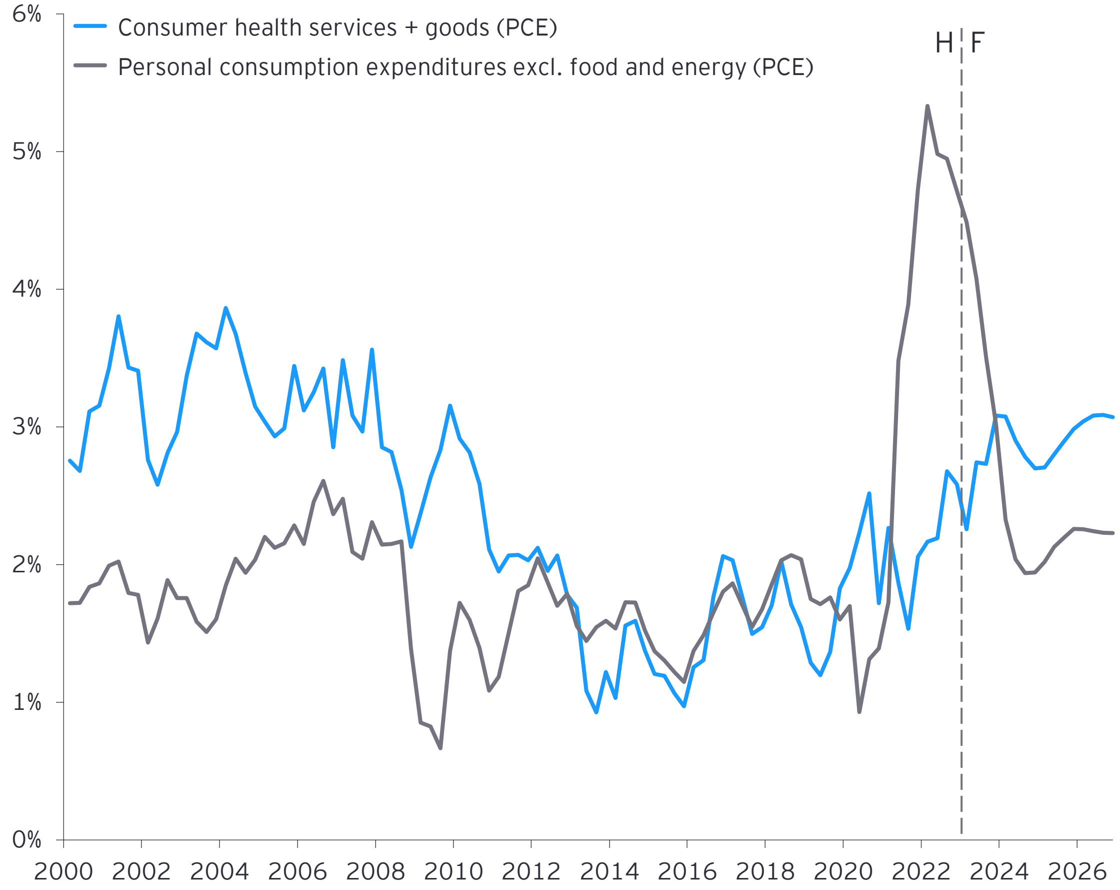
Source: Bureau of Labor Statistics (BLS); EY-Parthenon

Inflation is expected to become a larger contributor to health care spending as a structural mismatch between supply and demand leads to higher cost pass-through

US y/y percentage change in health PCE spending
2010-2026F



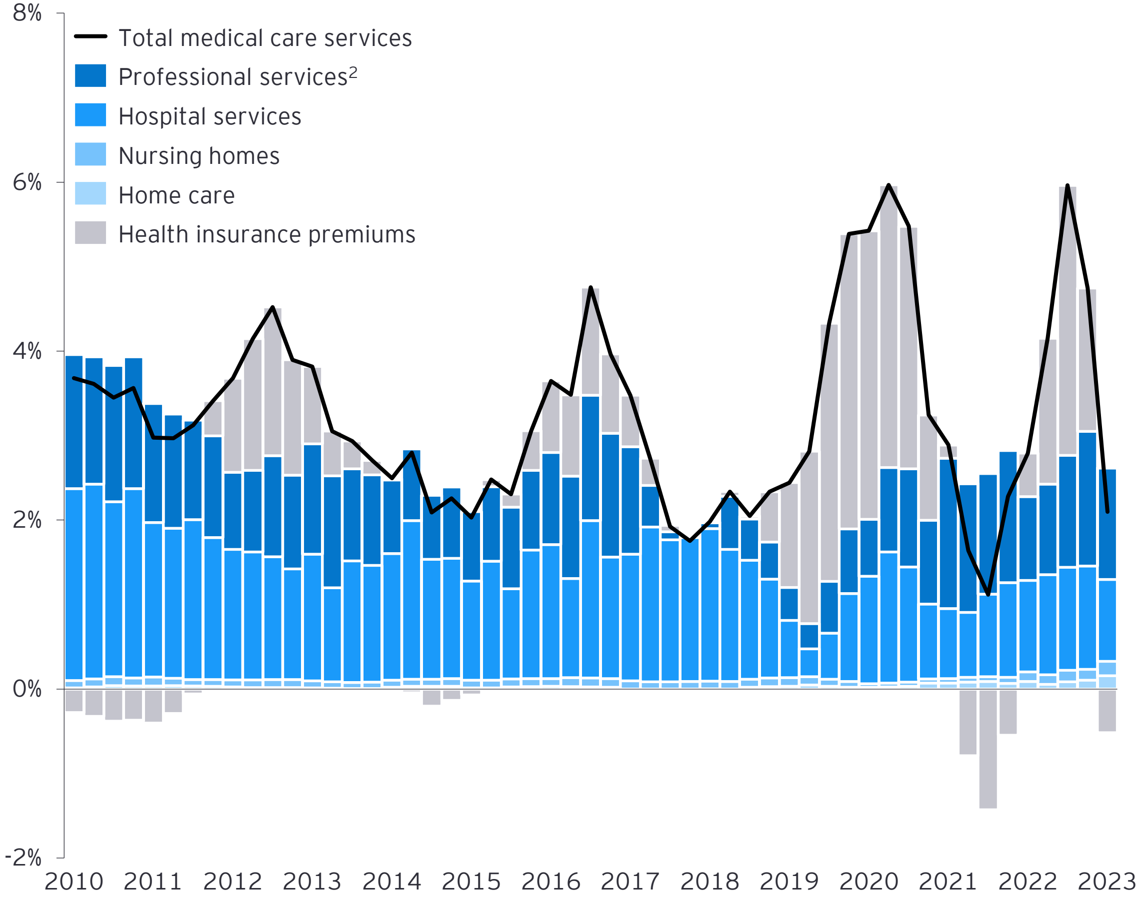
US y/y percentage change in PCE inflation
Q1 2000-Q4 2026F



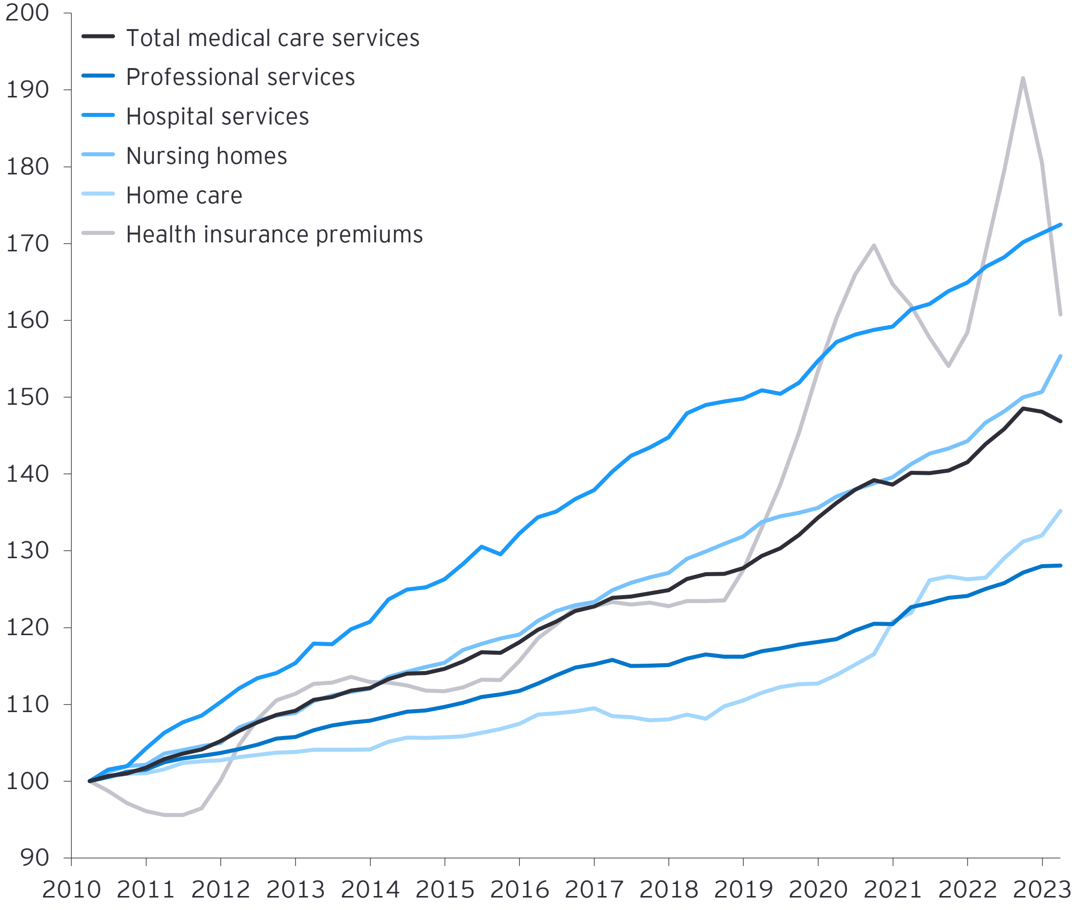
Source: BEA; EY-Parthenon

Insurance premiums and steadily growing price levels for outpatient and hospital care have historically been key drivers of health care service CPI

US y/y growth in medical care services CPI, contribution by category[1]
Q1 2010–Q1 2023



US health care services CPI by category
Q1 2010–Q1 2023 (Q1 2010 = 100)



1. Segment-level data for Jun-20, Jun-21 and Oct-22 are estimated as the average of adjacent months.
2. Includes physician; dental; eyeglasses and eye care; and services by other medical professionals (e.g., outpatient care).

