

Measures of Inflation

March 2011
(revised May 2011)

FRED Data Classroom Application



*Prepared by the Research Division of the
Federal Reserve Bank of St. Louis*

FRED in the Classroom: Measures of Inflation

Inflation is an important component of the Federal Reserve's evaluation of its policy measures. Economists, politicians, policymakers, and the public all want to know the change in the general price level and if the price level is generally rising or falling. The government has several measures for inflation. This exercise will guide you through accessing them and ask some questions about the data you find.

The March 15, 2011 [statement from the Federal Open Market Committee](#) (FOMC) says, in part:

Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. Currently, the unemployment rate remains elevated, and measures of underlying inflation continue to be somewhat low, relative to levels that the Committee judges to be consistent, over the longer run, with its dual mandate. The recent increases in the prices of energy and other commodities are currently putting upward pressure on inflation. The Committee expects these effects to be transitory, but it will pay close attention to the evolution of inflation and inflation expectations. The Committee continues to anticipate a gradual return to higher levels of resource utilization in a context of price stability.

1. What is the FOMC and what is its purpose? In the statement above, the FOMC uses the terms *price stability* and *inflation*. Define price stability and inflation.
2. The first step in this exercise is to find the Consumer Price Index for Urban Consumers. **Start at the FRED website, <http://research.stlouisfed.org/fred2>.**



The screenshot shows the homepage of the FRED (Federal Reserve Economic Data) website. The header includes the St. Louis Fed logo and navigation links for 'Economic Research', 'Publications', 'Working Papers', and 'Economists'. A search bar is located in the top right. The main content area features a 'Browse Data' sidebar with categories like 'Categories', 'Releases', and 'Sources'. The central content area displays 'Federal Reserve Economic Data' and 'FRED News' with headlines such as '4 Dow Jones Averages are now on FRED' and '96 New Emerging Market Bond Series Added to FRED'.

3. As you follow along in this exercise, the red arrows and circles show you where to access the information. In the Data Categories section of the site, choose **Consumer Price Indexes**.

The screenshot shows the FRED website interface. At the top, there is a navigation bar with 'ECONOMIC RESEARCH' and 'FEDERAL RESERVE BANK OF ST. LOUIS'. Below this is a search bar and social media links. The main content area is divided into several sections. On the left, there is a sidebar with 'Browse Data' and 'Tools'. The central part of the page features 'Federal Reserve Economic Data' with a 'FRED News' section. Below the news, the 'Data Categories' section is displayed, listing various categories with their respective counts. 'Consumer Price Indexes (384)' is circled in red, and a red arrow points to it from the right. Other categories include Banking (432), Business/Fiscal (2,528), Employment & Population (1,266), Exchange Rates (95), Foreign Exchange Intervention (21), Gross Domestic Product (GDP) and Components (233), Interest Rates (400), Monetary Aggregates (128), Producer Price Indexes (PPI) (18), Reserves and Monetary Base (148), U.S. Trade & International Transactions (1,099), U.S. Financial Data (344), Regional Data (21,693), and International Data (1,839). At the bottom, there are sections for 'Popular Series', 'FRED At a Glance', and 'Latest Releases'.

There are several measures of the CPI; one is the Consumer Price Index for All Urban Consumers: All Items (CPI-U: All Items). Other measures break out the components of CPI—products such as food, energy, housing, and medical care. To begin, we first look at the CPI-U: All Items. Then we will examine the energy component of the index and make some comparisons.

4. Choose the **Consumer Price Index for All Urban Consumers: All Items, Seasonally Adjusted (SA)**. It is the first item (circled in red) on the list.
- Click the **Series title** to see the graph.

ECONOMIC RESEARCH
FEDERAL RESERVE BANK of ST. LOUIS
Advancing Economic Knowledge Through Research & Data

Home > FRED® Economic Data > Categories

Consumer Price Indexes

Download Data Notify Me of Updates

Categories

- Food and Beverage (65)
- Housing (50)
- Apparel (21)
- Transportation (43)
- Medical Care (23)
- Recreation (9)
- Education and Communication (37)
- Other goods and Services (22)
- Commodity and Services Groups (45)
- Special Indexes (64)

*Note that the number of series in a category and its subcategories is shown above in parentheses.

