

# Price Adjusted Economic Indicator Data Wholesale Sales

Scott Scheleur

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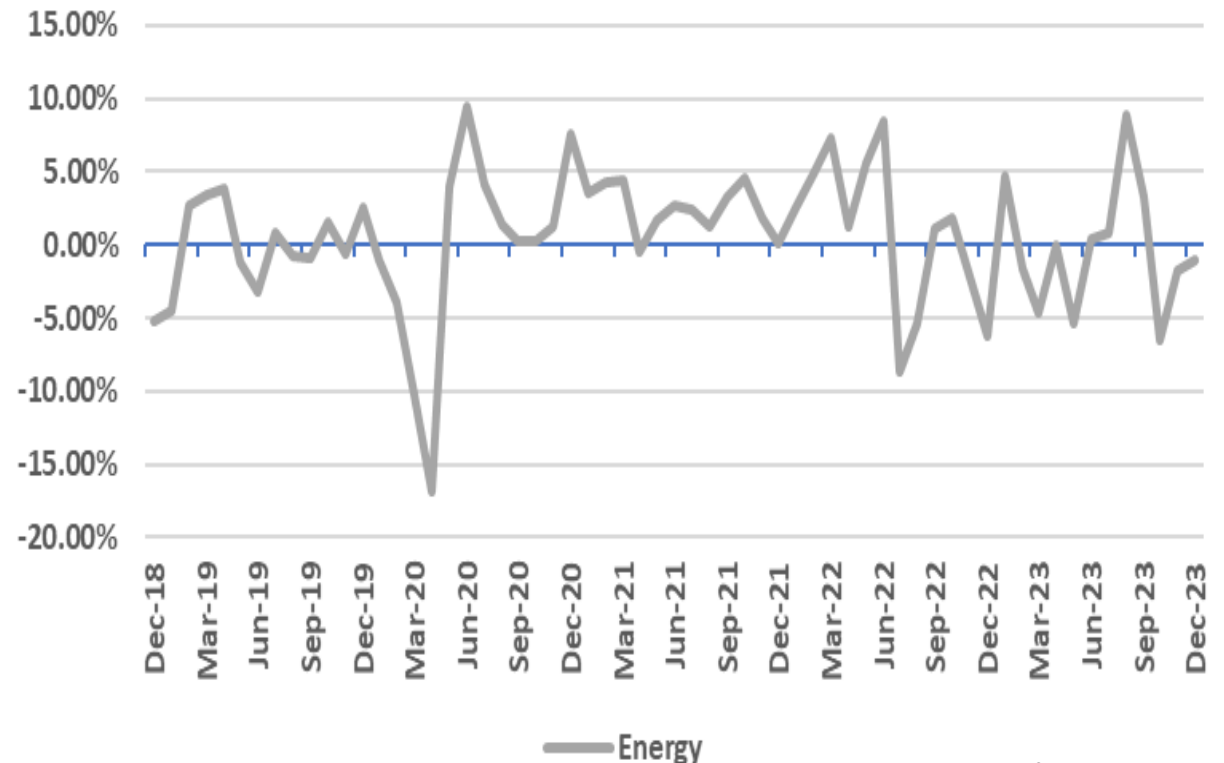
# Producer Price Index Volatility – Foods & Energy Examples

PPI for Final Demand  
1-Month Percent Change, Seasonally Adjusted



Source: U.S. Bureau of Labor Statistics

PPI for Final Demand  
1-Month Percent Change, Seasonally Adjusted



Source: U.S. Bureau of Labor Statistics

# Adding Value to Existing Census Indicator Data

- Census produces 13 economic indicators, majority of them on a nominal basis
- Price changes can skew the underlying trends in the data
- Goal to supplement existing indicator releases

# Real Dollar Estimates of Wholesale Sales

- Experimental data product first released on September 19, 2022
- Follows the lead of International Trade and BEA price adjustment processes
- Leverage published data from Census and BLS
- Coverage to match MWTS (only merchant wholesale excluding MSBOs)
- Time series starting in 2012

