



## State Street PriceStats® Inflation Series

PriceStats® provides high-frequency measures of inflation drawn from prices on millions of items sold by online retailers. Over the past decade, we have found that this source of data can generate timely insights into key economic variables and the performance of a range of investments. This real-time pulse of global economic trends helps investors anticipate and evaluate the impact of inflation, including the impact on monetary policy.

As the dynamics of global economies shift, anticipating and evaluating the impact of inflation has become increasingly important for investors. However, most traditional measures are published at relatively low frequencies and with significant lags, making it difficult to measure macroeconomic trends on a timely basis.

### A high-frequency view of inflation across major global economies

Through our partnership with PriceStats, we deliver a range of daily inflation indices, which provide timely insights into key macroeconomic trends. Published daily with a three-day lag, the PriceStats series are available at a higher frequency and with a shorter publication lag than most official statistics.

PriceStats' methodology is based on an extensive body of research by Harvard Business School professor Alberto Cavallo started as an academic initiative called the "Billion Prices Project".

PriceStats uses web-scraping technologies to monitor and collect daily prices on millions of items sold by online retailers around the globe. From these online prices, PriceStats constructs daily measures of inflation.

By providing a high-frequency view of inflation across major economies, PriceStats can help you get ahead of major shifts in inflation trends and build dynamic strategies that improve portfolio return and manage risk. Through our research portal, [Insights](#), you can access PriceStats' suite of indicators — along with macro strategy insights derived from these measures.

### PriceStats' key advantages include:

- **Timeliness.** The PriceStats series are published at a higher frequency (daily) and with a shorter lag (three days) than most official measures.
- **Comparability.** PriceStats uses a consistent statistical methodology through time and across countries. Trends in the series reflect changes in the data rather than differences in methodology.
- **Economic and investment insights.** Due to the nature of online prices, trends in PriceStats often anticipate trends in official measures, which may be useful for investment and policy decisions.

**Index coverage:**

**24 countries:**

- Argentina
- Australia
- Brazil
- Canada
- Chile
- China\*
- Colombia
- France
- Germany
- Greece
- Ireland
- Italy
- Japan
- Korea
- Mexico
- Netherlands
- New Zealand
- Russia
- South Africa
- Spain
- Turkey
- United Kingdom
- United States
- Uruguay

**Regional aggregates:**

- Developed Markets
- DM Food
- DM Fuel
- Emerging Markets
- EM Food
- EM Fuel
- Eurozone
- Eurozone Food
- Eurozone Fuel
- World
- World Food
- World Fuel
- World Diffusion

**US sectors:**

- Apparel
- Equipment
- Food
- Health
- Recreation & Culture
- Transportation

**PriceStats Daily Inflation Series**

**An innovative approach to anticipate major inflation trends**

PriceStats produces daily inflation series for more than 20 individual countries and a number of regional aggregates.

Derived from online prices, the PriceStats Daily Inflation Series helps capture headline inflation across major world economies.

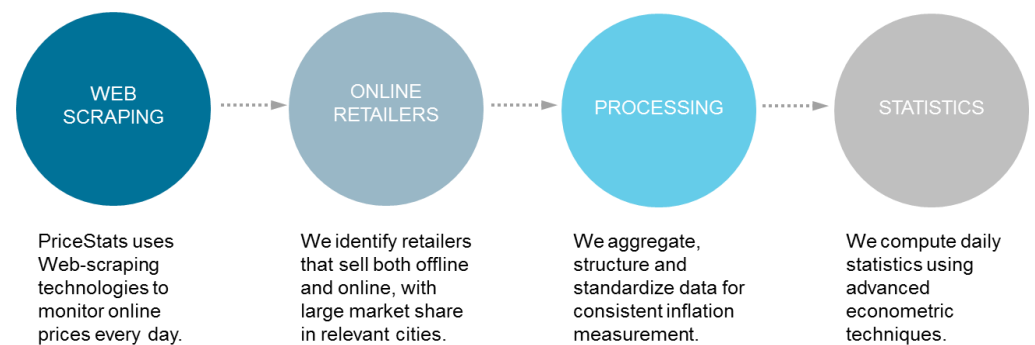
**Using online prices to measure inflation**

Research by professor Alberto Cavallo shows that online data can successfully measure inflation in a variety of countries. In economies where online transactions are common, online and offline prices tend to be closely related. Even in countries where Internet retailing is a small share of transactions, retailers tend to tie online prices to offline prices.

**Anticipating trends in official inflation**

Our research suggests that, in addition to measuring inflation effectively, online prices often anticipate official inflation trends by several months. This is due, in part, to our ability to collect, process and publish data faster than official statistics. It is also because online prices tend to adjust faster to aggregate shocks, since:

- Online prices are easier to change.
- Online consumers are less price-sensitive.
- Online retailers face intense, contemporaneous competition



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## Investment insights from the PriceStats series

Our strong qualitative and quantitative frameworks help you use PriceStats' content for investment and policy decisions.

### Interpreting online inflation

Inflation in Focus is a monthly guide to online inflation trends for global financial market participants and policymakers alike. The PriceStats series are used alongside official statistics to pinpoint when inflation expectations, economic activity or interest rates may be out of sync with the trends identified by our online metrics.

Over past years, Inflation in Focus has produced many actionable insights. These range from broad views of global inflation trends (including the breakdown across developed and emerging economies and the impact of global food and fuel prices) to market-specific opportunities (such as identifying numerous occasions where economists' or market-based measures of inflation in a particular country were either too high or too low).

Our monthly guide has also highlighted potential turning points in economic activity and indicators of economic surprises, warned of deflation trends that ultimately resulted in policy moves, and alerted investors to the rapid pass-through of exchange rate depreciations into consumer prices in emerging-market economies (which ultimately prompted policy tightening).

### Sample investment applications

Using the anticipatory capabilities of the PriceStats series, we have developed proof-of-concept applications spanning a range of investment strategies. In analyzing simple, systematic trading rules, we have found that the PriceStats series contain information that goes above and beyond other widely followed metrics.

For example, as an investor, you may want to allocate dynamically between inflation-linked bonds and nominal bonds. We've developed an illustrative application that uses the US PriceStats Daily Inflation Series to scale exposure to Treasury Inflation-Protected Securities (TIPS) versus nominal bonds.

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## PriceStats offers an innovative approach

PriceStats' high-frequency view of inflation across major economies can help you anticipate shifts in inflation trends and build dynamic strategies to help improve portfolio return and manage risk.

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SSA MMD 2020-01.

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