



2023 Macroeconomic Update

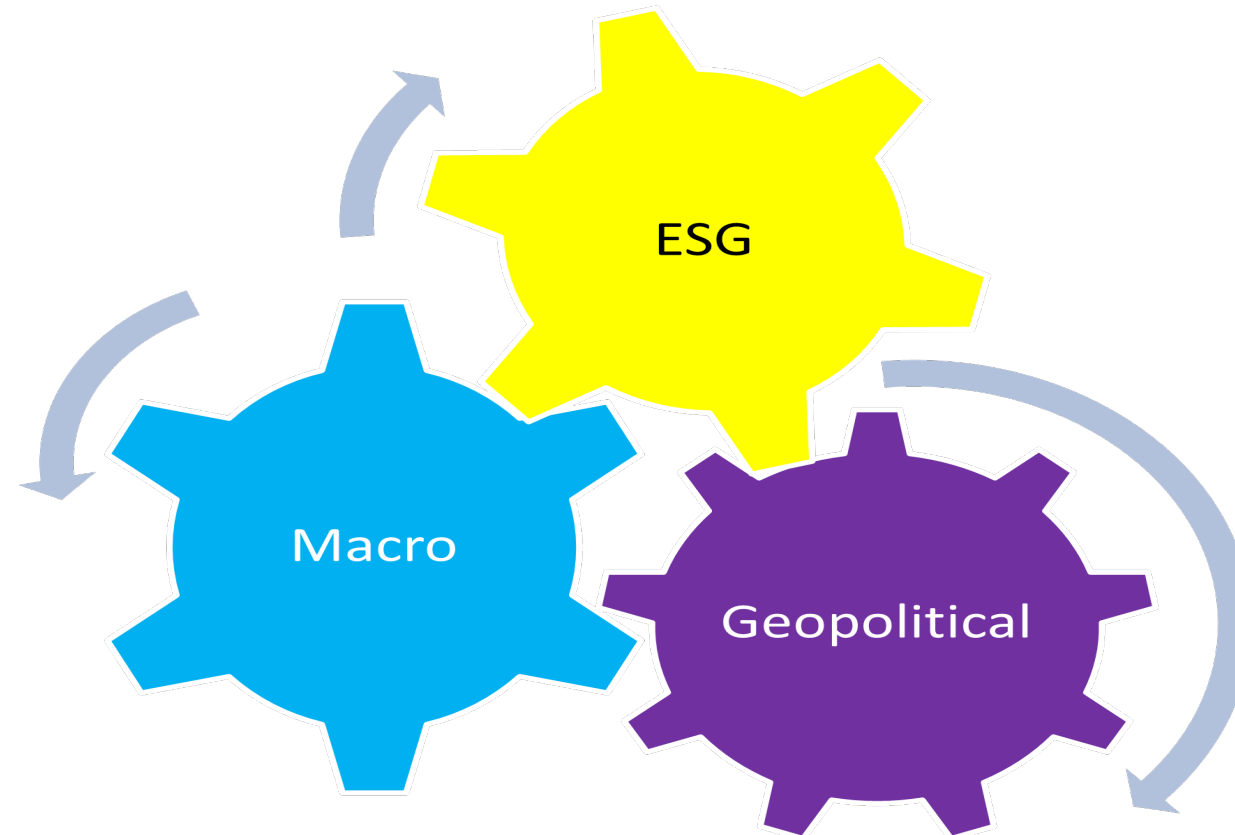
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Macroeconomic Update

A Complex, Evolving, Iterative Interaction



The complex interaction of Macro, Geopolitical and ESG is shaping global events, economic development, market opportunities and risks

Russia & Ukraine. China. “Security” on many levels! Commodity & Chip Wars?

Bubbles

Maslow's Hierarchy of a Credit Bubble



Bubbles Only Happen in “Safe Assets”

- Bubbles only happen in “safe assets”
 - That is where leverage builds.
 - That is where investors aren’t prepared for any losses.
- Historically this has been the case
 - S&L Crisis – missed interest rate risk.
 - Long Term Capital / Russia Default – extremely large trades on “arcane” products and “sovereigns don’t default.”
 - IG Credit – WorldCom and Enron introduced fraud as a risk.
 - Great Financial Crisis – AAA mortgage backed bonds.
 - European Debt Crisis – sovereign debt.
- Usually is Something “New”
 - Once a bubble has “popped” it is unlikely to be source of the next bubble.

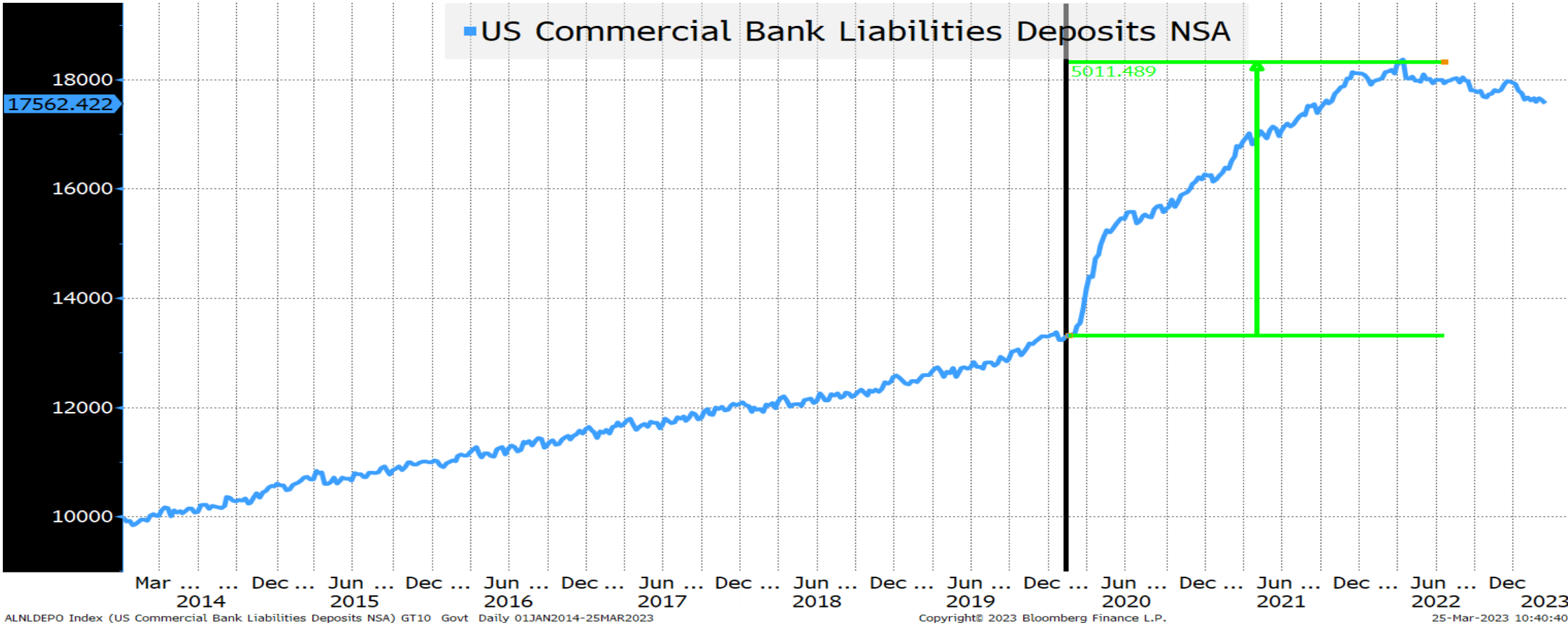
Quantitative Tightening & Easing



- Easing might be easier to explain
- Going forward QE should be the “nuclear” option not “extraordinary” measure
- Will weigh on markets as “behind the scenes” the Fed questions QE

