

Mastercard SpendingPulse™



What is SpendingPulse™?

Mastercard SpendingPulse™ is a **macroeconomic indicator of retail sales across all payment types**. SpendingPulse derives total and sector-level retail sales by aggregating sales activity in the Mastercard payments network and survey-based estimates for other payment types (including cash). These aggregates are then adjusted to account for macroeconomic factors, so they are representative of consumer retail spend.



Contactless



Mobile Pay



Cash



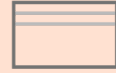
Mastercard transactions



Cheque



In-app Payments



Non-Mastercard
Card Payments

1



SpendingPulse leverages aggregate sales activity in the Mastercard payments network to build retail sales estimates while controlling for factors to ensure the data is representative of total consumer retail spend

2



Census data, city level sales estimates, historic retail tax figures, public company data, weather data, and US Bureau of Economic Analysis are some of the additional 15+ data points used to ensure the Spending Pulse modeled estimates accurately reflect retail spend

3



Treasury yields, oil futures, macroeconomic events, foreign exchange rates, local holiday schedule, and climate data are some of the additional data points Mastercard uses to create SpendingPulse forecasts, in addition to modeled data



SpendingPulse offers frequent, accurate retail insights at a high level of geographic granularity

FREQUENCY

SpendingPulse™ Next Generation provides **daily metrics** refreshed on a **weekly cadence**

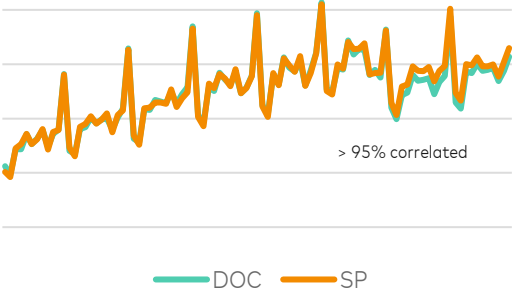
with only a 5-7-day lag from the week's end

vs.

monthly Department of Commerce updates that are released 2-3 weeks after month close, and revised in subsequent months

ACCURACY

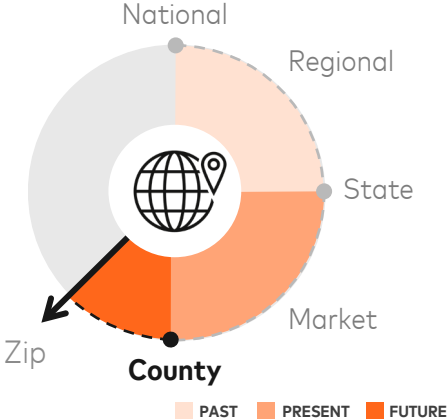
Sales – Total Retail xAuto



SpendingPulse uses proprietary data and advanced modeling to accurately estimate spend that closely matches DOC estimates

GRANULARITY

Geography



SpendingPulse includes the following features, with additional enhancements to come



Web-Based Platform

Features:

- **Visualizations:** Access to user interface to enable dynamic visualizations of local performance benchmarks
- Sales performance by day since 2018, with **weekly updates with a 5-7-day delay**
- Sales metrics include **sales by purchase channel (in-store, online)**
- Daily **forecasts** for the next 18 months
- **No technical integration** required; only usernames and email addresses for user account setup
- **Export** any platform data or visuals to Excel

Geographies: All US, sales figures for 50 states, over 200 DMAs and 3000 counties