Source: BEA; BLS; EY-Parthenon

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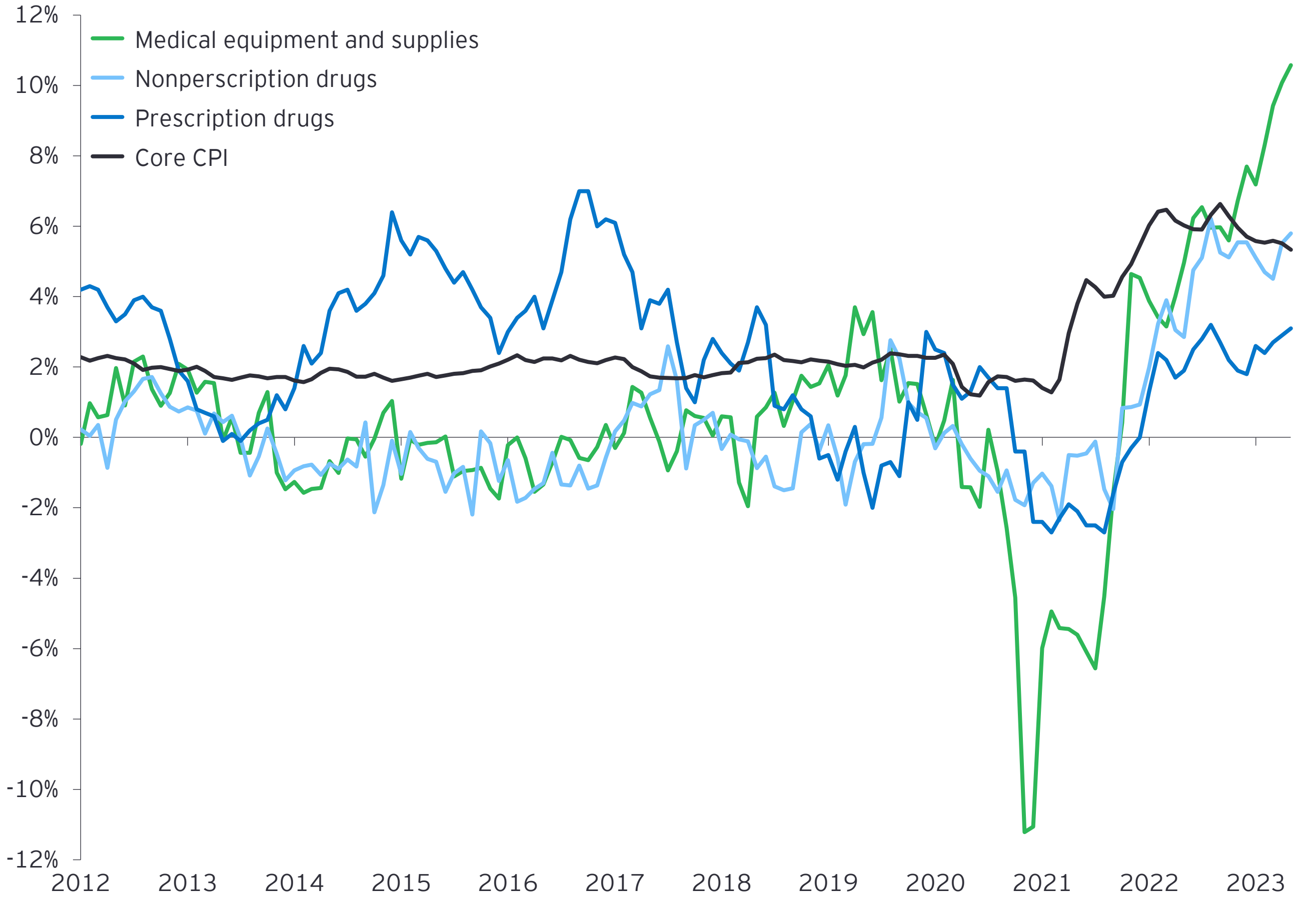
Prescription drugs have been a strong contributor to consumer drug expenditures, while medical equipment and supplies prices are rebounding strongly

US y/y change in CPI[1]
January 2012-May 2023

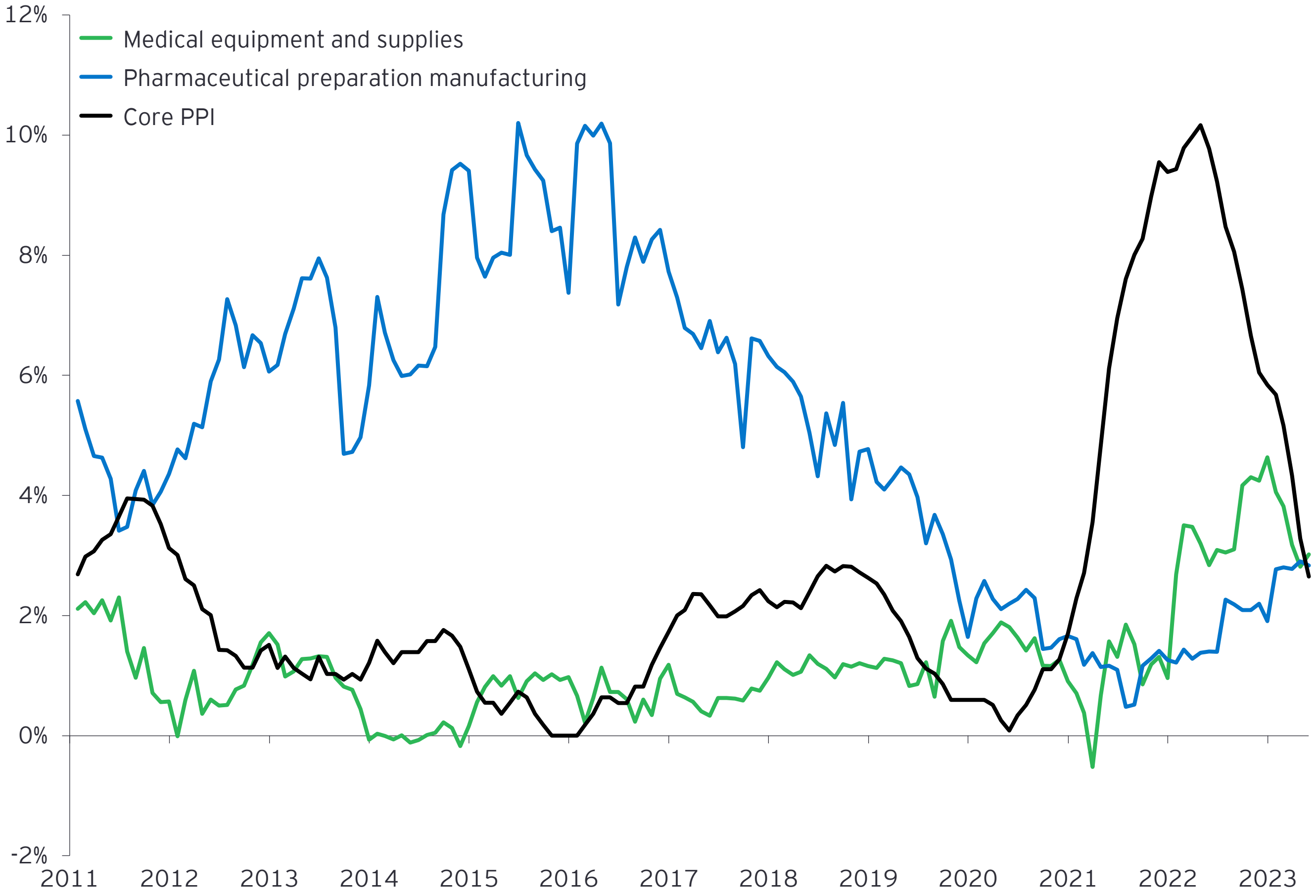


- Brand-name drugs, while accounting for a declining share of prescriptions, have experienced substantial growth in average prices.
- Rising drug prices, though not as significant as rising prices in other sectors, could still prompt consumers to prioritize other essential expenses over health care needs.

1. Measures transaction prices received by retail pharmacies, excluding hospital-administered drugs, including both patient co-payment as well as the insurance reimbursement.
Source: BEA; BLS; EY-Parthenon analysis

Life sciences firms face margin pressure due to inflation-related increases in costs, disruptions in the supply chain, and a limited ability to pass on the inflationary costs

US y/y change in PPI[1]
January 2011-May 2023



- While broader PPI measures saw surges of around 10% annual growth in 2022, the medical device and supplies manufacturing and pharmaceutical preparation sectors experienced only relatively modest increases of around 4%-5% and 2%-3%, respectively.
- Rising inflation is driving up labor, raw materials and transportation costs for drug and medical device manufacturers. However, strict regulations are preventing biopharma and MedTech from passing on the increased costs to customers, thereby exerting pressure on their profit margins.
- There are concerns about the life sciences supply chain, specifically regarding a heavy dependency on foreign suppliers, weak domestic production, and heightened fears of drug shortages and rising prices due to the pandemic. These issues have intensified the discussion around re-shoring and investing in US capacity.

