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MEET THE MEASURES

**Consumer Price Index, or CPI**

The CPI, compiled monthly by the Bureau of Labor Statistics, measures the average price of a set (or market basket) of goods and services. The basket reflects all of the items a typical family buys. The CPI does not count the prices of all items equally, but weights each according to its share of total household expenses, so that changes in the index from one period to the next are broadly reflective of changes in a household's current cost of living. The weightings are determined from detailed expenditure information provided by families and individuals on what they actually bought.



41.5 %	Housing
16.4 %	Transportation
14.9 %	Food and beverages
7.6 %	Medical care
7.1 %	Education   communication
5.8 %	Recreation
3.4 %	Apparel
3.3 %	Other goods and services

**Core CPI**

The core CPI excludes food and energy prices, which tend to go up or down quite a bit over a short time period. These items' sharp, short-term movements can dominate the total, or headline, CPI reading and obscure the more long-term or underlying inflation trend.

**Median CPI**

The Federal Reserve Bank of Cleveland created the median CPI as a way to measure underlying trend inflation. Instead of calculating a weighted average of all goods and services prices like in the CPI, the Cleveland Fed looks at the median price change—or the price change that's right in the middle of the long list of all price changes. According to our research, the median CPI provides a better signal of the inflation trend than the CPI, the CPI excluding food and energy, and the core PCE.

Owners' equivalent rent (OER) is the biggest component of shelter costs, and because of its importance, a measure of OER is very often the median CPI component. OER is published by the Bureau of Labor Statistics to measure implicit rent, or the amount a homeowner would pay to rent or would earn from renting his or her home in a competitive market.

**Trimmed-Mean CPI**

The trimmed-mean CPI, reported monthly by the Federal Reserve Bank of Cleveland, is a measure of underlying trend inflation excluding the components in the CPI that show the most extreme monthly price changes. Excluding 8 percent of the CPI components with the highest and lowest one-month price changes from each end of the price-change distribution results in a "16 percent trimmed mean" inflation estimate. This measure is much less volatile than either the CPI or the more traditional core CPI.

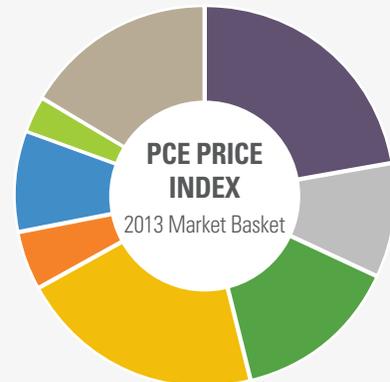
**Personal Consumption Expenditures, or PCE**

The PCE price index, computed by the Bureau of Economic Analysis, provides a measure of the prices paid for goods and services purchased by or on behalf of households. It is a somewhat broader measure of consumer prices than the CPI, and, due to technical aspects of its construction, the PCE is able to more accurately capture how consumers adjust their purchases in response to relative price changes. The PCE index relies

largely on information from businesses, detailing what they've sold to households, to produce its weights.

**Core PCE**

The core PCE price index measures the prices paid by consumers for goods and services without the volatility caused by movements in food and energy prices, which can be useful in assessing underlying inflation trends.



22.3 %	Housing
9.8 %	Transportation
14.1 %	Food and beverages
20.9 %	Medical care
4.9 %	Education   communication
8.6 %	Recreation
3.3 %	Apparel
16.1 %	Other goods and services

**Trimmed-Mean PCE**

The trimmed-mean PCE inflation rate is another measure of trend inflation using the PCE price index. Like the trimmed-mean CPI, the trimmed-mean PCE inflation rate is constructed by excluding the items that had the biggest increases or decreases in a given month. Removing the extreme price changes (both high and low) helps to filter out very noisy price changes in an effort to identify underlying trends in the monthly PCE inflation data. It is calculated by the Federal Reserve Bank of Dallas, using data from the Bureau of Economic Analysis.

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## FOOD FOR THOUGHT



Meat, poultry, fish, and eggs cost more today than they did a year ago. Four percent more, in fact. This is *not* necessarily inflation, though it's hard to wrap your head around this when you're at the checkout.