# MWTS Coverage

Distributors

Manufacture Sales  
Branches and  
Offices (MSBO)

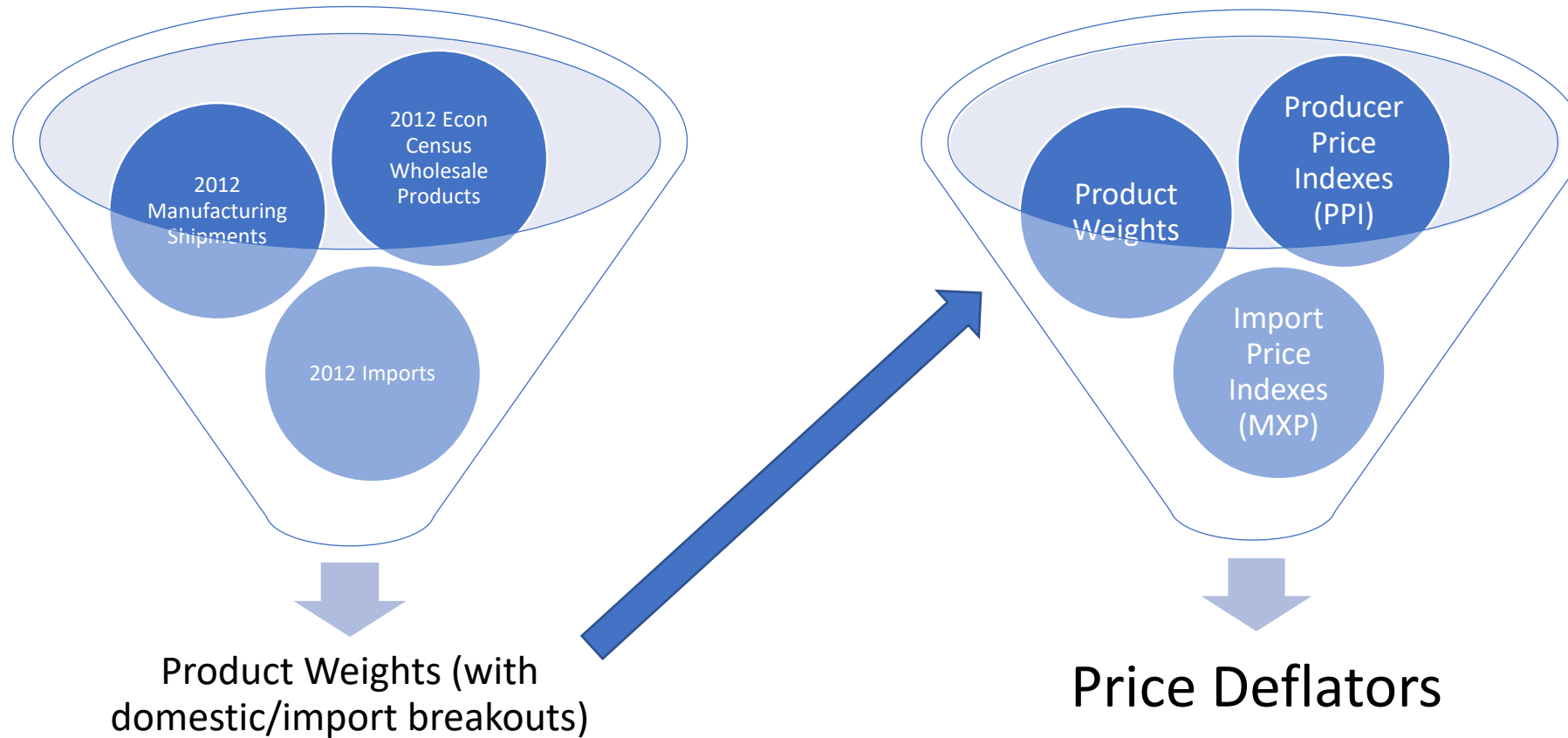
Importers

Exporters

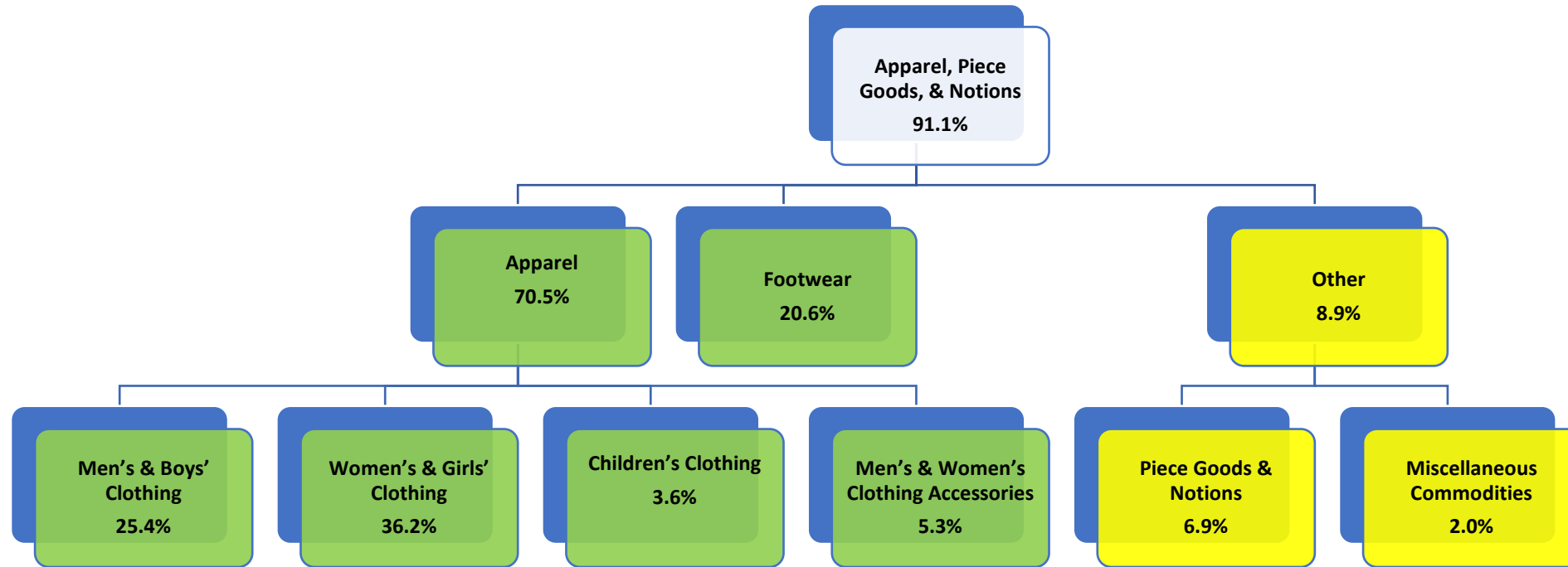
Agents & Brokers  
(Includes  
Marketplaces)

Blue boxes – included in Monthly Wholesale

# From Nominal to Real



# Product Weighting Example – NAICS 4243



- The other product category and related product lines were excluded for purposes of weighting NAICS 4243.
- BLS' Import Price Indexes (MXP) & Producer Price Indexes (PPI) were applied at the apparel and footwear product category levels for purposes of calculating real dollar estimates.