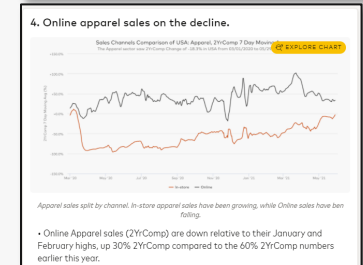
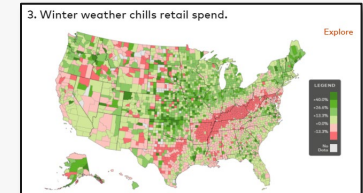
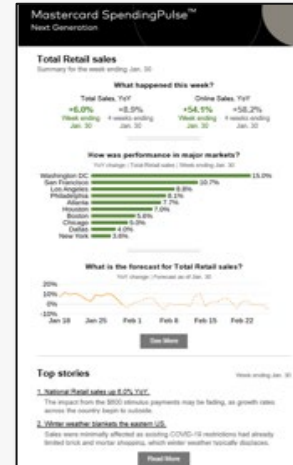
Sectors: Total Retail (excl Auto) + *Airlines, Apparel, Department store, Electronics, Fuel & Convenience, Grocery, Home Furniture & Furnishings, Home Improvement, Jewelry, Lodging, Restaurants;*

Subsectors available for *Restaurant and Apparel* subsectors



Weekly Insights & Email Alerts

- Email & platform **briefings with insights** to share the latest macroeconomic thought leadership
- Webinar content hosted to **hear directly from Mastercard economists**



SpendingPulse provides financial institutions with faster, more accurate retail and sector spend insights for a variety of critical use cases

Issuer Portfolio Strategy

- Benchmark sales performance of card portfolios to total sector sales. Identify opportunities to increase spend from growth trends/forecasts across key sectors and geographies.

Acquirer Portfolio Strategy

- Compare sales performance of merchant partners to relevant sectors. Assess growth trends and forecasts across key sectors and geographies to prioritize merchant partners and acquiring strategy.

Forecasting

- Leverage sector-level sales trends and forecasts as a leading indicator of consumer spending and card performance. Forecast sector-level sales 18 months into the future.

Executive Reporting

- Build executive-level reports capturing latest macroeconomic trends among total retail, online retail, lodging, and other relevant sectors.

Lending & Risk Management

- Gain insights into the health of the consumer economy and develop appropriate risk management based on macro risk and opportunities.

Marketing

- Dynamically allocate resources to the fastest-growing areas; identify opportunities for investment based on forecasted growth.

Online vs. In-Store Sales Channels

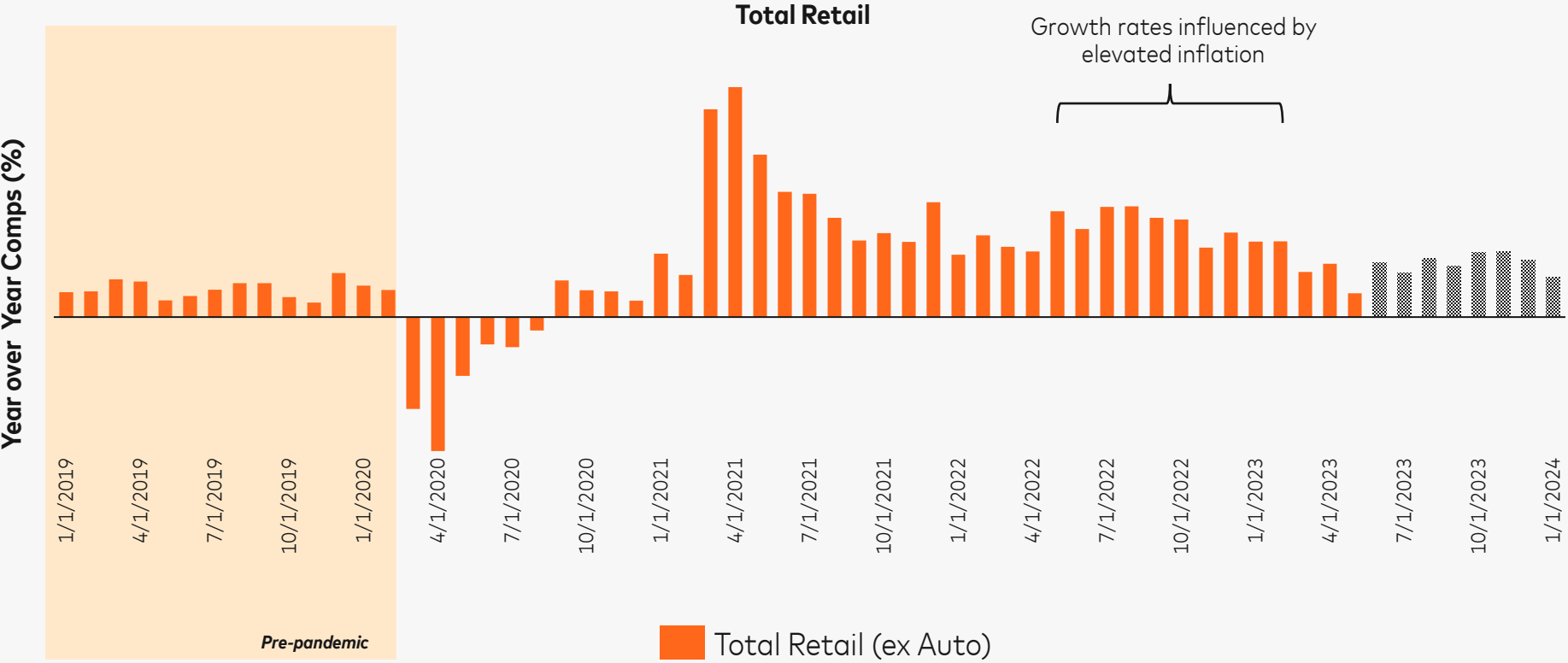
- Monitor where and when customers are shifting to e-commerce and where the appetite remains for in-store shopping.