Show Only :

Selected Series : Series 1 - 5 of 5

<input type="checkbox"/>	Title	Observation Range	Freq.	Units	Seas. Adj.	Popularity
		Start	End			
<input checked="" type="checkbox"/>	Consumer Price Index for All Urban Consumers: All Items	1947-01	2011-04	M	Index 1982-84=100	SA
<input type="checkbox"/>	Consumer Price Index for All Urban Consumers: All Items	1913-01	2011-04	M	Index 1982-84=100	NSA
<input type="checkbox"/>	Chained Consumer Price Index for all Urban Consumers: All items	1999-12	2011-04	M	Index Dec 1999=100	NSA
<input type="checkbox"/>	Consumer Price Index for Urban Wage Earners and Clerical Workers: All Items	1913-01	2011-04	M	Index 1982-84=100	NSA
<input type="checkbox"/>	Consumer Price Index for Urban Wage Earners and Clerical Workers: All Items	1947-01	2011-04	M	Index 1982-84=100	SA

Selected Series: Series 1 - 5 of 5

5. What does *seasonally adjusted* mean?

6. This is the opening graph. Notice that the data for CPI are an index. The number (on the left axis) represents a price level of a basket of goods purchased at different points in time. To view the data, choose **View Data** (on the left side, under **Tools**). For the most recent observations, see **Latest Observations** to the left of the graph.

Tools

- View Data
- Download Data
- Notify Me of Updates
- Add to My Data List
- Vintage Series in ALFRED

Latest Observations

2011-04:	224.433
2011-03:	223.490
2011-02:	222.270
2011-01:	221.062
2010-12:	220.186

Other Formats

- Monthly, Not Seasonally Adjusted

Related Categories

- Consumer Price Indexes

Need Help?

- Tutorials
- FAQs
- Email Us

Consumer Price Index for All Urban Consumers: All Items (CPIAUCSL)

Source: U.S. Department of Labor: Bureau of Labor Statistics

(Index 1982-84=100)

Shaded areas indicate US recessions. 2011 research.stlouisfed.org

Series ID:	CPIAUCSL
Source(s):	U.S. Department of Labor: Bureau of Labor Statistics
Release:	Consumer Price Index
Units:	Index 1982-84=100
Frequency:	Monthly
Seasonal Adjustment:	Seasonally Adjusted
Observation Range:	1947-01 to 2011-04
Last Updated:	2011-05-13 8:34 AM CDT

7. What is the current index value?
8. Calculate the inflation rate from February 2010 to February 2011. Hints: You'll need to either **View Data** or **Download Data** to see the data for February 2010. The formula to use is:
- $$\text{Inflation rate in year 2} = \frac{\text{CPI in year 2} - \text{CPI in year 1}}{\text{CPI in year 1}} \times 100.$$
9. What does the resulting number tell you?

10. Next, edit the the CPI: All Items graph. After editing the graph, you will add the CPI for energy (CPI: Energy). CPI: Energy is a subset of the entire Consumer Price Index.

- Start with Consumer Price Index for All Urban Consumers (which you just had up).
- Click on the **Edit Graph** link.

ECONOMIC RESEARCH
FEDERAL RESERVE BANK OF ST. LOUIS
Advancing Economic Knowledge Through Research & Data

Search

Follow the Fed [f](#) [t](#) [v](#) [s](#)

FRED® Economic Data | Publications | Working Papers | Economists

Home > FRED® Economic Data > Categories > Consumer Price Indexes

Consumer Price Index for All Urban Consumers: All Items (CPIAUCSL)

SHARE [t](#) [f](#) [e](#)

Consumer Price Index for All Urban Consumers: All Items (CPIAUCSL)
Source: U.S. Department of Labor: Bureau of Labor Statistics

Shaded areas indicate US recessions.
2011 research.stlouisfed.org

[Edit Graph](#) [Print](#) [PDF](#) [Save](#)

Type: Line Size: Medium Range: Max Recession Bars: On Log Scale: Left Units: Levels

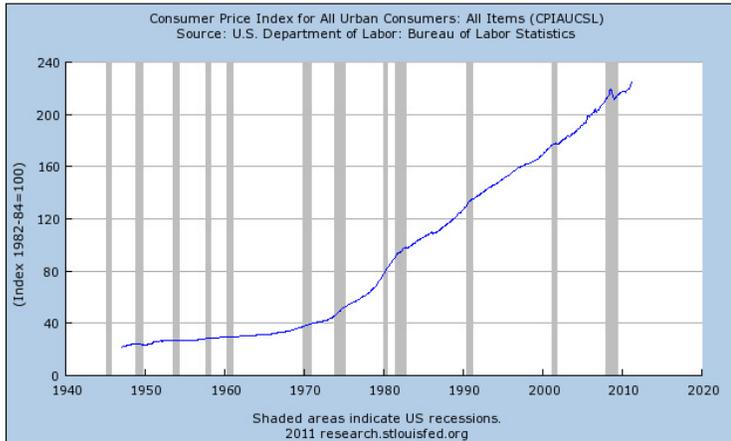
Notes: Growth Rate Calculations | US recession dates