# Limitations

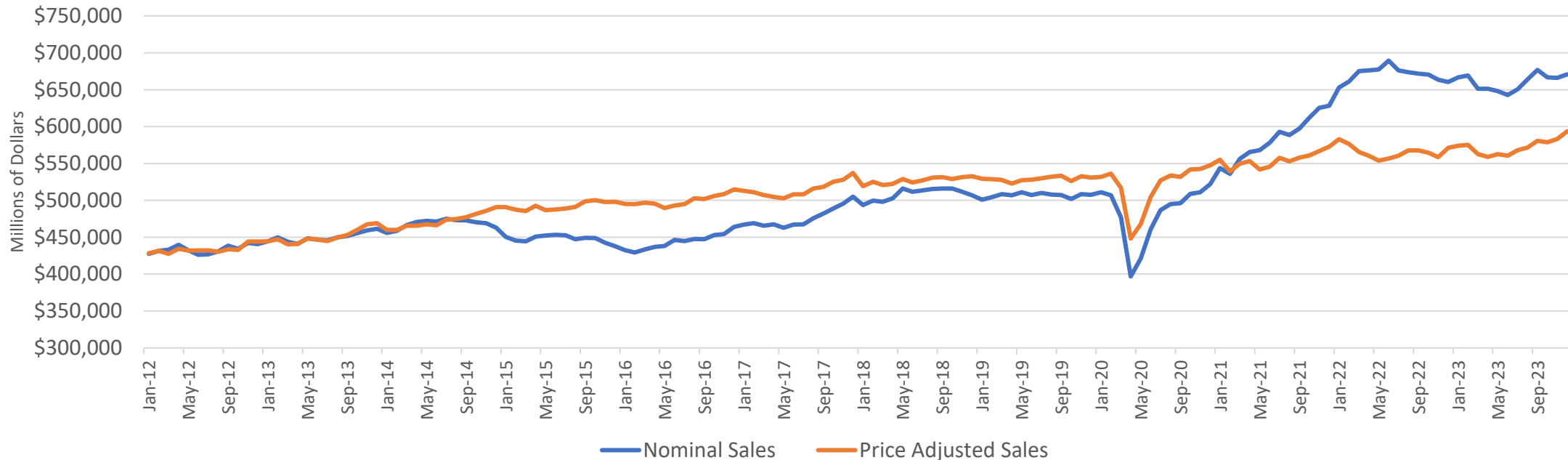
- Product weights based on annual product data, does not account for seasonal variation (future enhancement?)
- MWTS sample is not controlled for products
- MWTS subject to sampling and nonsampling error, currently no estimate of the nonsampling error associated with BLS prices
- Price indexes not always available on a seasonally adjusted basis



# Census Real vs Nominal Wholesale Sales

## Total Merchant Wholesale Sales except MSBOs

Total Merchant Wholesale Sales, Except MSBO's  
Base Year = 2012, Seasonally Adjusted



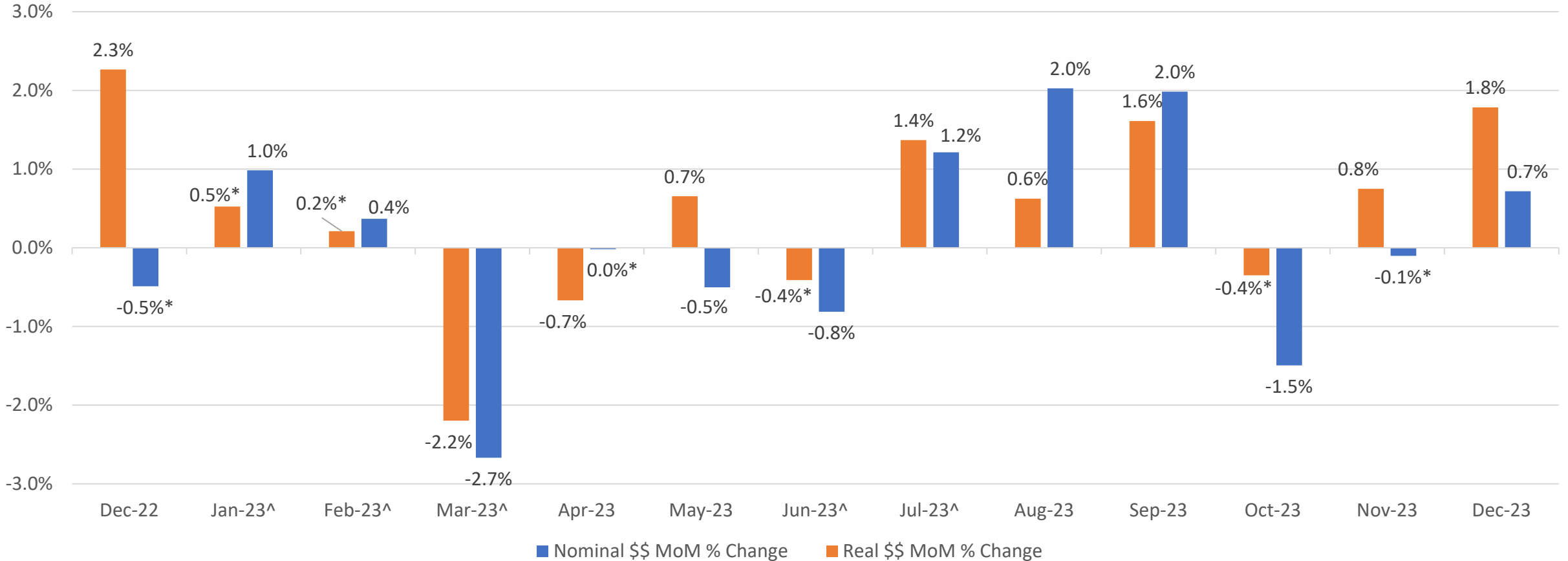
Sources: U.S. Census Bureau, Monthly Wholesale Trade Survey, December 2023, released February 8, 2024  
U.S. Census Bureau, Monthly Real Dollar Estimates of Wholesale Sales, December 2023, released February 8, 2024