Banks

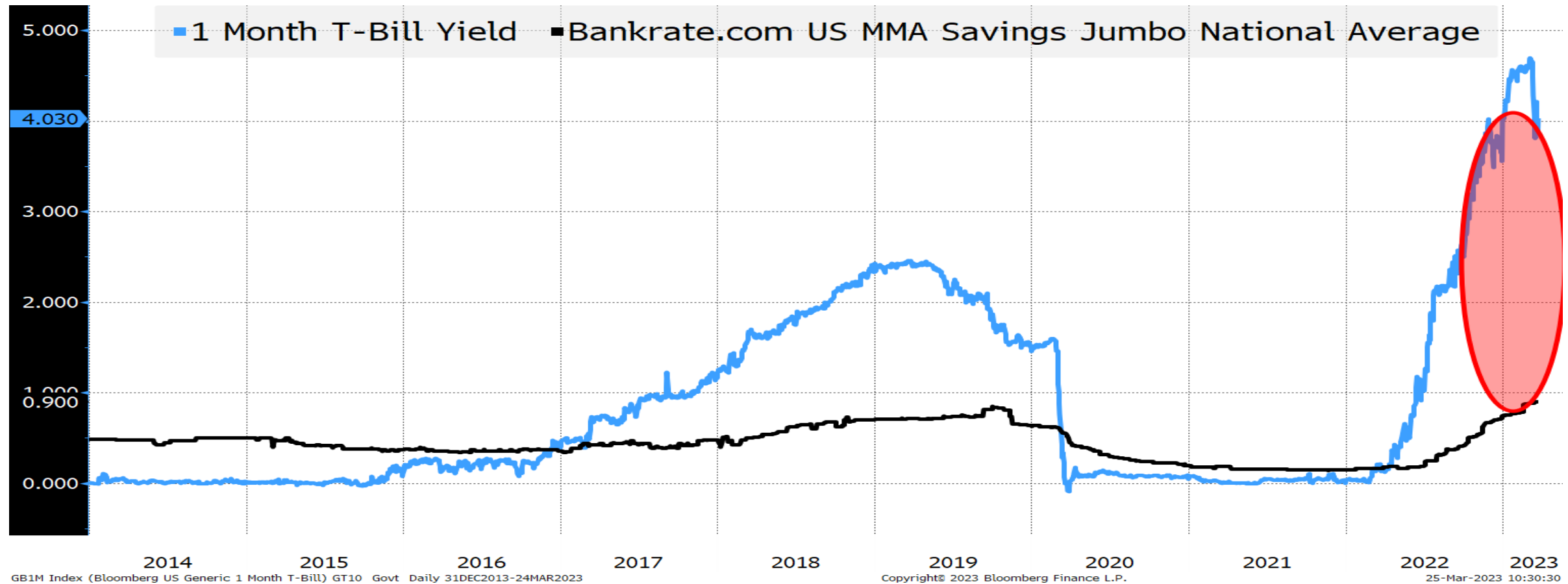
The Rise of Bank Deposits



From \$500 Billion a year to \$2.5 Trillion a year?

The rise occurred during peak “ZIRP”

Is it a Rate Problem?



Bank deposit rates are not competitive.
It has never been easier to move money.

What's Next for Rates?

- Fighting the “Wrong” Fight?
 - Is ongoing fight on inflation, the “right” fight to have?
 - Inventories continue to grow.
 - Rail freight shipping is down and declining as is activity at ports.
- Debt Ceiling
 - Already potentially contentious, but add the ongoing efforts to support banks, and it gets even trickier.

Supply Chain “Security”

Supply Chain “Security”

- Business Follows the Flag
 - National Security if front and center and companies see that too.
- The “Intangible” Costs of Widgets
 - Should companies factor in risks and intangible costs into their decision making?
 - Can they do it without hurting shareholders? Can they “not” do it without hurting shareholders?
 - **Government support and incentives might be the key here!**
- The “Closeness” Effect
 - Working with companies, countries and regions that are “closer”
 - Politically
 - Morally
 - Physically (geographic proximity)
- A Great time to Segue to Utilities
 - All utilities face “energy transformation” challenges.
 - Some are doing this in regions with declining populations, while others are building rapidly to meet the influx of new residents and business

The Future?

The “Commodity War”

- The “Commodity” War
 - How do we secure the resources we need?
 - How much further is China on this front?
 - Where once a map of the world’s oil sources and U.S. interests would have overlapped, it will be a map of rare earths and critical minerals that overlap.
 - China figured this out years ago.
 - **INDIA!**
- Processing the resources
 - The ability to process the rare earths and critical minerals is crucial.
 - **One positive story out of Australia.**
- Does this “Escalate” Into a Chip War?
 - Chips are becoming headline news.
 - Chips are part of the “secure” supply chains and good jobs.
 - Chip sanctions might be the one area that sanctions worked with Russia,

Local Economic Update

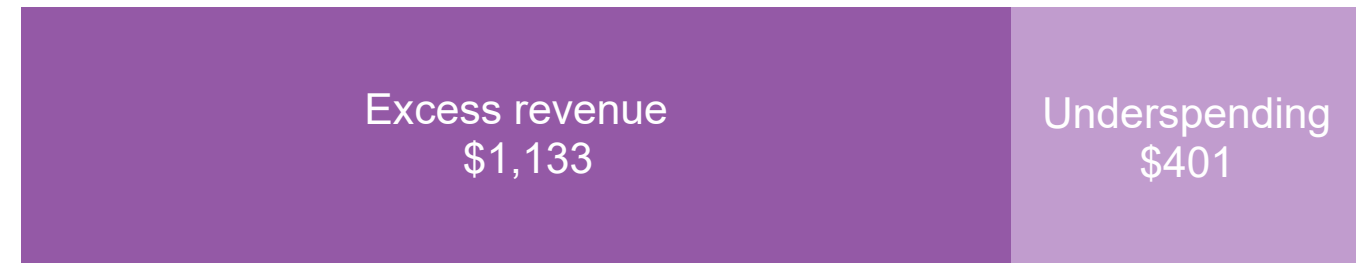
Part I: District FY 2022 Financial Results

**Record level
budget surplus**

\$1.5B

FY 2022 budget surplus

Composition of budget surplus (\$ millions)