Series ID:	CPIAUCSL
Source(s):	U.S. Department of Labor: Bureau of Labor Statistics
Release:	Consumer Price Index
Units:	Index 1982-84=100
Frequency:	Monthly
Seasonal Adjustment:	Seasonally Adjusted
Observation Range:	1947-01 to 2011-04
Last Updated:	2011-05-13 8:34 AM CDT
Notes:	Handbook of Methods - (http://www.bls.gov/opub/hom/pdf/homch17.pdf) Understanding the CPI: Frequently Asked Questions - (http://stats.bls.gov:80/cpi/cpifaq.htm)

11. That will bring up a graph to which series can be added, units can be changed, and time modified (e.g., 5 years, 1 year). Below is the example of the page with CPI-U: All Items displayed.

Graph: Consumer Price Index for All Urban Consumers: All Items (CPIAUCSL)

[Download Data in Graph](#) | [Print](#) | [PDF](#) | [Link](#) | [View Saved Graphs](#) | [Save Graph](#) | [Help](#)



Settings [Restore Defaults](#) | [Save Settings](#) | [Apply Saved Settings](#)

► **Graph**

▼ **Line 1: Consumer Price Index for All Urban Consumers: All Items (CPIAUCSL)**

Scale: Line Style: Line Width: Mark Type: Mark Width: Color:

Observation Date Range: to
 Observation Quick Range: Custom 1yr 5yrs 10yrs Max

Frequency:

(a) Consumer Price Index for All Urban Consumers: All Items (CPIAUCSL), Monthly, Seasonally Adjusted, 1947-01-01 to 2011-04-01

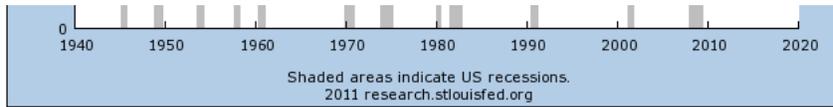
Units:

[Create Your Own Data Transformation](#)

► **Add Data Series**

[Notes on growth rate calculations, US recession dates, and frequency aggregation](#)

12. To make changes in the display:
- Scroll down to find the units.
 - **Change** the display of the units to **“Percent Change from Year Ago”** (as highlighted).
 - Click **Redraw Graph**.
- This is a common way to describe inflation—the change year over year. Why do you think inflation measures are generally referred to over the course of a year?



Settings [Restore Defaults](#) | [Save Settings](#) | [Apply Saved Settings](#)

▶ **Graph**

▼ **Line 1: Consumer Price Index for All Urban Consumers: All Items (CPIAUCSL)**

Scale: Line Style: Line Width: Mark Type: Mark Width: Color:

Observation Date Range: to

Observation Quick Range: Custom 1yr 5yrs 10yrs Max

Frequency:

(a) Consumer Price Index for All Urban Consumers: All Items (CPIAUCSL), Monthly, Seasonally Adjusted, 1947-01-01 to 2011-04-01