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# Census Real vs Nominal Month-to-Month Percent Changes

Merchant Wholesale Sales, Except MSBO's – Total Wholesale  
Base Year = 2012, Seasonally Adjusted



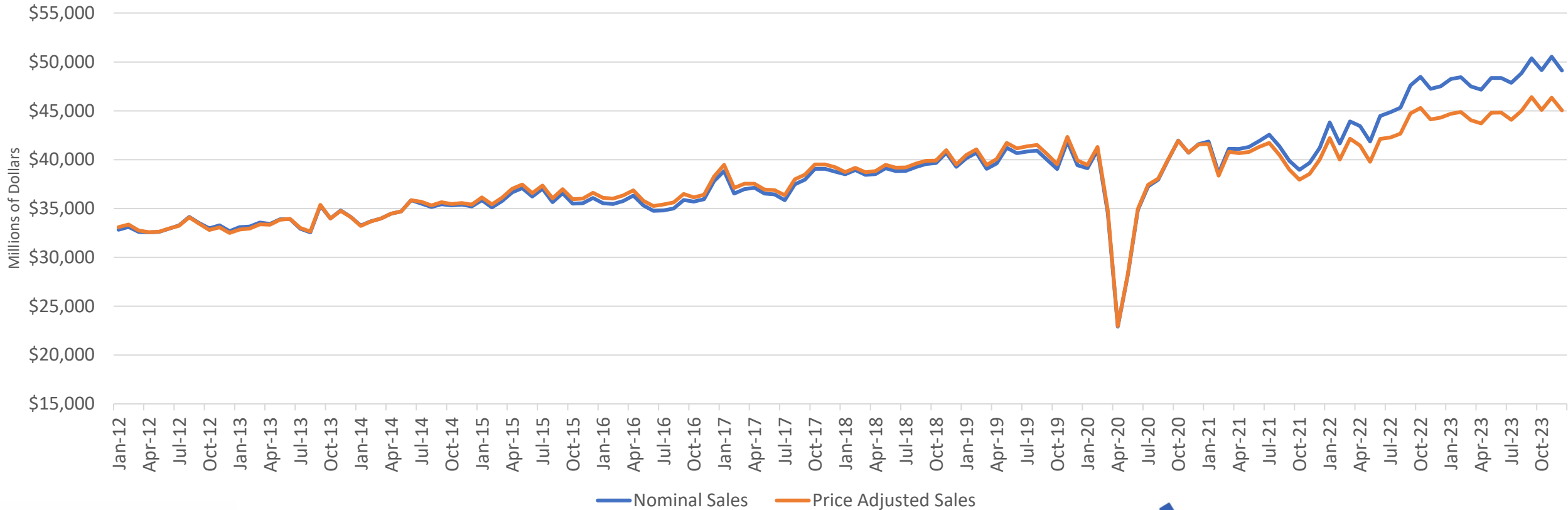
\* The 90 percent confidence interval includes zero. There is insufficient evidence to conclude that the actual change is different from zero  
 ^ Month-over-month percent changes for nominal dollar and real dollar estimates are not significantly different at the 90% confidence interval  
 Sources: U.S. Census Bureau, Monthly Wholesale Trade Survey, December 2023, released February 8, 2024  
 U.S. Census Bureau, Monthly Real Dollar Estimates of Wholesale Sales, December 2023, released February 8, 2024