Inflation is a general rise in prices across the board. It affects all prices, not just a few. The bacon you bought that gave you sticker shock is just one price, albeit a potentially important one for some households. Rising prices in food, gas, or other commodities that keep your household running can prompt us to make adjustments in our lives—perhaps squeezing in three errands on one run to save on gas. While these choices can tell us something about how households are faring, they don't tell us much about inflation itself, which has much broader implications for the economy as a whole.

Inflation is usually measured by tracking the prices of a broad basket of goods and services, such as with the Consumer Price Index (CPI). The CPI is a weighted index of a typical consumer's market basket, which does include food, though its weight is only roughly 15 percent of the basket. In that way, rising food prices in general do affect the CPI, but there are a lot of other components to consider as well (see "Meet the Measures" on page 9).

Food prices can also be affected by things like poor weather conditions: the freezing temperatures in the Northeast, drought in the West, snow in the Midwest. Bad weather can, for example, prevent the transportation of food supplies to processors and retailers, driving up prices temporarily. But that's just it: These types of price changes are temporary, not an indicator of a longer-term trend.

Another thing to keep in mind when it comes to commodity prices: basic supply and demand. A shortage of, say, oranges because of drought in the West prompts a price increase, encouraging people to buy fewer oranges. Apples, on the other hand, may have a great harvest and be abundant; their price goes down, encouraging people to buy them instead. In this way, a balance is struck.

Inflation or not, rising food prices are frustrating for consumers, and something that economists do keep an eye on lest they turn into broader inflation. If, for instance, drought continues and livestock levels don't pick up in the West, rising food prices may be more than just temporary and could feed into the longer-term outlook for inflation.

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## MONETARY POLICY PRIMER



THE FEDERAL RESERVE IS RESPONSIBLE FOR MAKING SURE THERE IS ENOUGH MONEY AND CREDIT TO SUPPORT ECONOMIC GROWTH, BUT NOT SO MUCH THAT OUR DOLLAR LOSES ITS PURCHASING POWER. THIS IS THE CORE OF MONETARY POLICY.

The goals of monetary policy—maximum employment and price stability—were given to the Federal Reserve by Congress and are known as the Fed’s **dual mandate**. These goals mean that we want as many Americans as possible who want jobs to have jobs, and that we aim to keep the rate of increase in consumer prices low and stable.

Price stability can be thought of as an inflation rate low enough and predictable enough that it doesn’t play a big role when firms and consumers are making financial decisions. Take, for example, a business that is considering whether to enter into a long-term contract with a supplier. If this business is confident enough about the general level of prices in the future, it can make the decision more easily knowing it will get a fair deal both now, and later. With confidence in the likely inflation rate, employers can give raises without fear, layoffs are fewer because businesses remain profitable, and employment gets closer to its maximum level.

People need the same confidence to do their longer-term planning, such as for retirement, and for deciding when to make big purchases. Having confidence in both price stability and job security encourages people to act now instead of waiting until there are fewer uncertainties.

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## AN INFLATION OBJECTIVE



**Inflation** is a general rise in the prices of things we buy. When people have the money to buy more products than can be produced, it creates an imbalance, prices go up, and the result is inflation.

Inflation can reduce the purchasing power of your money. With **inflation much higher** than the FOMC's 2 percent inflation objective, workers whose wages don't rise as fast as prices may have problems paying their bills. And people on fixed incomes can suffer because their incomes might not adjust completely and they would not be able to buy as much as they could before.



With **inflation lower** than the objective, it is likely that the economy isn't firing on all cylinders, and businesses will try to reduce their costs to maintain or regain profitability. One way they might do this is by increasing efficiencies, such as through layoffs. Another way could be through lower wage growth. In the extreme, if this behavior is replicated throughout the economy, unemployment is likely to rise while both wages and prices are lower. Efficiencies and lower wage growth can then reinforce the downward movement of prices.



We do want to have a bit of inflation. To borrow the theme from Goldilocks, the FOMC's 2 percent longer-run inflation objective seeks a balance that is "**just right**" to keep the economy humming along. Not too hot (high inflation) and not too cold (deflation). A 2 percent objective sets an expectation and makes it less likely that the economy will experience deflation if it takes a turn for the worse.