1. Producer Price Index collects net transaction price received by drug manufacturers from wholesalers for US-manufactured drugs.
Source: BEA; BLS; EY-Parthenon analysis

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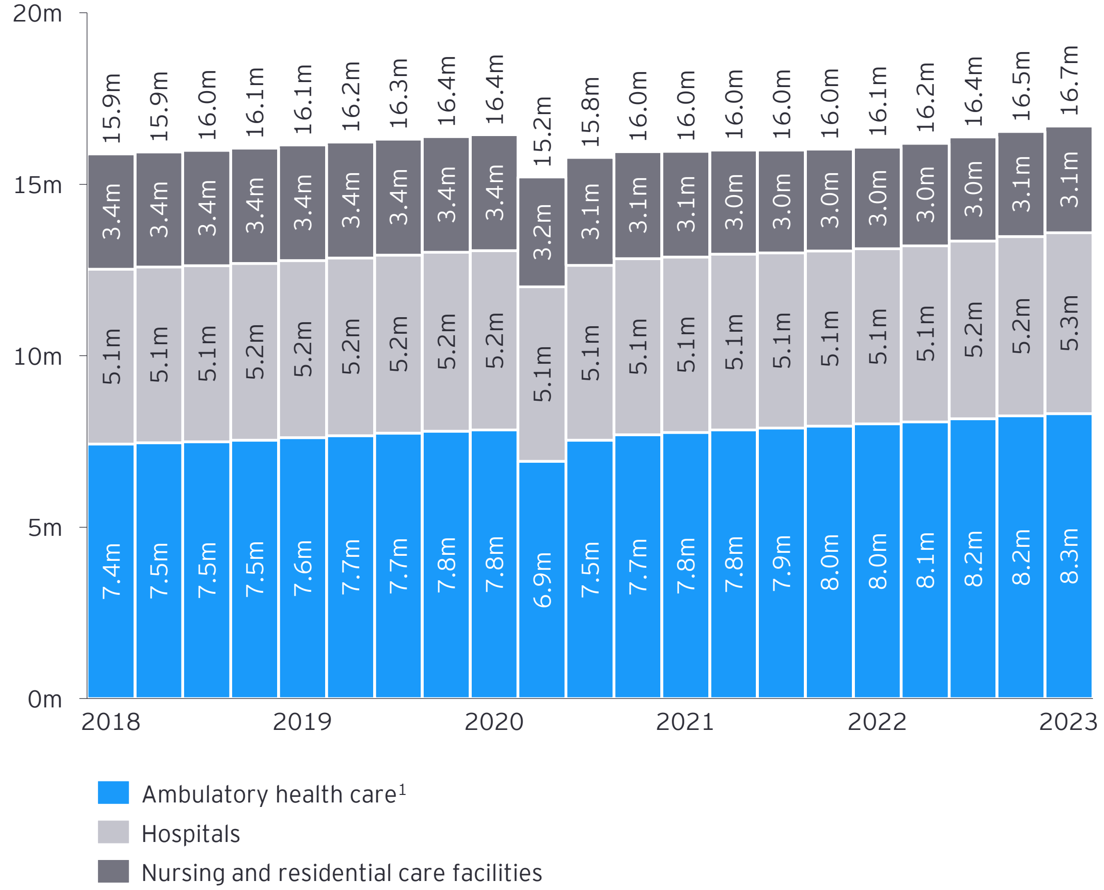
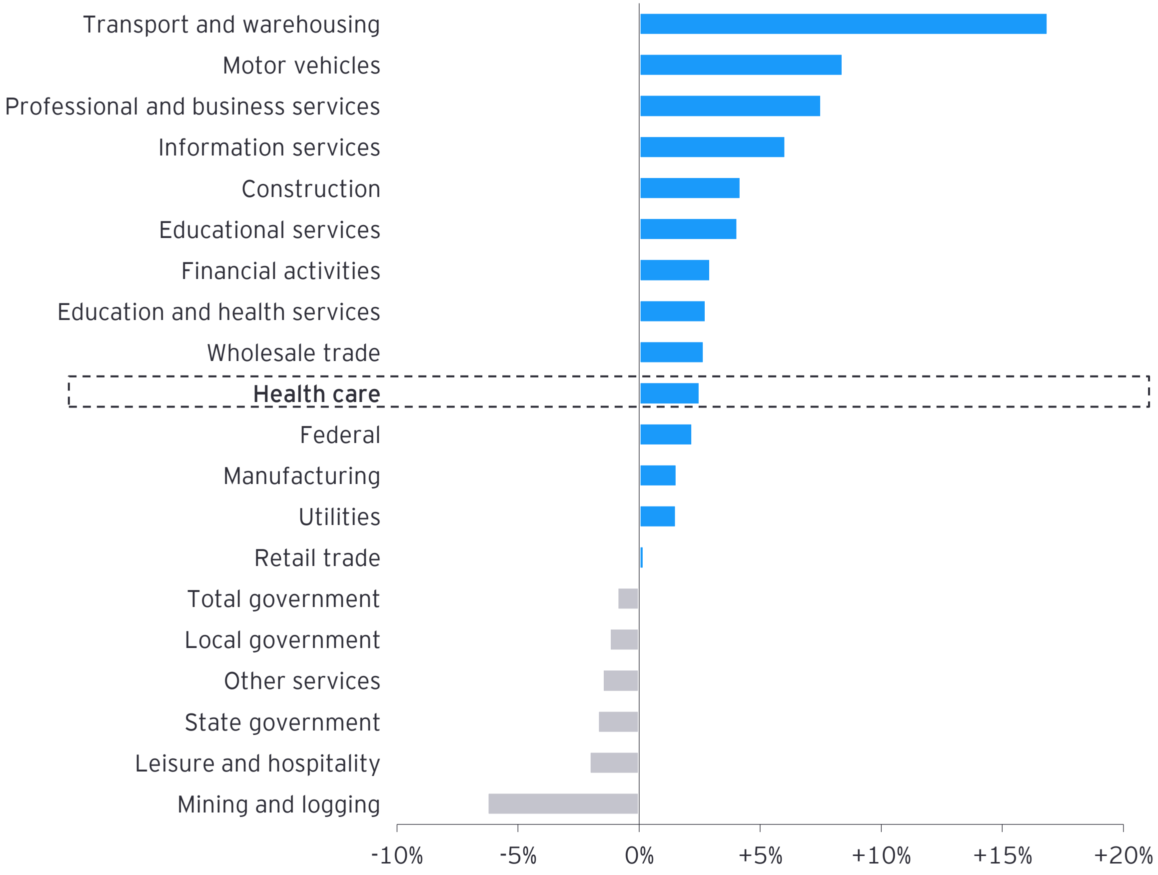
Health care employment levels have recently surpassed pre-COVID-19 levels, though trend has varied across sectors, with nursing and residential care facilities notably trailing

US health care employment by segment
2018 Q1-2023 Q1



Percentage headcount change by industry vs. February 2020
May 2023



1. Includes offices of physicians and dentists, outpatient care centers, laboratories, home health care services, and other ambulatory care centers.
Source: BLS, EY-Parthenon analysis

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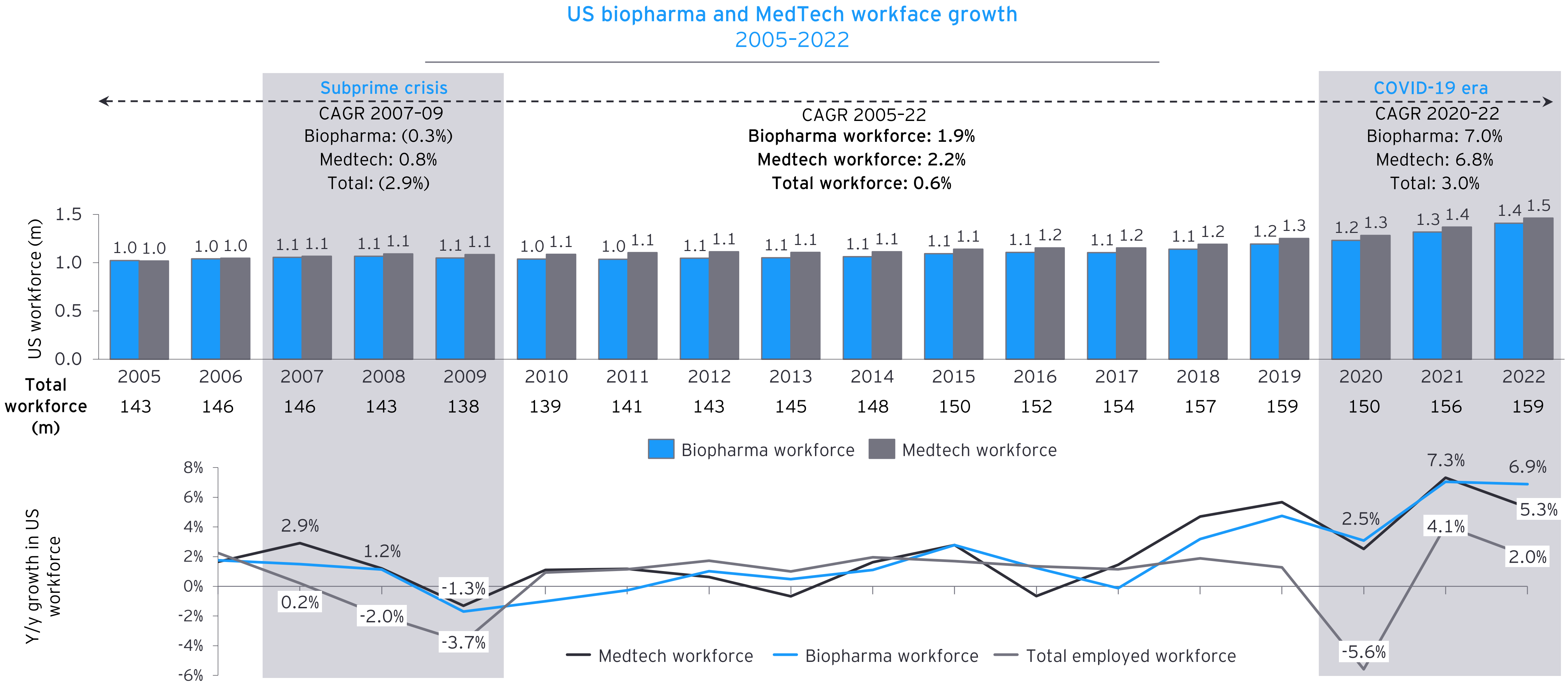
Life sciences employment has outpaced the overall workforce over the years; even in recessionary periods, the industry had fewer layoffs compared with overall economy