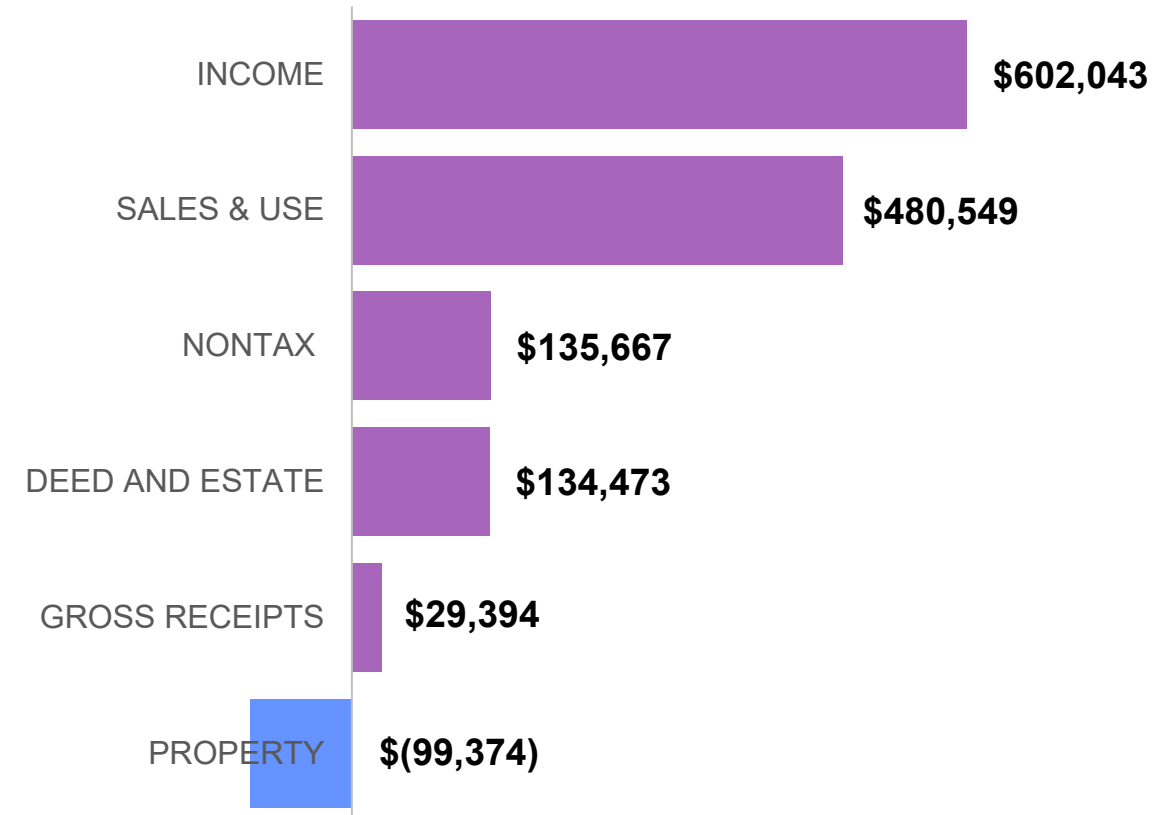


Strong FY 2022 revenue growth

\$1.3 Billion (14%)

FY 2022 revenue growth

Components of Revenue Growth (\$ thousands)

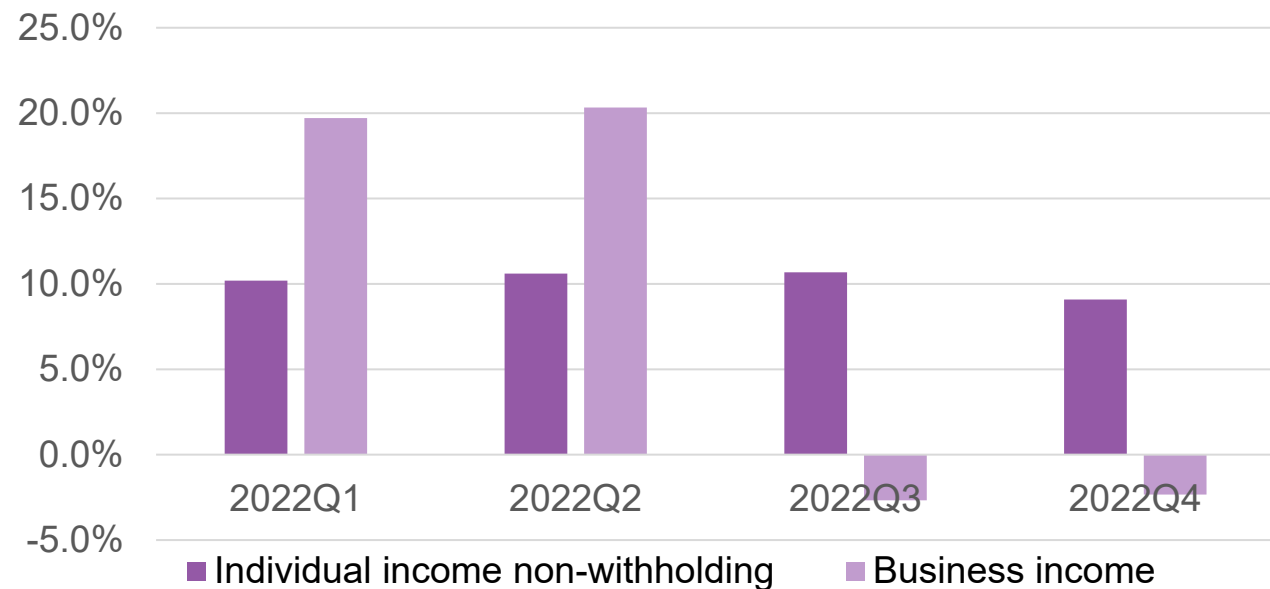


Sources of revenue growth: Asset price appreciation

Strong growth in asset prices in 2021...
S&P 500 Index (January 2021 =100)



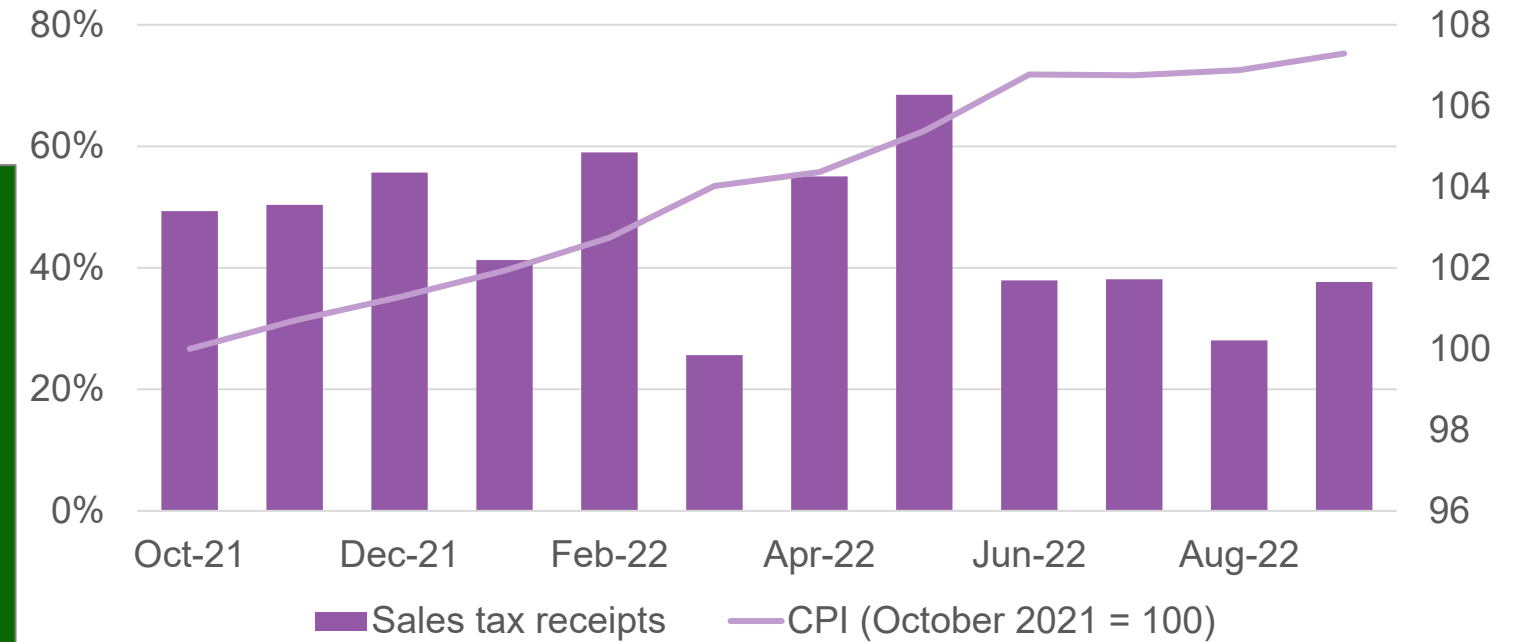
...drove components of income tax revenue higher in 2022
Quarterly income tax revenue, %change from previous year