Economic Health Indicator

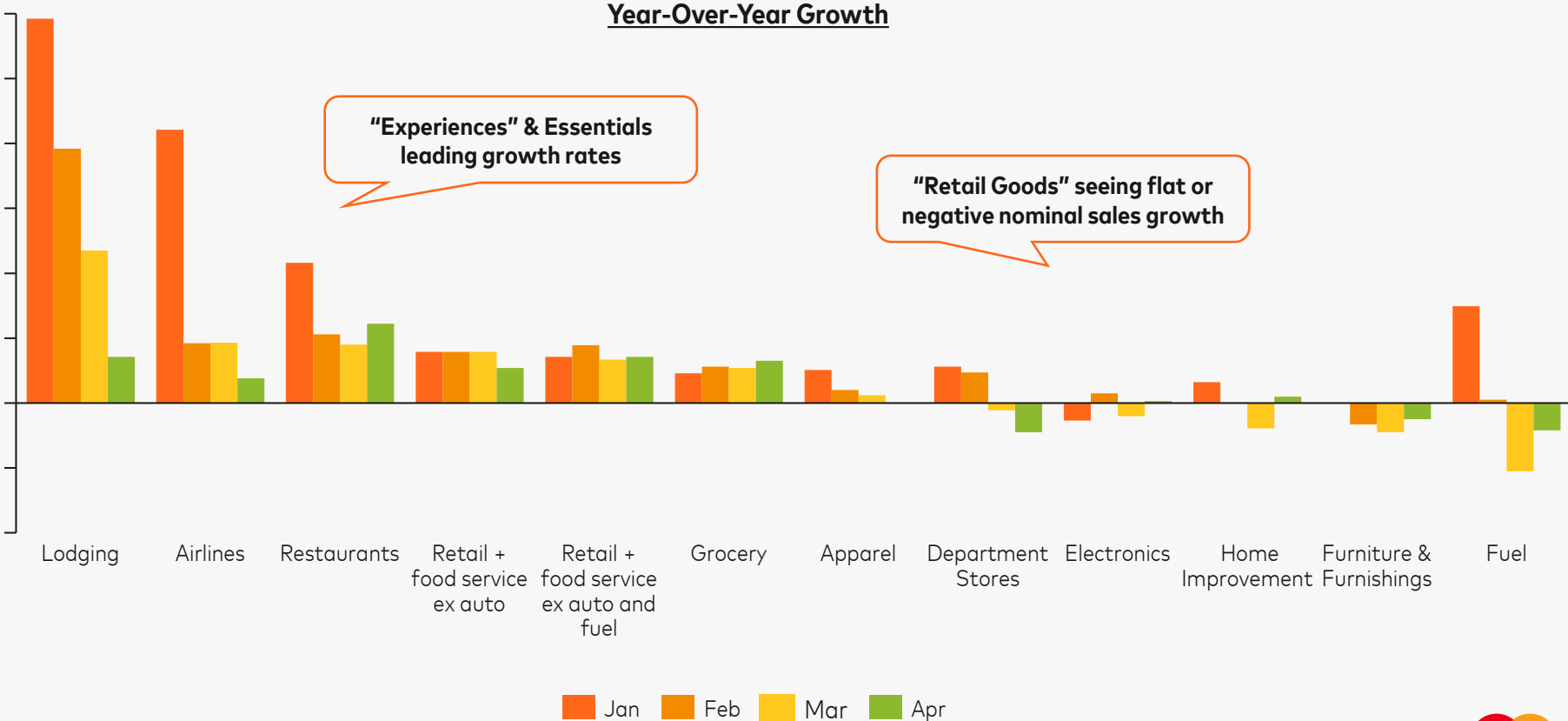
- Gauge the overall health of the consumer economy and contextualize the impact of inflation and other macro factors.