Source: BLS; EY-Parthenon analysis

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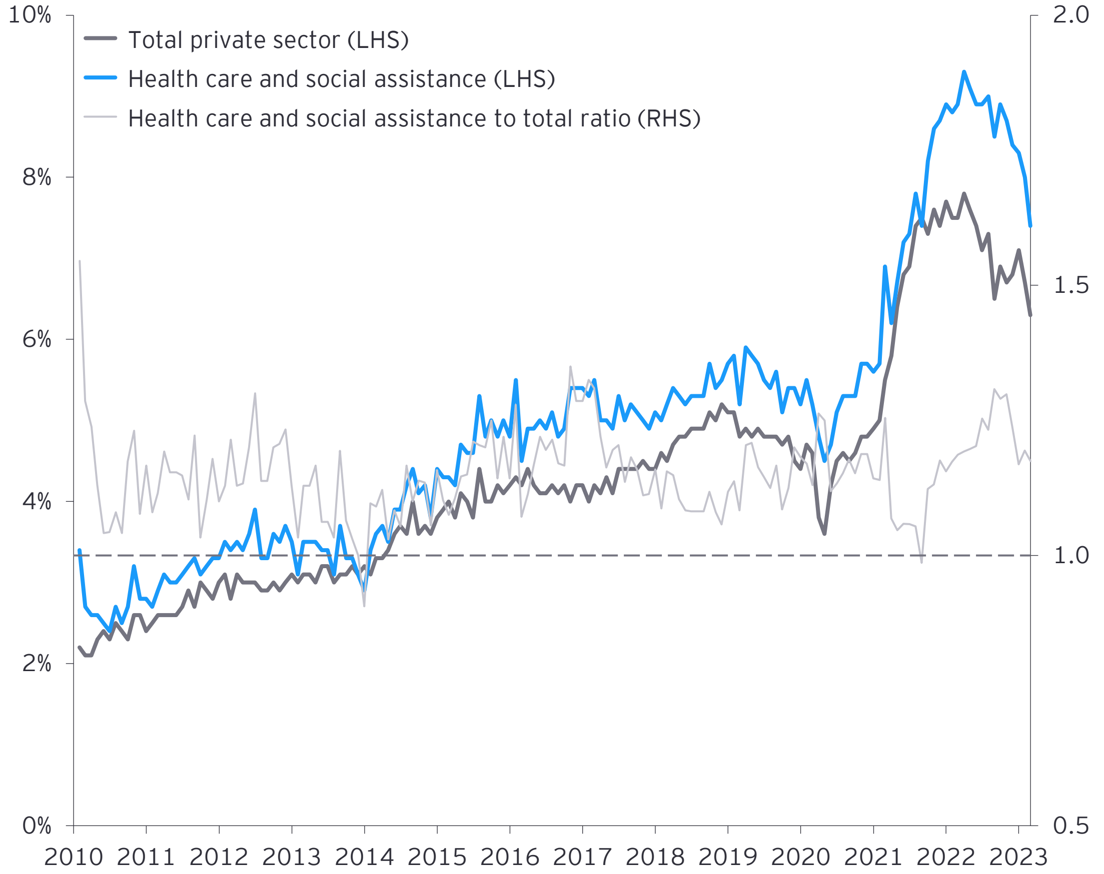
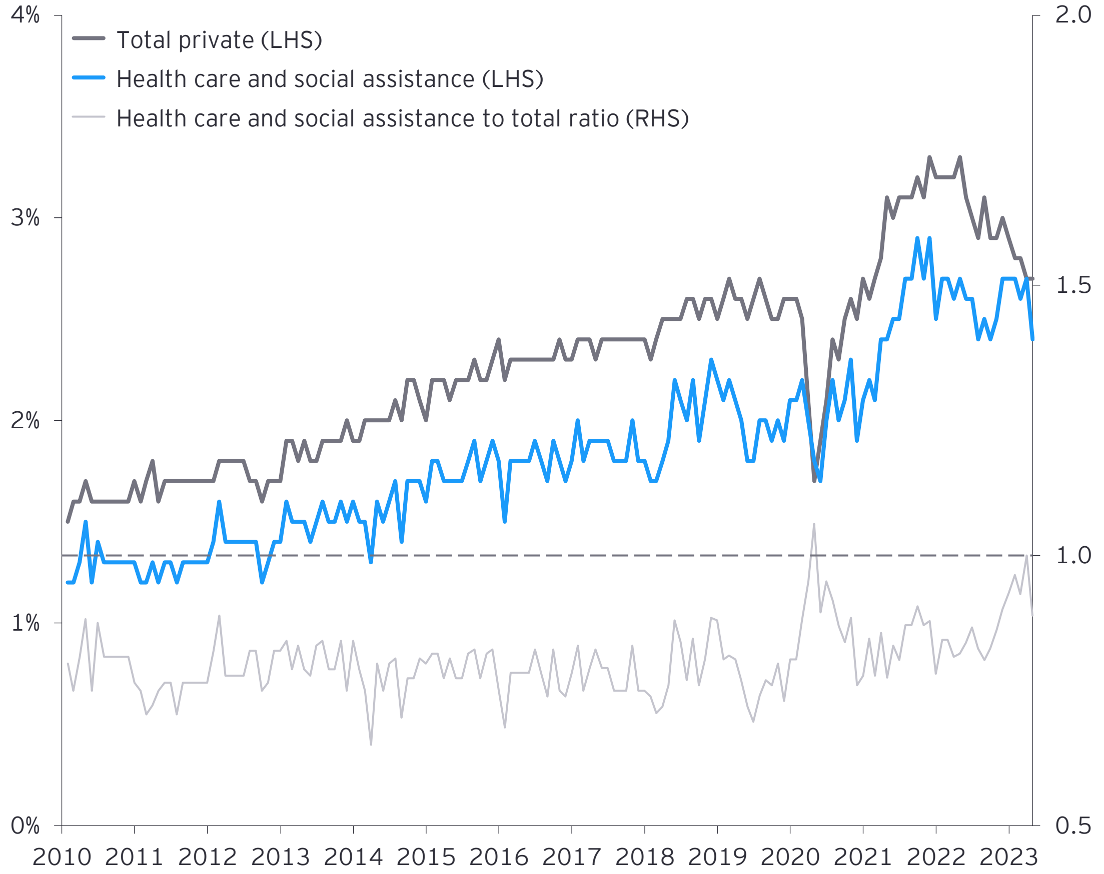
Demand for health care and social assistance workers rose rapidly in wake of COVID-19; job opening and quits rates have begun to soften