Sources of revenue growth: Higher inflation

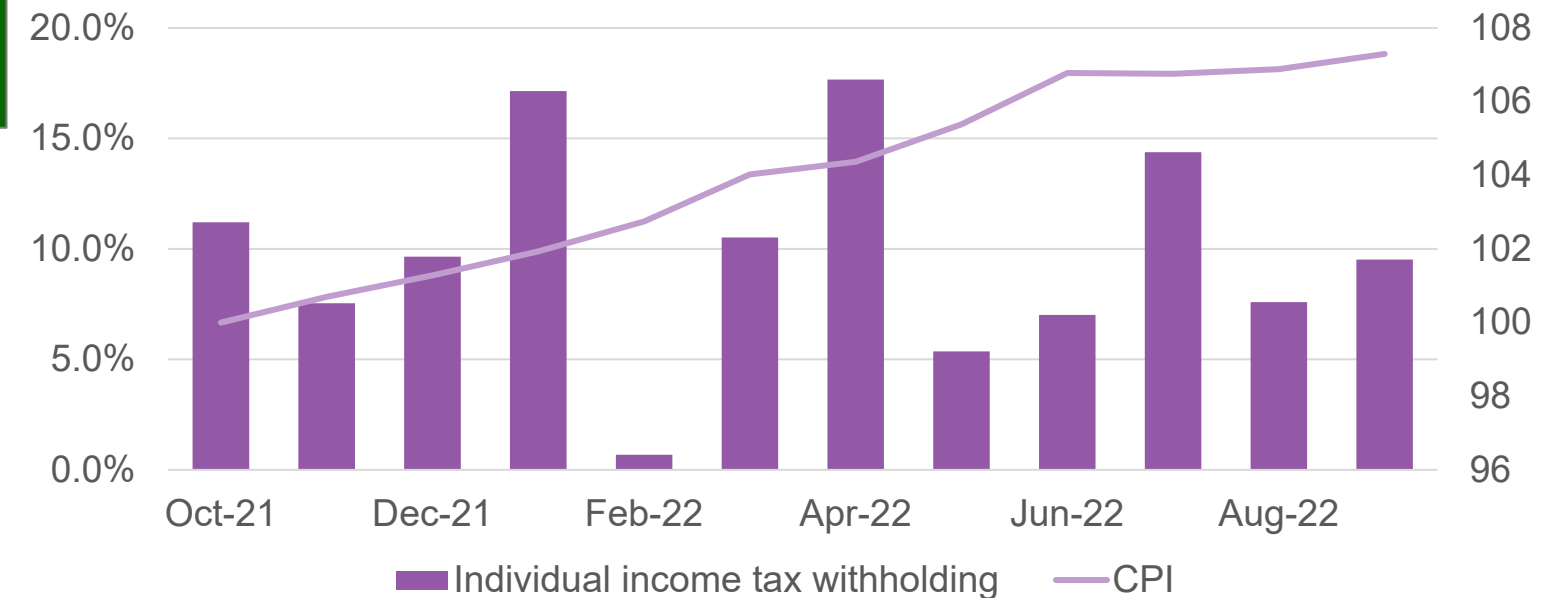
Inflation drove receipts for sales taxes...

Monthly sales tax receipts, % change from previous year; CPI October 2021 = 100



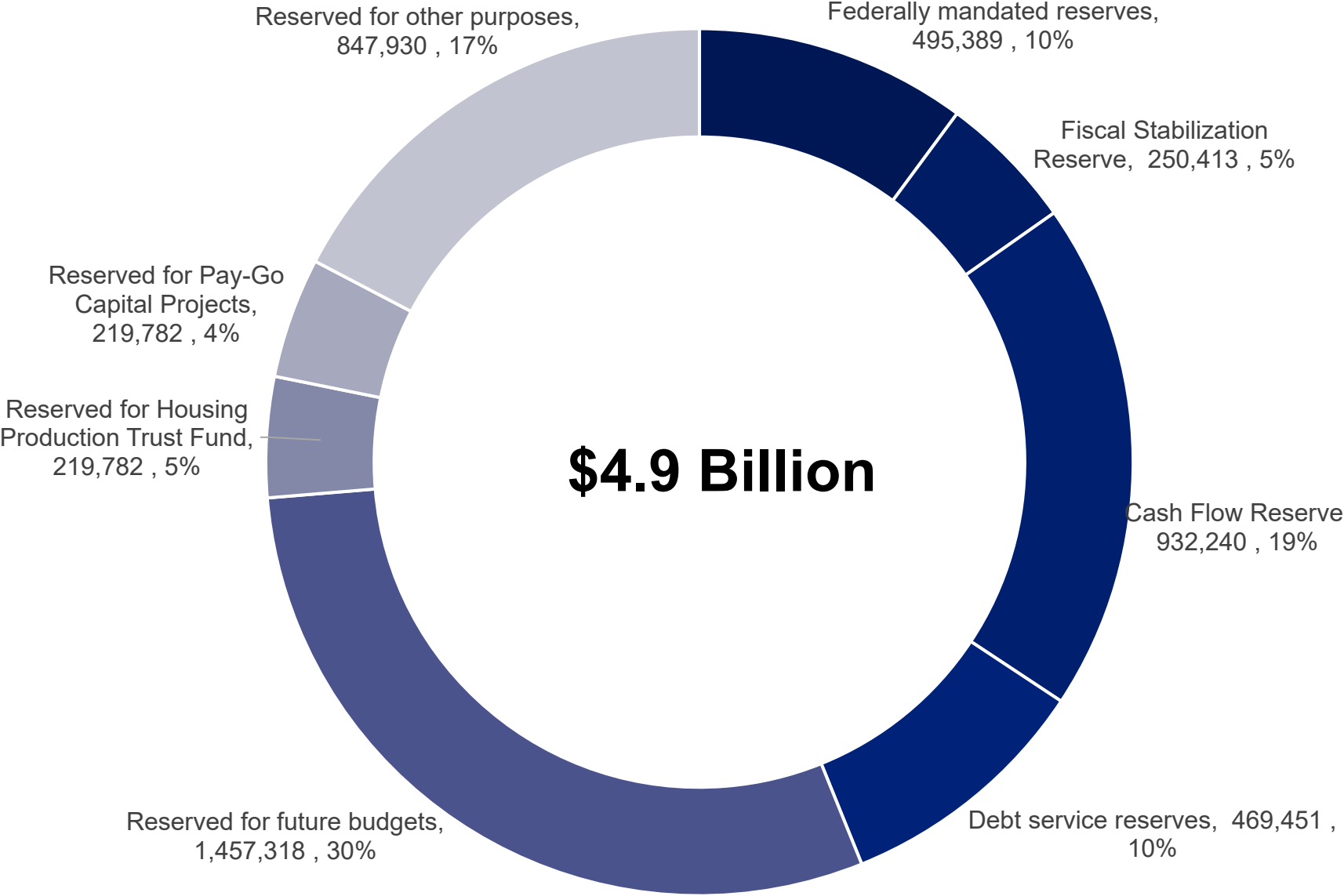
...and individual income tax withholding higher