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# Census Real vs Nominal Wholesale Sales

Wholesale Sales- Motor Vehicle & Motor Vehicle Parts & Supplies (NAICS 4231)  
Base Index Year = 2012, Seasonally Adjusted



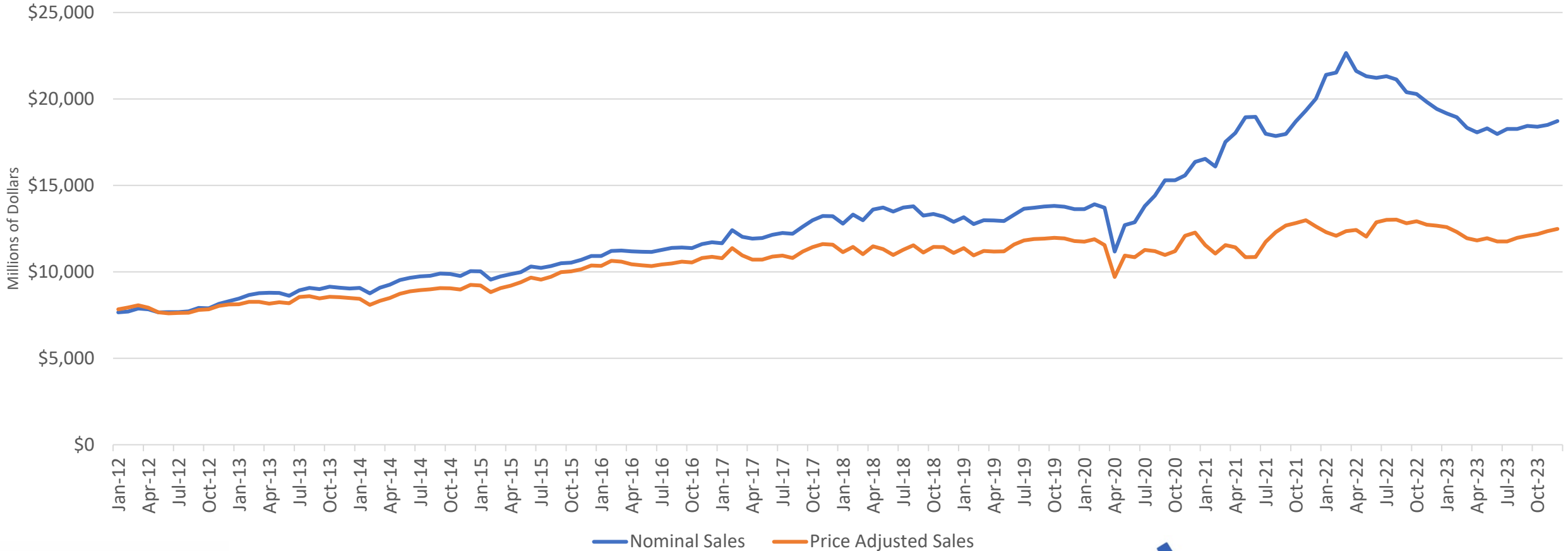
Sources: U.S. Census Bureau, Monthly Wholesale Trade Survey, December 2023, released February 8, 2024  
U.S. Census Bureau, Monthly Real Dollar Estimates of Wholesale Sales, December 2023, released February 8, 2024