US job openings rate
January 2010–April 2023

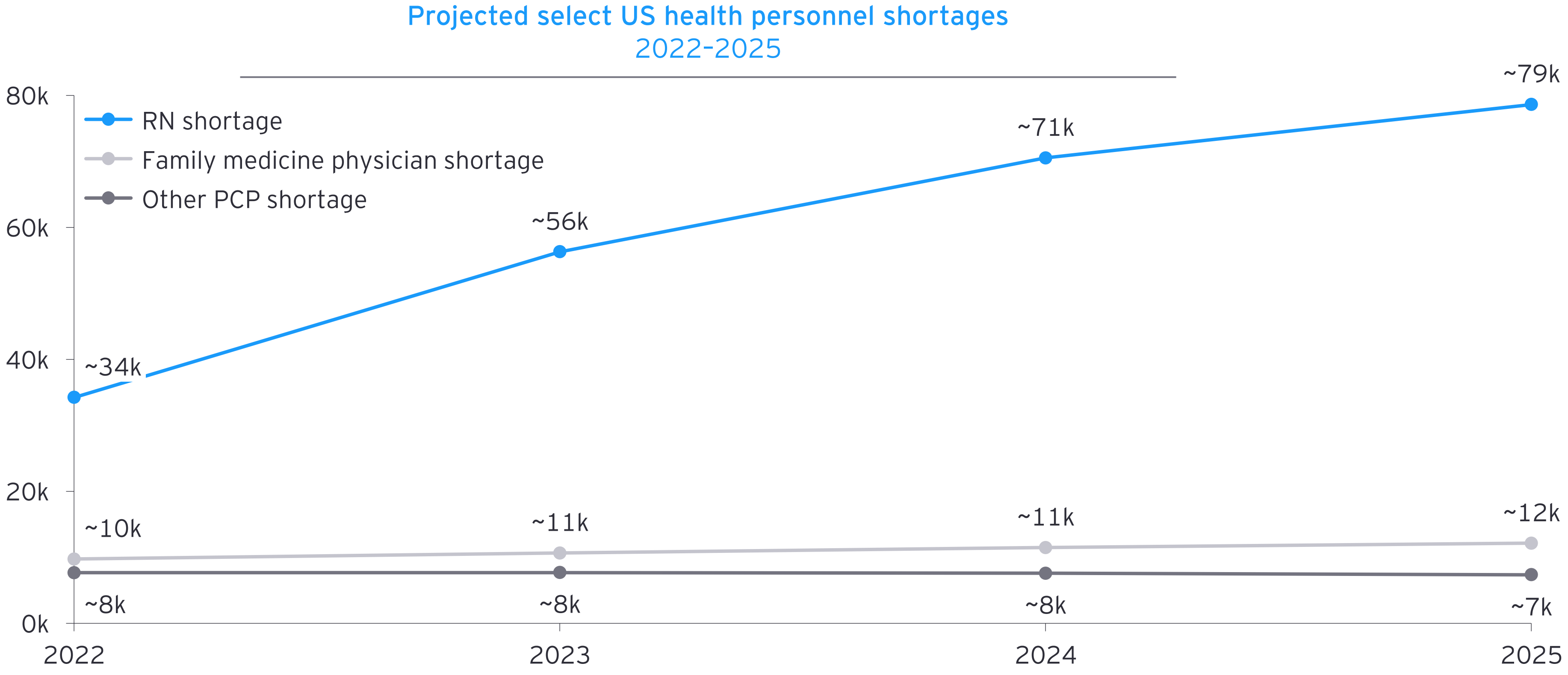


US quits rate
January 2010–April 2023



Source: BLS; EY-Parthenon analysis

Continuing labor shortages among registered nurses and primary care physicians (PCPs) will keep pressure on provider organizations

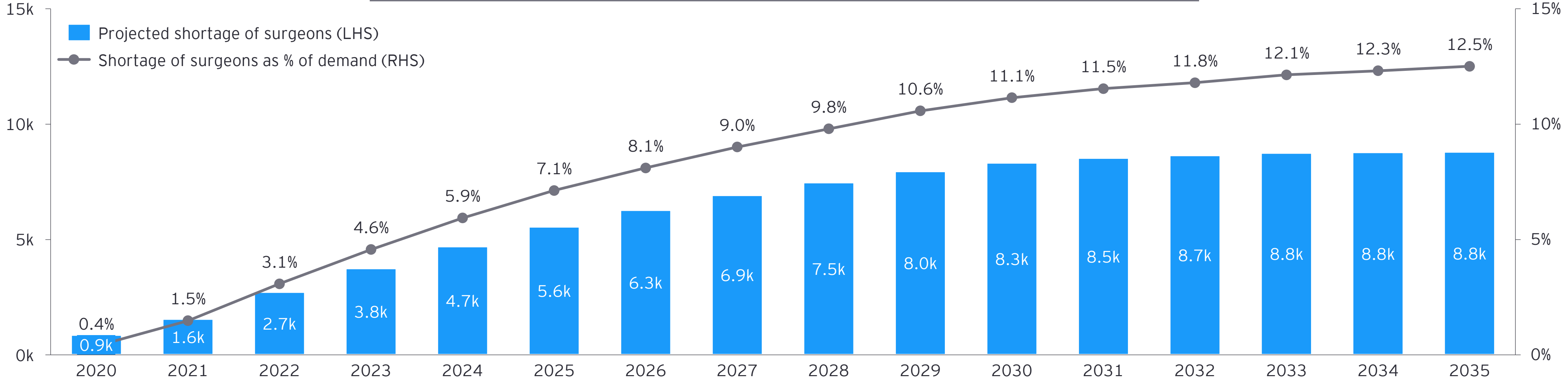


Shortage as % of demand	2022	2023	2024	2025
Registered nurses	1%	2%	2%	2%
Family medicine physicians	8%	9%	9%	10%
Other primary care physicians	4%	4%	4%	4%

Source: Health Resources and Services Administration (HRSA); EY-Parthenon analysis

By 2035, the demand for surgeons is expected to outpace the supply by ~12.5%, requiring procedure-reliant MedTechs to rethink their OR and product strategy

Projected US surgeon shortage[1]
2020–2035F

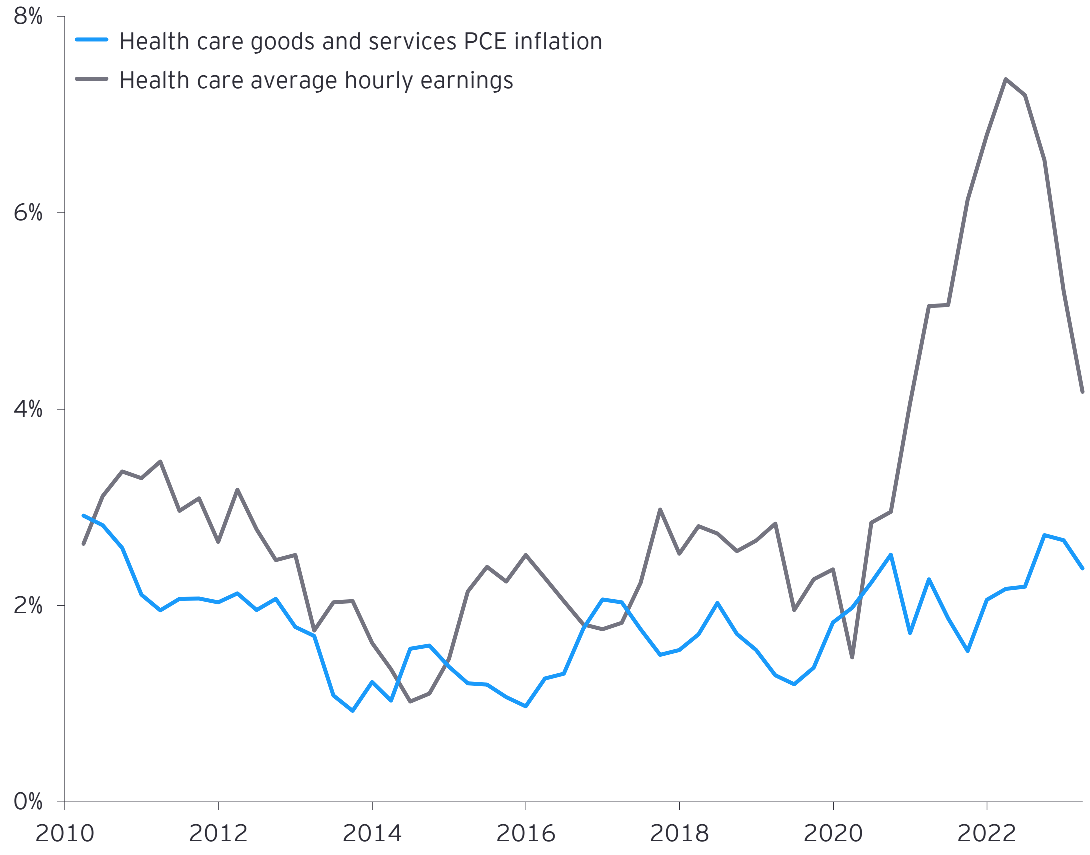


- Current and future shortages of medical practitioners, such as surgeons and radiologists, may make it difficult for hospitals to maintain procedure volumes and may drive up hospital payroll costs, leading to potential cutbacks in procurement of medical devices, other capital equipment, and diagnostic services.
- Procedure-reliant MedTechs and diagnostic companies will need to reimagine their business strategies, e.g., identify high-growth surgical procedures and prioritize non-elective procedures (e.g., C-section), and develop products for patients that can be used at home to treat or manage their conditions (e.g., patient monitoring devices).
- Additionally, medical device companies have a role in supporting this evolving operating room dynamic with solutions to drive efficiency, training programs (e.g., using virtual reality (VR)) or advancing technologies that can reduce the need for human intervention.

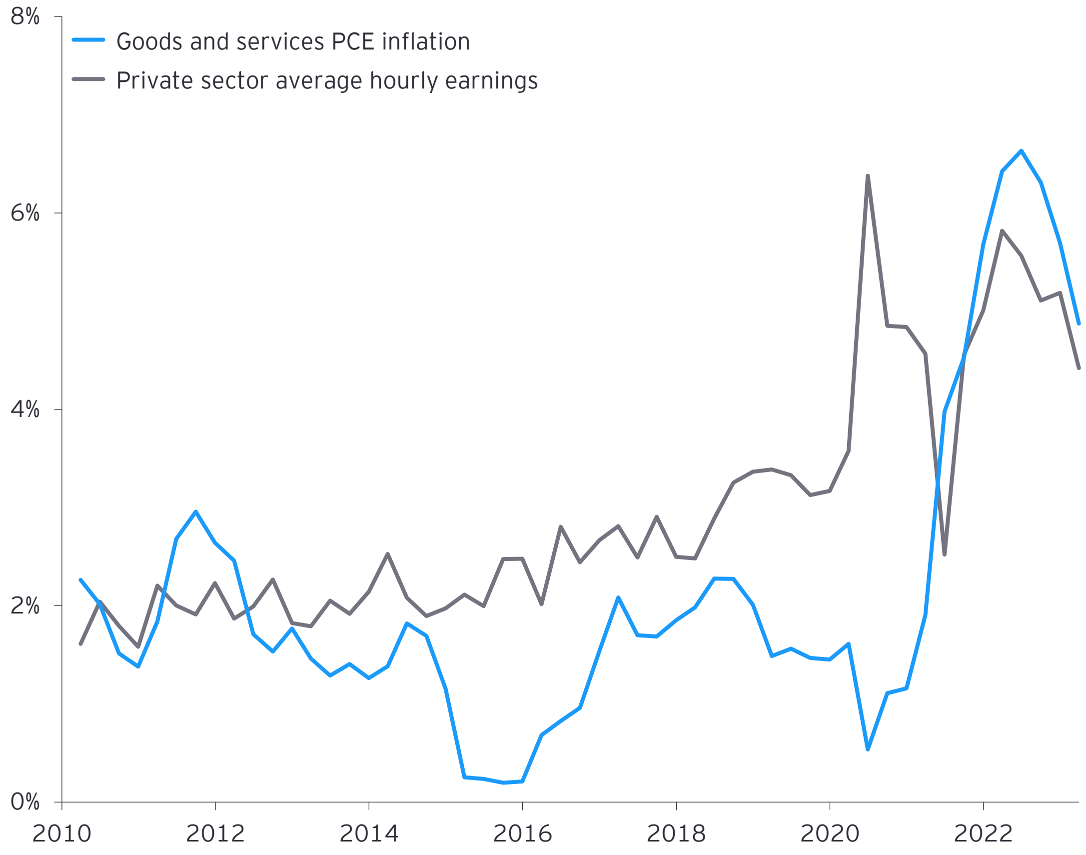
1. Covers major types of surgeons, except for obstetricians and gynecologists, ophthalmologists, urologists and pediatric surgeons.
Source: HRSA; EY-Parthenon analysis