Monthly individual income tax withholding, % change from previous year



FY 2022 Composition of General Fund Balance
(\$ thousands)

District shored
up General
Fund Balance
with surplus



Part II:

Risks and uncertainties going forward

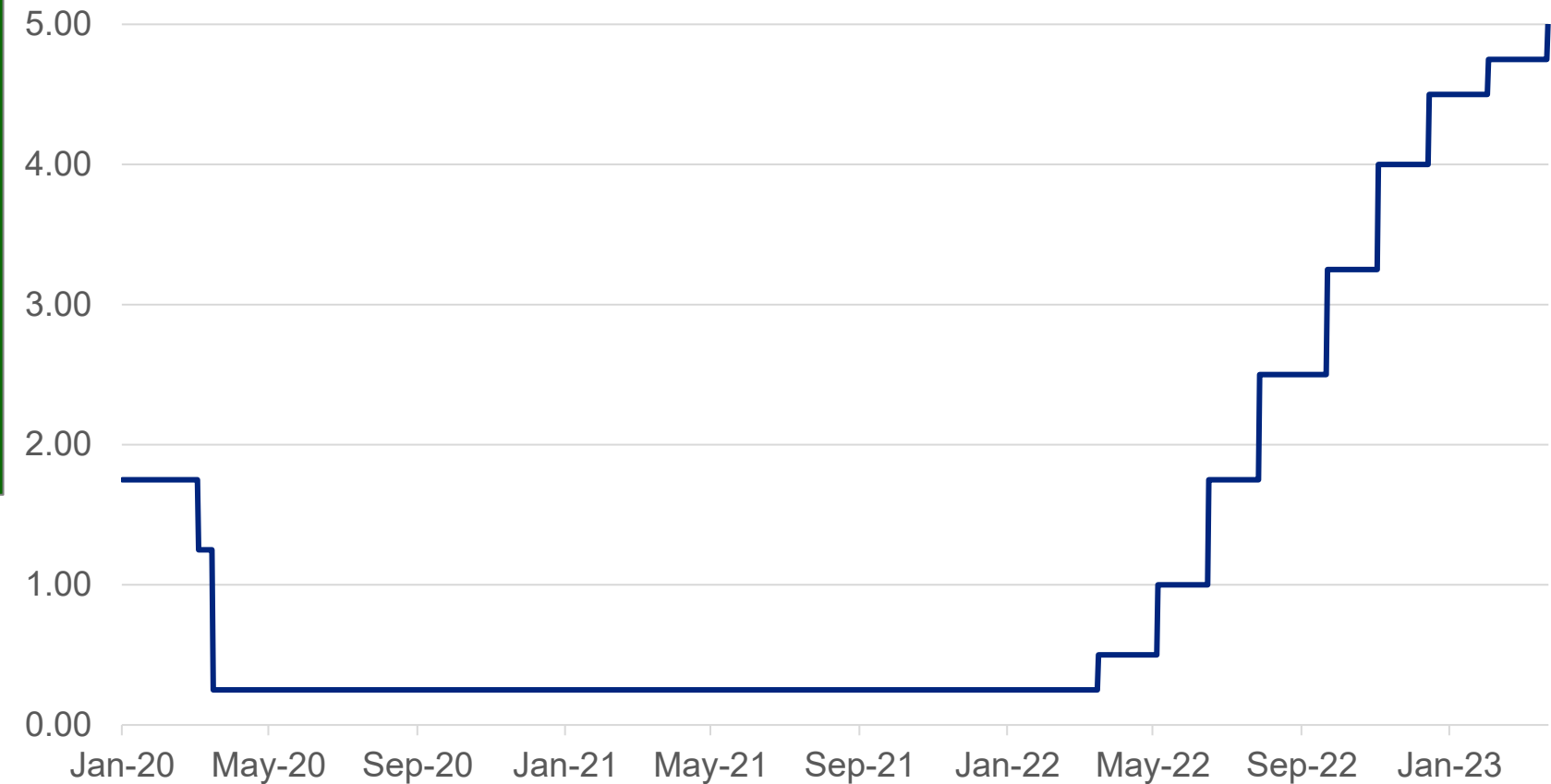
**“Everything,
Everywhere,
All at Once”**

Mist of risks and uncertainties shrouds economy

- Inflation
- Interest rate hikes
- Stock market volatility
- Bank runs
- Commercial real estate apocalypse (maybe)
- Recession (maybe)
- Demographic shifts
- War/energy market volatility
- Trade tensions

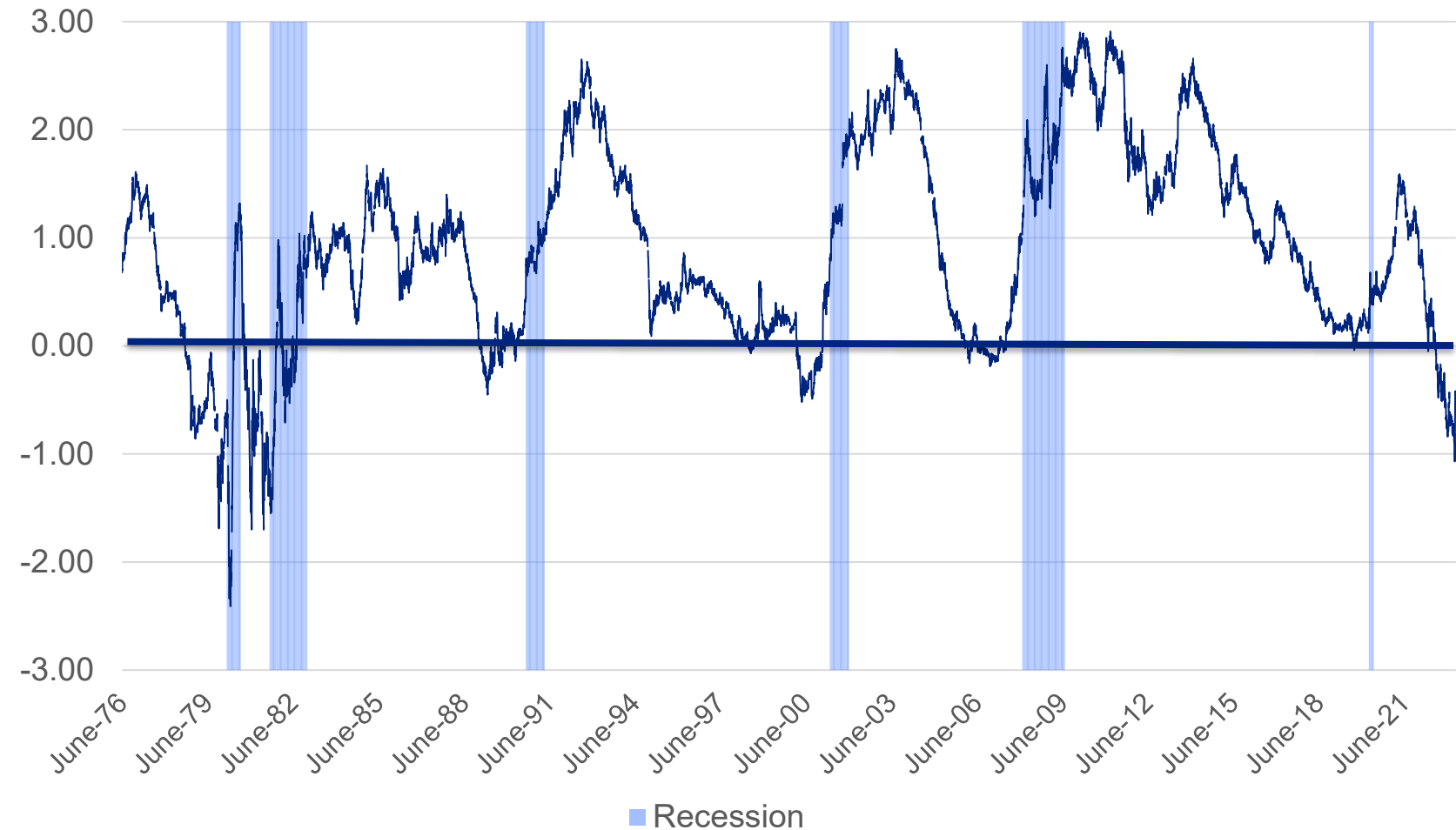
Source of risk: Rapid rise in interest rates