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# Census Real vs Nominal Wholesale Sales

Wholesale Sales- Lumber & Other Construction Materials (NAICS 4233)  
Base Index Year = 2012, Seasonally Adjusted



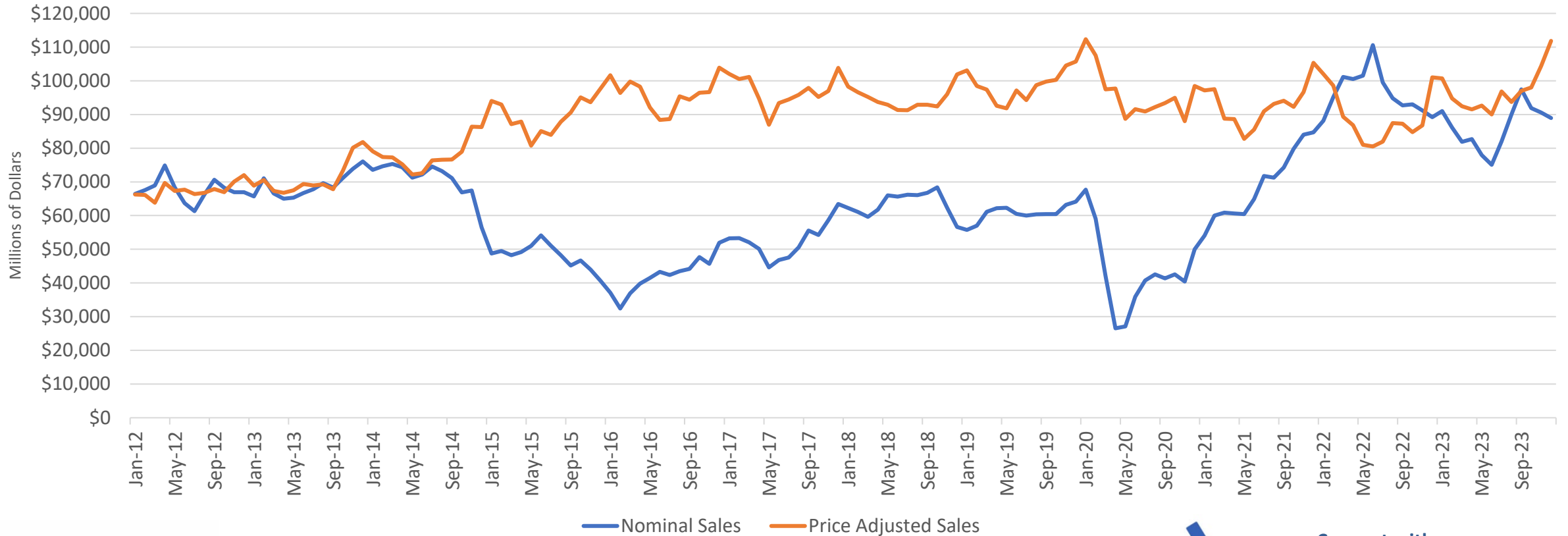
Sources: U.S. Census Bureau, Monthly Wholesale Trade Survey, December 2023, released February 8, 2024  
U.S. Census Bureau, Monthly Real Dollar Estimates of Wholesale Sales, December 2023, released February 8, 2024



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# Census Real vs Nominal Wholesale Sales

Wholesale Sales- Petroleum & Petroleum Products (NAICS 4247)  
Base Index Year = 2012, Seasonally Adjusted



Sources: U.S. Census Bureau, Monthly Wholesale Trade Survey, December 2023, released February 8, 2024  
U.S. Census Bureau, Monthly Real Dollar Estimates of Wholesale Sales, December 2023, released February 8, 2024



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# In Progress

- Improvements to Wholesale Sales Methodology, plus addition of Wholesale Inventories
- Other sectors (Retail, Services, Manufacturing)
  - Some work has been done using primarily industry CPI/PPI for internal clearances and Departmental briefings
  - Research ongoing to develop similar experimental products