A tight labor market in the health care sector has led to very strong wage growth, placing increased and persistent costs pressures on providers

Y/y % change in average hourly earnings and inflation: health care
Q1 2010-Q1 2023



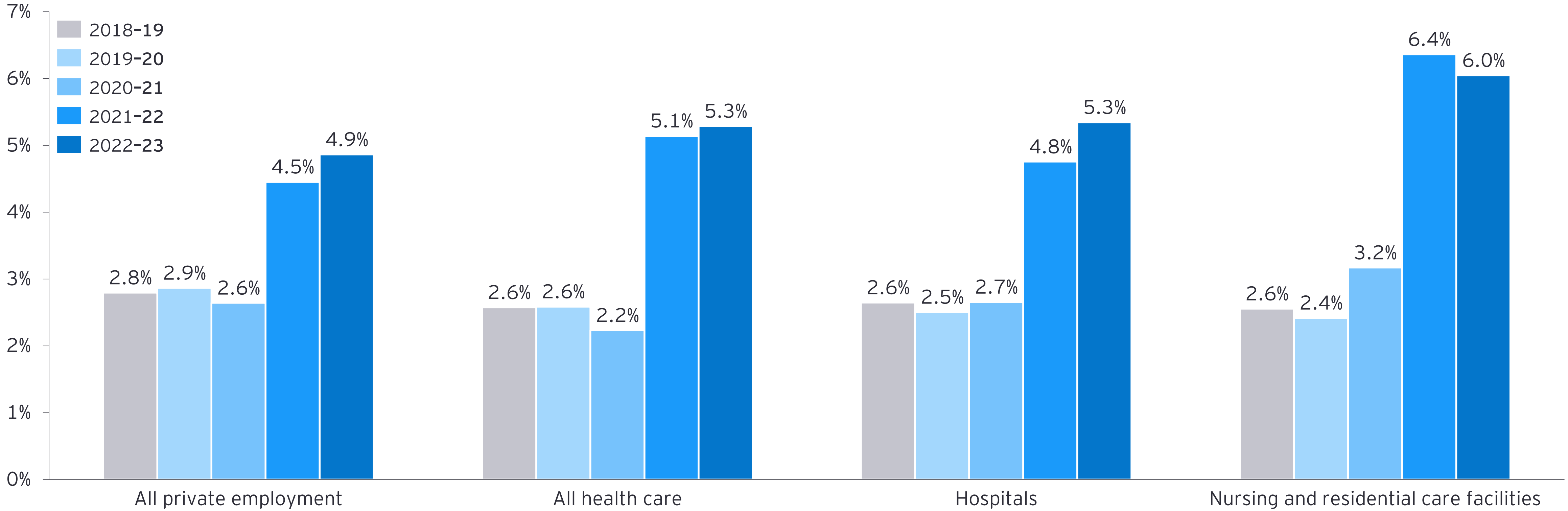
Y/y % change in average hourly earnings and inflation: private sector
Q1 2010-Q1 2023



Source: BLS, EY-Parthenon analysis

Health care wages have grown at a slightly higher rate than the broader economy in recent years; wage growth has an outsized impact on the labor-intensive health sector

Y/y change in employment cost index (total compensation) by industry[1]
Q1 2018-Q1 2023



2018-23 total growth	19%	19%	19%	22%

1. Annual comparisons based on Q1 data points.
Source: BLS; EY-Parthenon analysis

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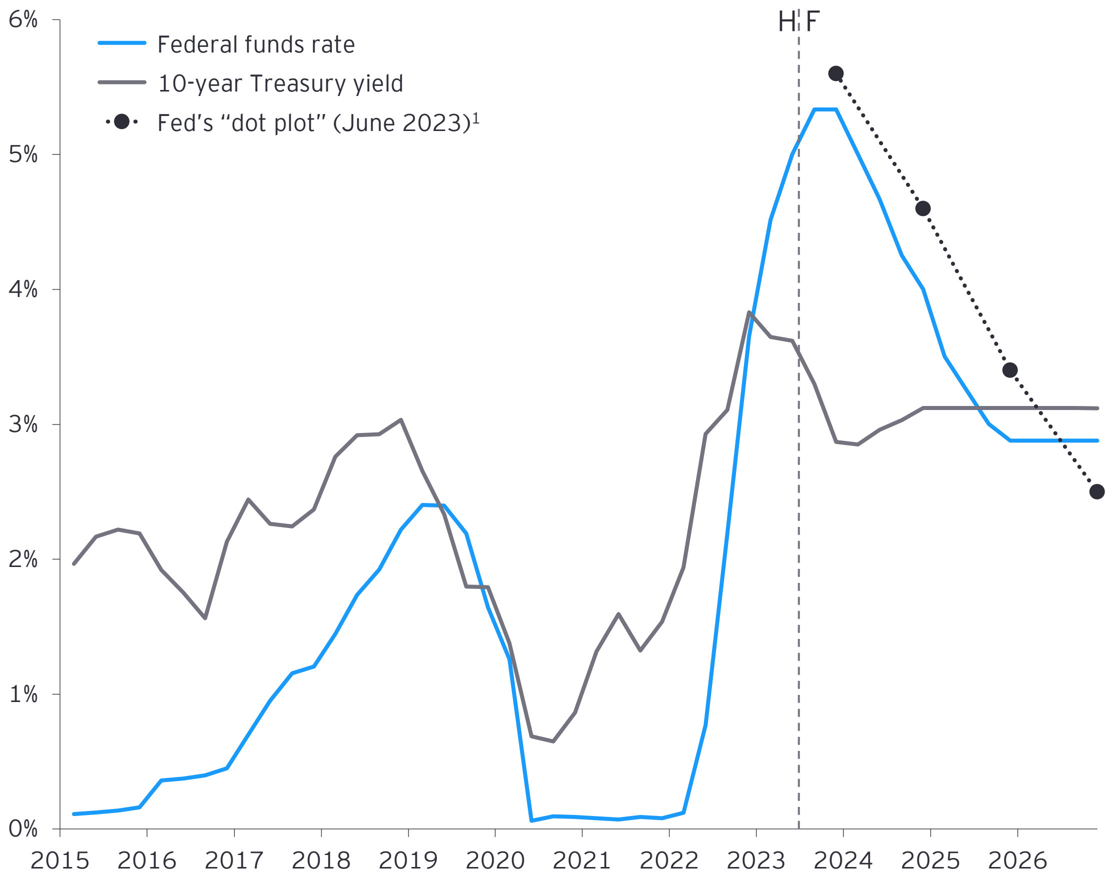
The Fed skipped a rate hike in June, but one is nearly guaranteed in July, and while the terminal rate is within sight, rate cuts won't occur until 2024

US interest rate forecasts, federal funds rate and 10-year Treasury yield
Q1 2015-Q4 2026F



- As widely telegraphed, the Fed maintained the federal funds rate range unchanged at 5.00%–5.25%. The Federal Open Market Committee (FOMC) statement along with the Federal Reserve's new economic projections and Fed Chair Jerome Powell's press conference were an illustration of the current "cognitive dissonance" at the Fed. While extreme data dependence has convinced policymakers of the need to raise the federal funds rate by an additional 50 basis points (bps), the FOMC unanimously decided to maintain the policy rate unchanged in June.
- The June dot plot revealed a higher-than-expected interest rate path compared to March, with the new median federal funds rate projections indicating the Fed will proceed with two additional 25bps rate hikes in 2023 until it reaches a terminal federal funds rate of 5.6%. The recent strength in payroll data along with robust core CPI inflation print appear to have convinced most Fed officials that there is a need for a higher terminal rate to quell inflation.
- The economic projections showed that Fed officials now expect higher economic growth and inflation. GDP growth was revised up from 0.4% y/y in Q4 2023 to 1% and slightly down from 1.2% to 1.1% in 2024. The unemployment rate in Q4 2023 was revised down markedly to 4.1% from 4.5% in the March projections. On the inflation front, core personal consumer expenditures (PCE) inflation is expected to be noticeably higher at 3.9% y/y by the end of 2023 compared to 3.6% in March and 2.6% by the end of 2024 – still well above the Fed's 2% inflation target.
- With financial markets pricing Fed "skip" in favor of a July rate increase, Powell suggested further tightening could be warranted without entirely pre-committing to such an eventuality. As such, Powell reiterated that the Fed would evaluate the need for further tightening on a meeting-by-meeting basis. We now expect another 25bps rate hike in July, after which the Fed will likely pause its tightening cycle throughout the remainder of the year to assess the impact of the tightening to date.