Federal Reserve has raised interest rates 9 times over the past year
Federal Funds Target Range - Upper Limit



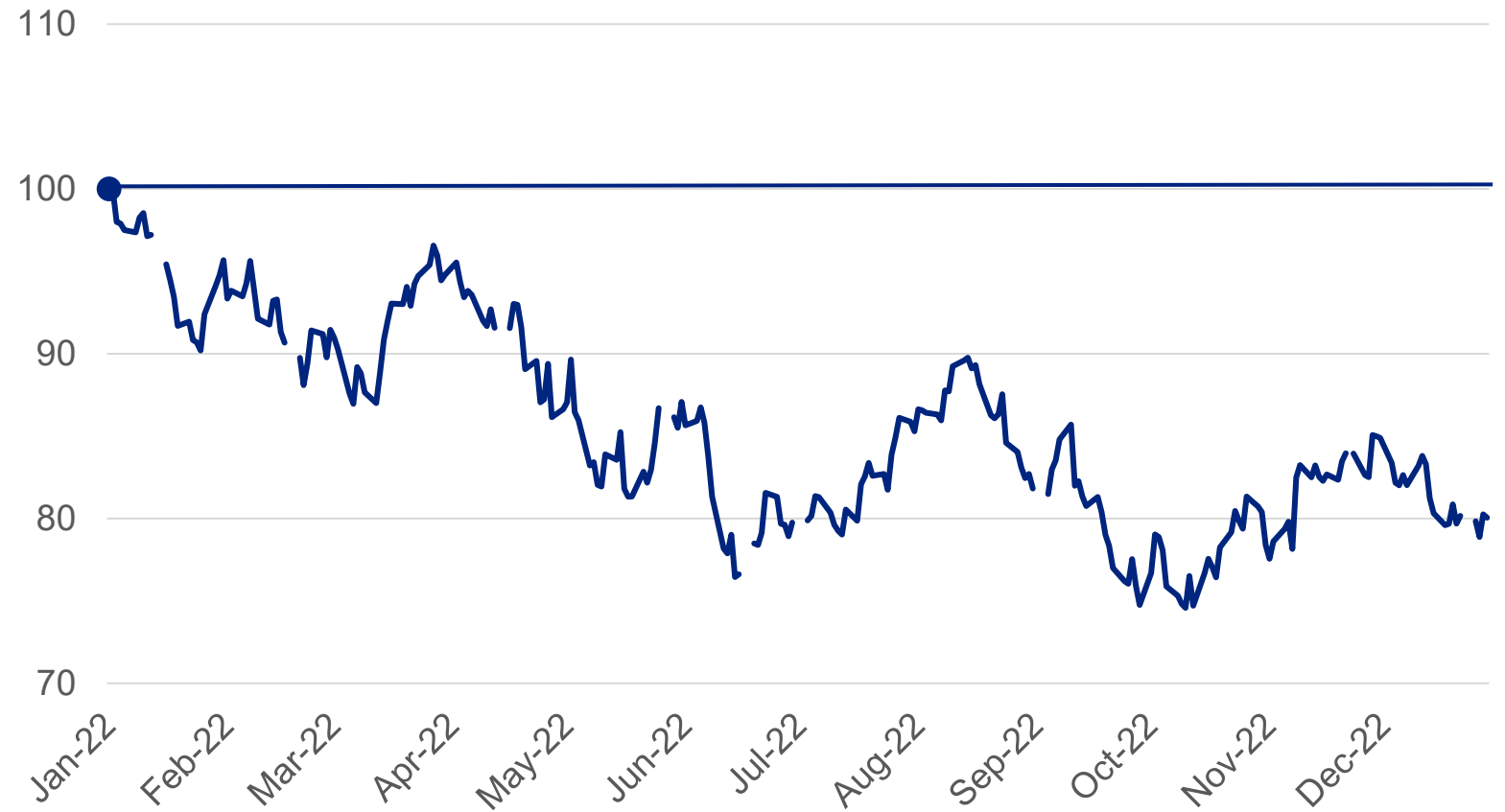
**Signs of
weakness:
Inverted yield curve
usually precedes
recession**

10-Year Treasury Constant Maturity Minus 2-Year Treasury Constant Maturity, Percent