SpendingPulse Insights | Total Retail has grown much faster than pre-pandemic rates

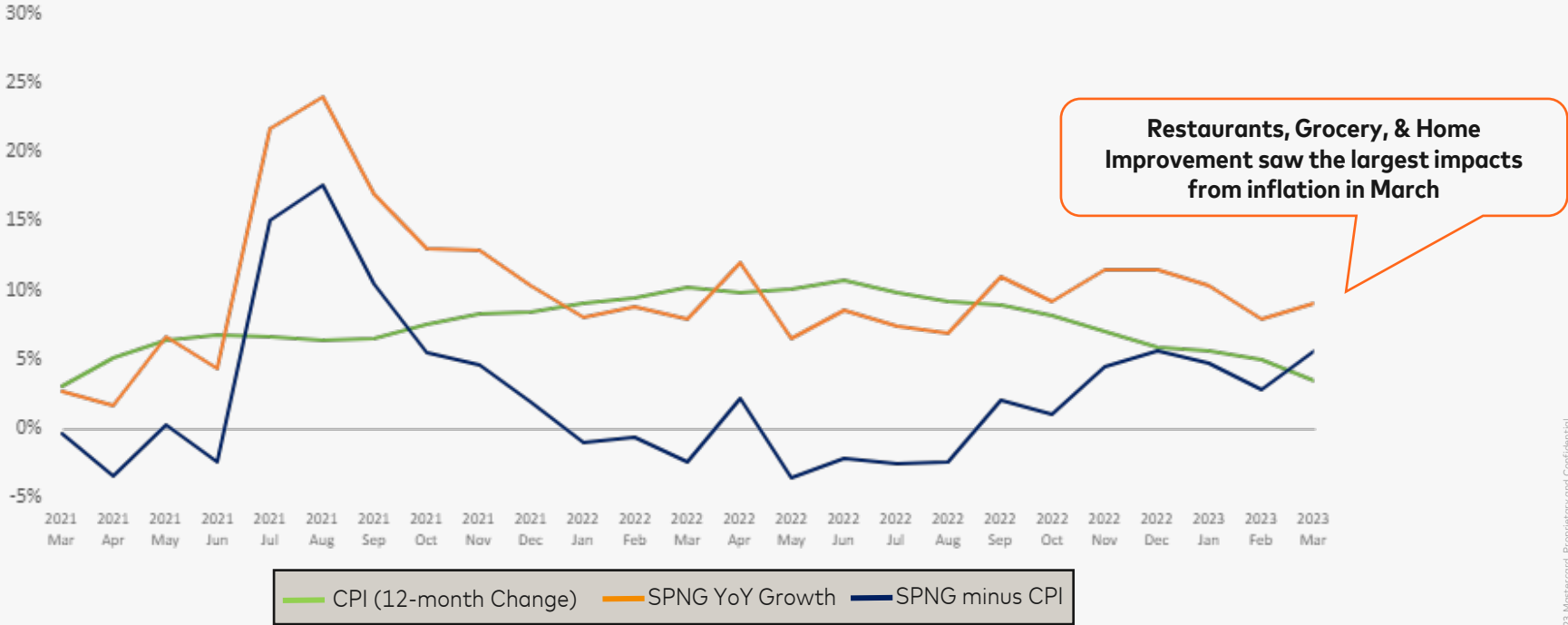


SpendingPulse Insights | Deceleration of sales growth in 2023

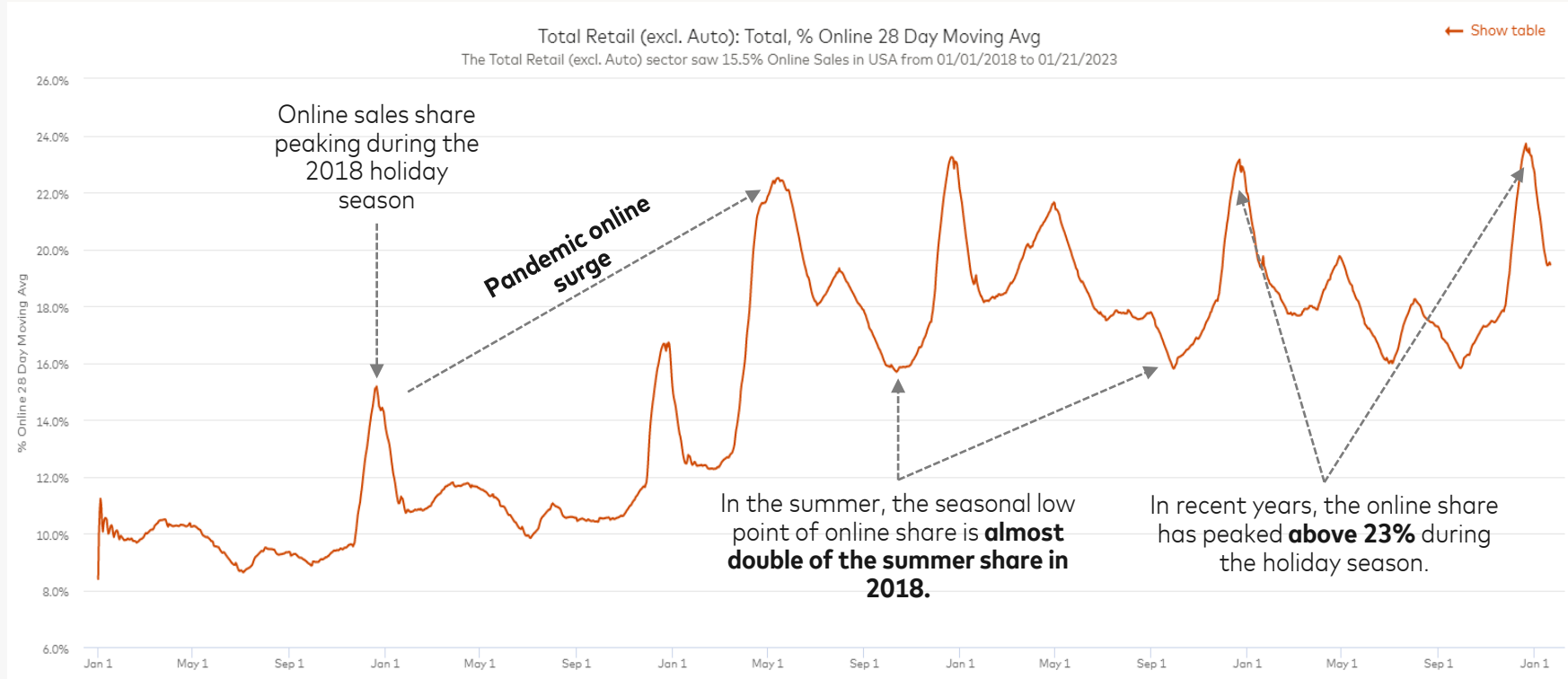


SpendingPulse Insights | Economy is growing, while inflation continues to impact some sectors

CPI-Adjusted Growth for Total Retail ex. Auto

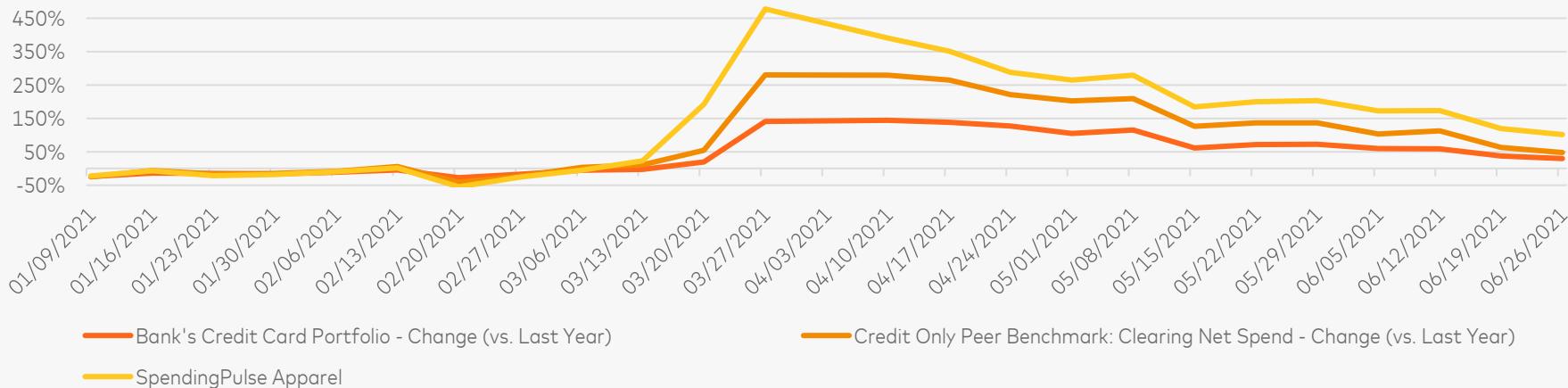


Channel Insights | Online sales as a % of total sales continue to exceed pre-pandemic norms



A large U.S. bank's credit portfolio is underperforming Apparel spend among peer credit cards and aggregate sector spend (across all payment types)

Apparel Sector Spend Growth YoY - YTD



The relative underperformance since mid-March indicates an opportunity to gain more of the surge in Apparel spend post-U.S. stimulus through Apparel-focused strategies, such as **card-linked offers with Apparel merchants**



PROVEN RESULTS: SPENDINGPULSE NEXT GENERATION

A community bank uses SpendingPulse to inform marketing and small-business lending decisions

Context and Challenge

A regional bank struggled to **contextualize and segment performance** across its brick-and mortar footprint

The bank wanted to optimize its **marketing and small-business lending decisions** based on real-time local economic conditions

Approach

The bank used SpendingPulse to **explain and anticipate trends** in mortgage applications by location

Data from **multiple sectors** was used to **enhance lending decisions** for small businesses based on the health of overall retail and sector spending





Thank You!

February 23, 2024