1. "Dot plot" charts the median interest rate projection from the FOMC. The projections for the federal funds rate are the values at the end of the specified calendar year.

Source: Federal Reserve Board; EY-Parthenon

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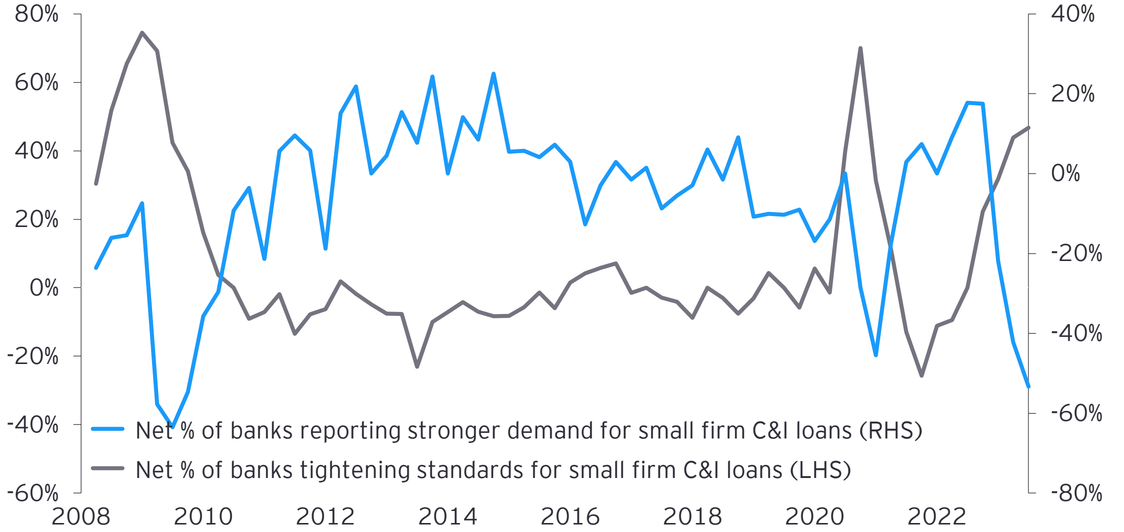
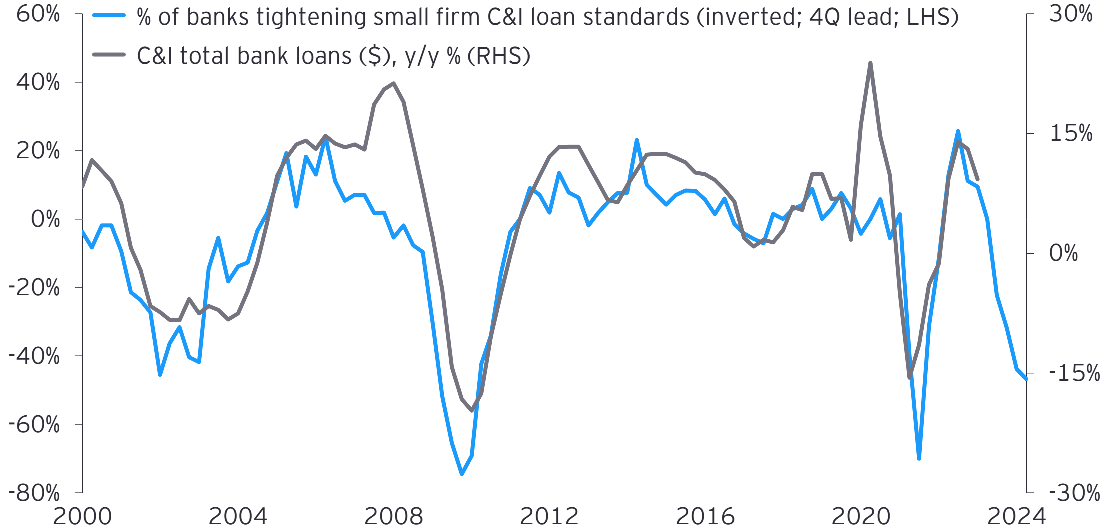
Credit conditions have tightened further in the wake of the banking sector turmoil, but not dramatically, and we anticipate a moderate credit drag on private sector activity

US lending conditions for small businesses
Q1 2008-Q2 2023



- Survey evidence points to a marked tightening of lending standards in recent quarters. The Federal Reserve's survey of bank-lending conditions showed that a net 47% had tightened standards on commercial and industrial (C&I) loans to firms of all sizes at the start of 2023. The data showed some moderate additional tightening in the wake of the banking turmoil, although banks widely reported expecting to tighten lending standards further over the rest of the year.
- Lending standards on credit card, auto and other consumer loans have also become more stringent. A net 25%–30% share of banks reported tightening standards for auto, credit cards and mortgage loans.

US C&I bank lending conditions
Q1 2000-Q2 2023



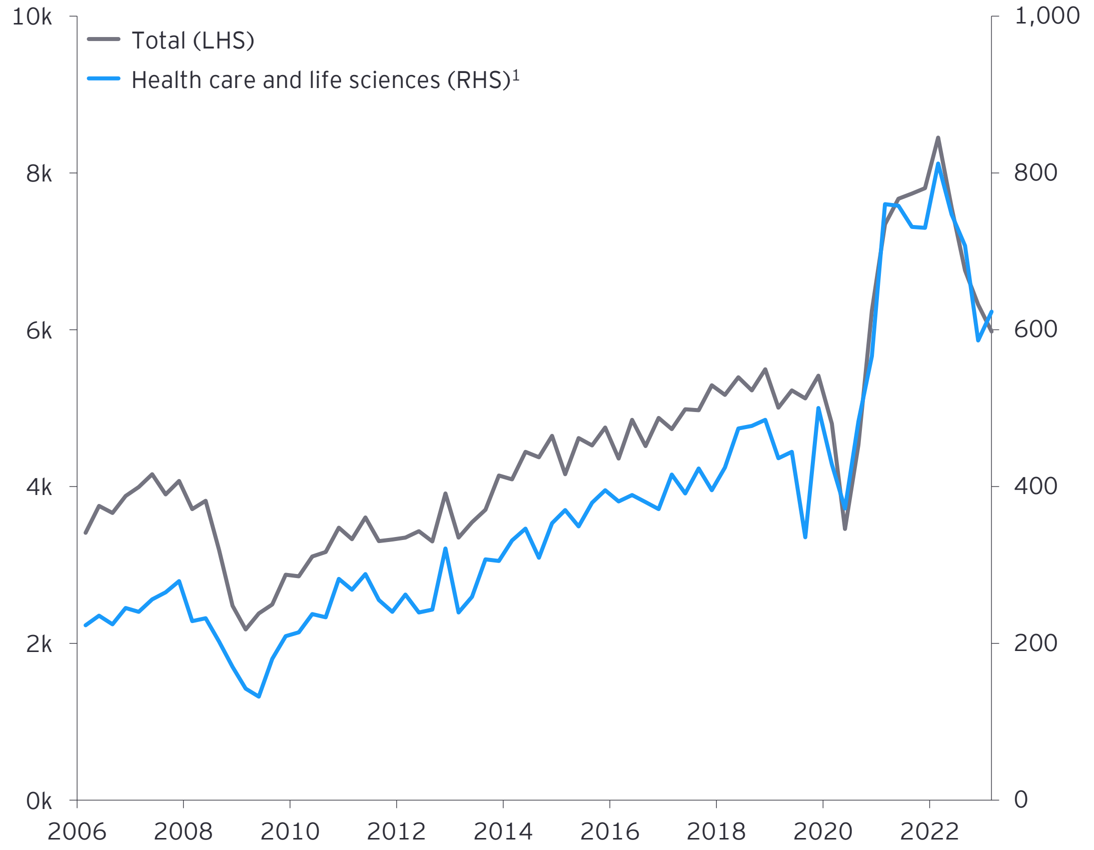
- Reduced credit demand is also driving the slowdown in lending activity. The Senior Loan Officer Opinion Survey (SLOOS) revealed rapidly falling demand for loans from consumers and businesses as the more challenging economic environment and increased economic uncertainty curb their willingness to spend and invest.
- Historically, swings in lending standards typically lead credit growth in the overall economy by about 12 months. This suggests that the full impact of the current tightening of credit conditions will increase significantly in the coming months.