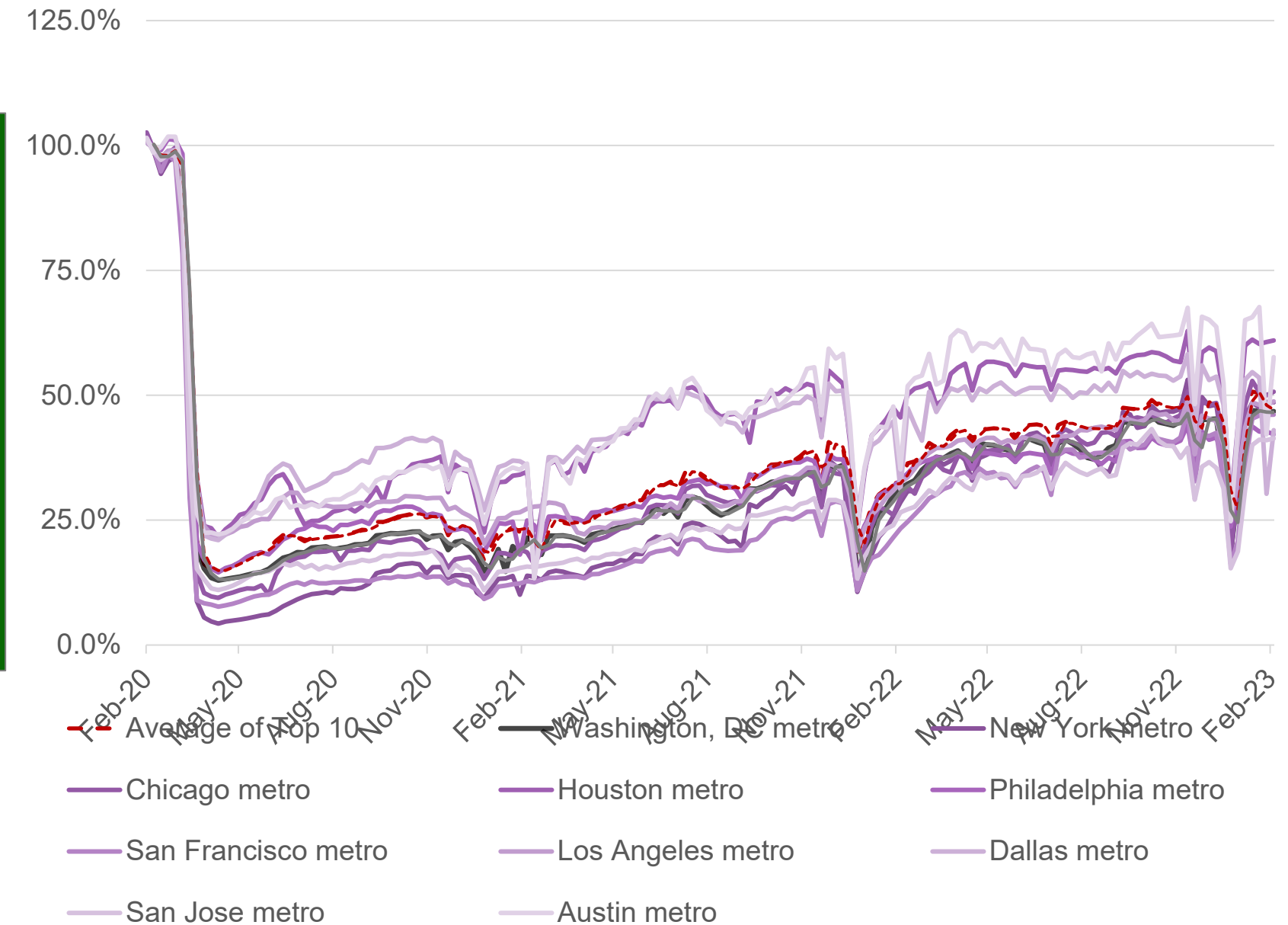
Signs of weakness: Falling stock prices

Lower stock prices in 2022 will reduce capital gains tax receipts in FY 2023
S&P 500 Index (January 2022 = 100)



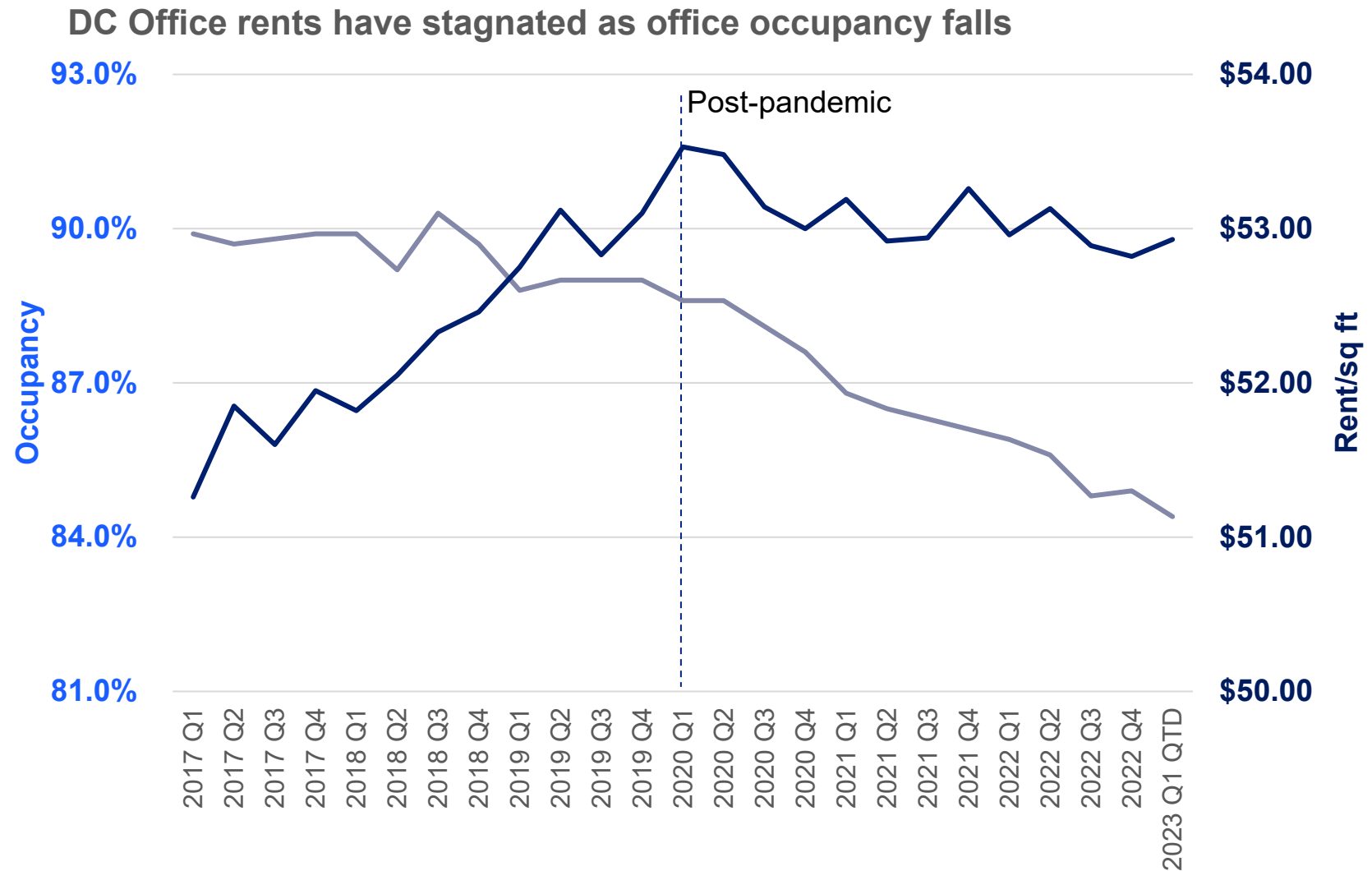
Expanded work from home may be here to stay

Weekly card swipe % , February 2020 =100%



Sources of risk:
Expanded work from
home

Signs of weakness: DC commercial office rents stagnate as occupancy falls



Demographic shifts:

Migration to the South from other regions

Northeast

Population change from previous year

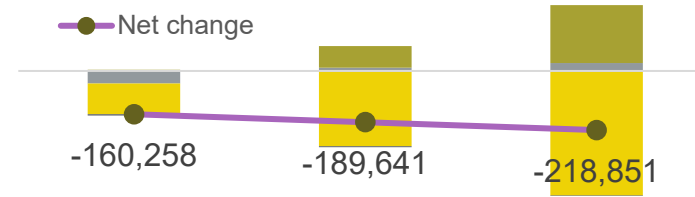
Not classified

Domestic migration

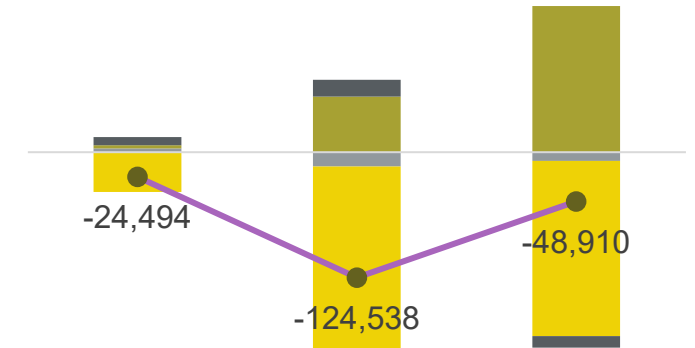
International migration

Natural increase

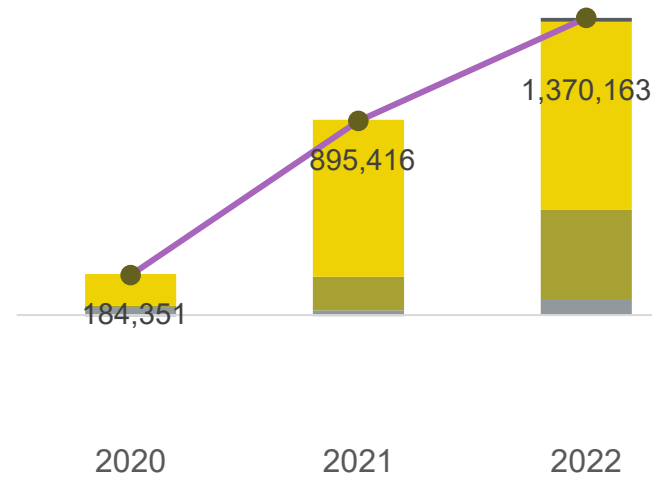
Net change



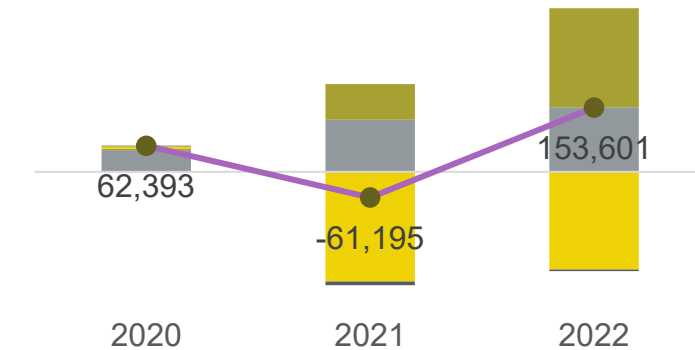
Midwest



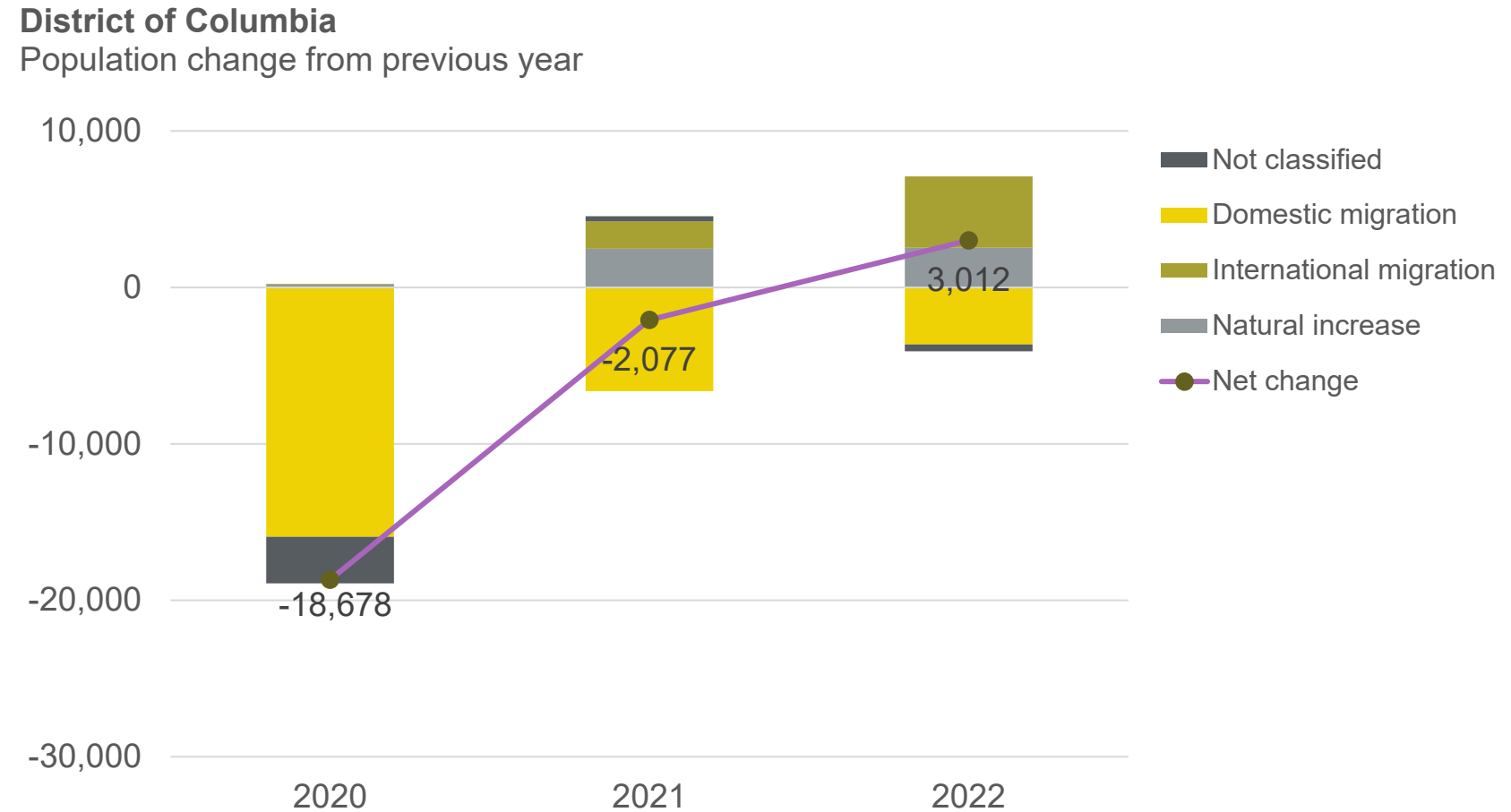
South



West



Long-term risk for the District: Demographic shifts are a source of risk for the District



What can state and local governments do in the face of uncertainty?

- Pandemic shows how shocks can quickly upend public finances
- There will be more shocks and more black swans (“unknown unknowns”)—that is, unpredictable events that significantly disrupt everyday life and the economy
- For example, the Russian invasion of Ukraine last February and China’s zero-Covid policy contributed to rising inflation
- Recent bank runs another example

How can we better prepare local finances to weather these shocks?

- Budget conservatively, preferably with a long-term financial plan
- Fully fund pensions and other post-employment benefits
- Limit debt (use surpluses to help finance capital projects)
- Build up a rainy-day fund from budget surpluses
- Scenario analysis/contingency planning

That's it!

Questions?

Sponsorship Opportunities are available.

Please contact

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