Source: Federal Reserve Senior Loan Officer Opinion Survey; Federal Reserve Board; EY-Parthenon

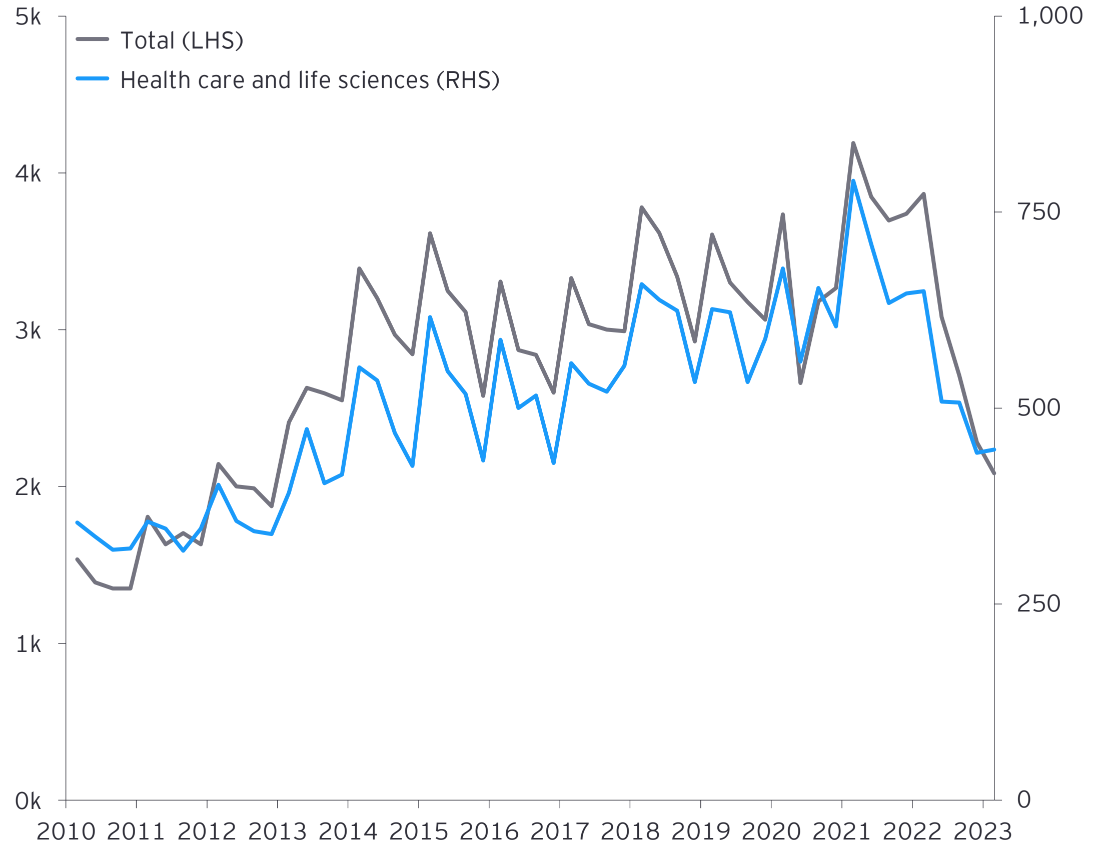
EY Parthenon

M&A and venture capital deal volumes have slowed materially in the last 18 months, and the health care and life sciences slowdown is consistent with broader trends

Global merger and acquisition (M&A) activity by volume
Q1 2006–Q1 2023



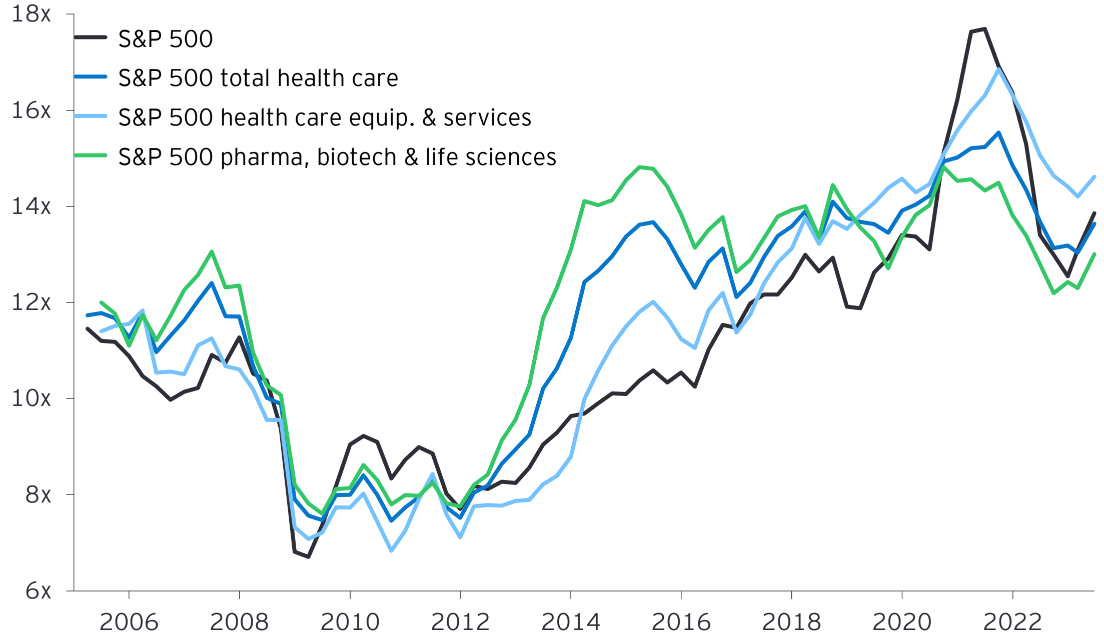
US equity financings for venture-backed companies by volume
Q1 2010–Q1 2023



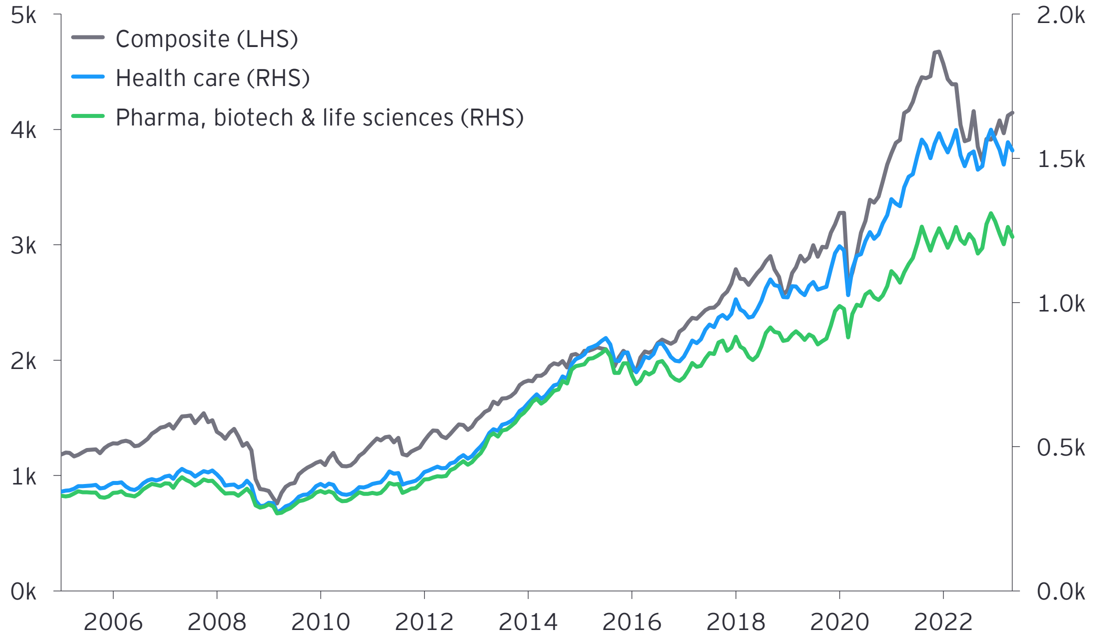
1.Includes the following White & Case sectors: Biotechnology, Medical, Pharmaceuticals.
Source: White & Case; Crunchbase; EY-Parthenon

Public market multiples in health care have reverted to pre-COVID-19 levels as enterprise value/EBITDA multiples in the broader market dropped from record highs

Public market multiples[1]
January 2005–June 2023



S&P 500 indexes
January 2005–May 2023



- For the first half of 2023, S&P 500 valuations multiples in health care recorded an uptick, after dropping from their high in 2021.
- Multiple valuation for pharma, biotech and life sciences has not seen a comparable spike in 2021 but joined the other multiples in their upward direction this year.

- The index of health care equities is trending sideways at 1500 while the S&P 500 is moving up again after falling from its peak in December 2021.

1. Total enterprise value to EBITDA multiple, quarterly average
Source: Capital IQ; Federal Reserve Board; EY-Parthenon

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Topics

- Macroeconomic backdrop
- Sector trends and perspectives
    - State of the sector
    - Inflation
    - Talent
    - Financial conditions and transaction activity
- **Key EY contacts**

Meet the EY-Parthenon Health Sciences and Wellness Team

Arda Ural
Americas Health Sciences & Wellness Leader
Ernst & Young LLP
New York
arda.ural@ey.com

Mallory Caldwell
Americas Health Leader
Ernst & Young LLP
Houston
mallory.caldwell@ey.com

Ranu Carroll
Life Sciences Leader
Ernst & Young LLP
Hoboken
ranu.carroll@parthenon.ey.com

Melinda Durr
Payer Leader
Ernst & Young LLP
Chicago
melinda.durr@parthenon.ey.com

Shashank Rao
Senior Director
Ernst & Young LLP
Hoboken
shashank.rao@parthenon.ey.com

Haley Clement
Director
Ernst & Young LLP
Washington, DC
haley.rhodes@parthenon.ey.com

Ian Donahue
Director
Ernst & Young LLP
Boston
ian.donahue@parthenon.ey.com

Jean Keleher
Associate Director
Ernst & Young LLP
Chicago
jean.keleher@parthenon.ey.com

Harish Kumar
Associate Director
Ernst & Young LLP
New York
harish.kumar7@parthenon.ey.com

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Meet the EY-Parthenon Macroeconomics Team

Gregory Daco
Chief Economist
Ernst & Young LLP
New York
gregory.daco@parthenon.ey.com

Dan Moody
Director
Ernst & Young LLP
Denver
dan.moody@parthenon.ey.com

Lydia Boussour
Senior Economist
Ernst & Young LLP
New York
lydia.boussour@parthenon.ey.com

Kamish Valiani
Associate
Ernst & Young LLP
Chicago
kamish.valiani@parthenon.ey.com

Marko Jevtic
Senior Economist
Ernst & Young LLP
New York
marko.jevtic@parthenon.ey.com

Sophia Wang
Associate
Ernst & Young LLP
Boston
sophia.wang2@parthenon.ey.com

Explore content from our team

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Individuals above are members of Ernst & Young LLP.
Please direct initial questions and requests to Dan, Kamish and Sophia.

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