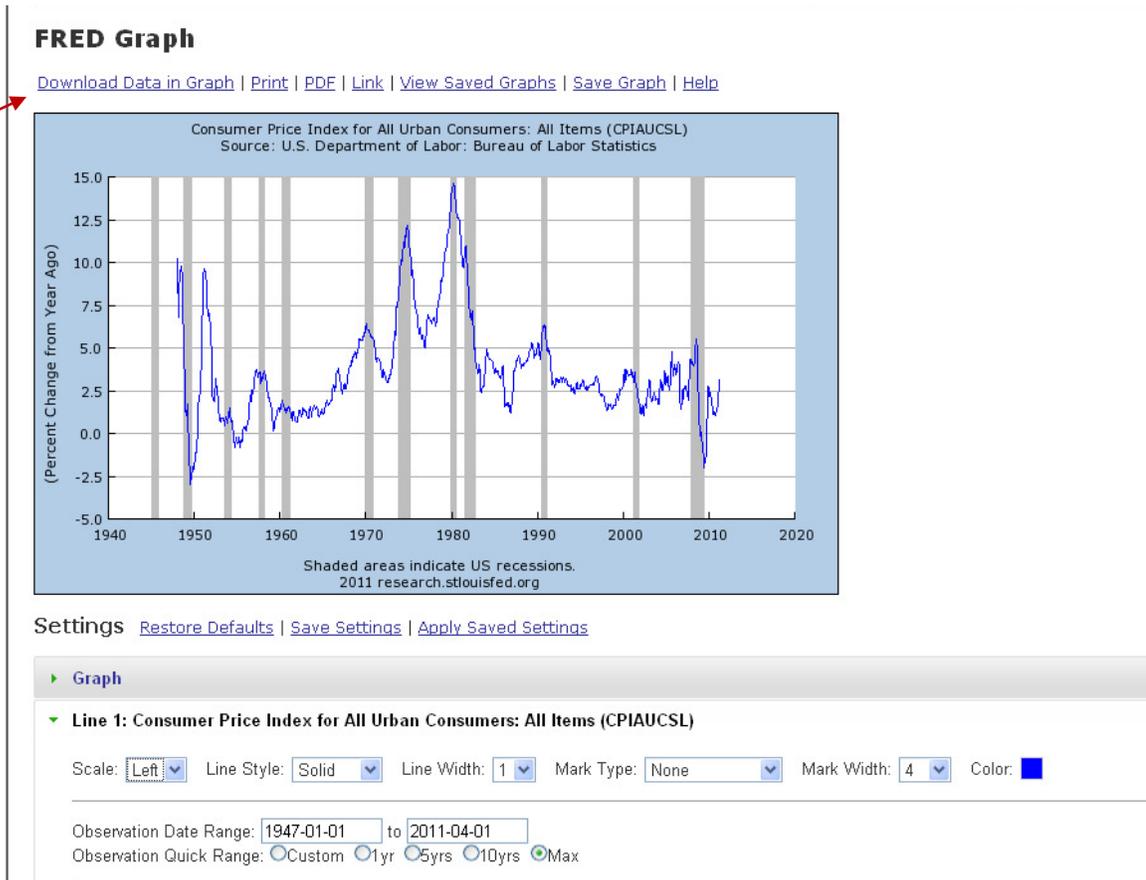
Units: (circled in red)

- Index 1982-84=100
- Change, Index 1982-84=100
- [Create](#) Change from Year Ago, Index 1982-84=100
- Percent Change
- Percent Change from Year Ago** (highlighted in blue)
- Compounded Annual Rate of Change
- Continuously Compounded Rate of Change
- Continuously Compounded Annual Rate of Change
- Index (Scale value to 100 for chosen period)

▶ **Add D**

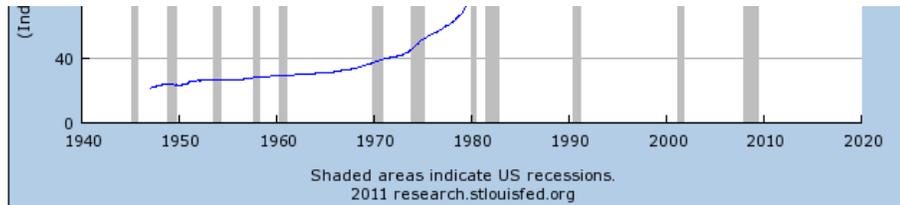
[Notes on growth rate calculations, US recession dates, and frequency aggregation](#)

13. Looking at the graph below, what is interesting or unusual about inflation during the various time periods represented on the graph?



14. For more detailed information, you can choose to **Download Data in Graph**. What was the rate of inflation (compared with the previous year) in July 2009?
15. What does this rate of inflation tell you about the price of any single item (e.g., a laptop computer)?

- 16.
- Next, scroll down below the graph to the “Add Data Series” bar.
 - Open it and type **CPI energy** in the search box. The search box automatically makes suggestions based on the words entered.
 - For the comparison, **choose Consumer Price Index for All Urban Consumers: Energy (SA)**.
- Once you select it, those data will be added to a new line on the graph. Notice that the data are automatically represented in the same manner as Line 1 CPI data (percent change from a year ago).



Settings [Restore Defaults](#) | [Save Settings](#) | [Apply Saved Settings](#)

▶ **Graph**

▶ **Line 1: Consumer Price Index for All Urban Consumers: All Items (CPIAUCSL)**

▼ **Add Data Series**

To: New Line Line 1 [What's This?](#)

Search: [Browse](#)

[Notes on arc...](#)

Research

Publicatio

Working F

Economis

Tracking t

Events

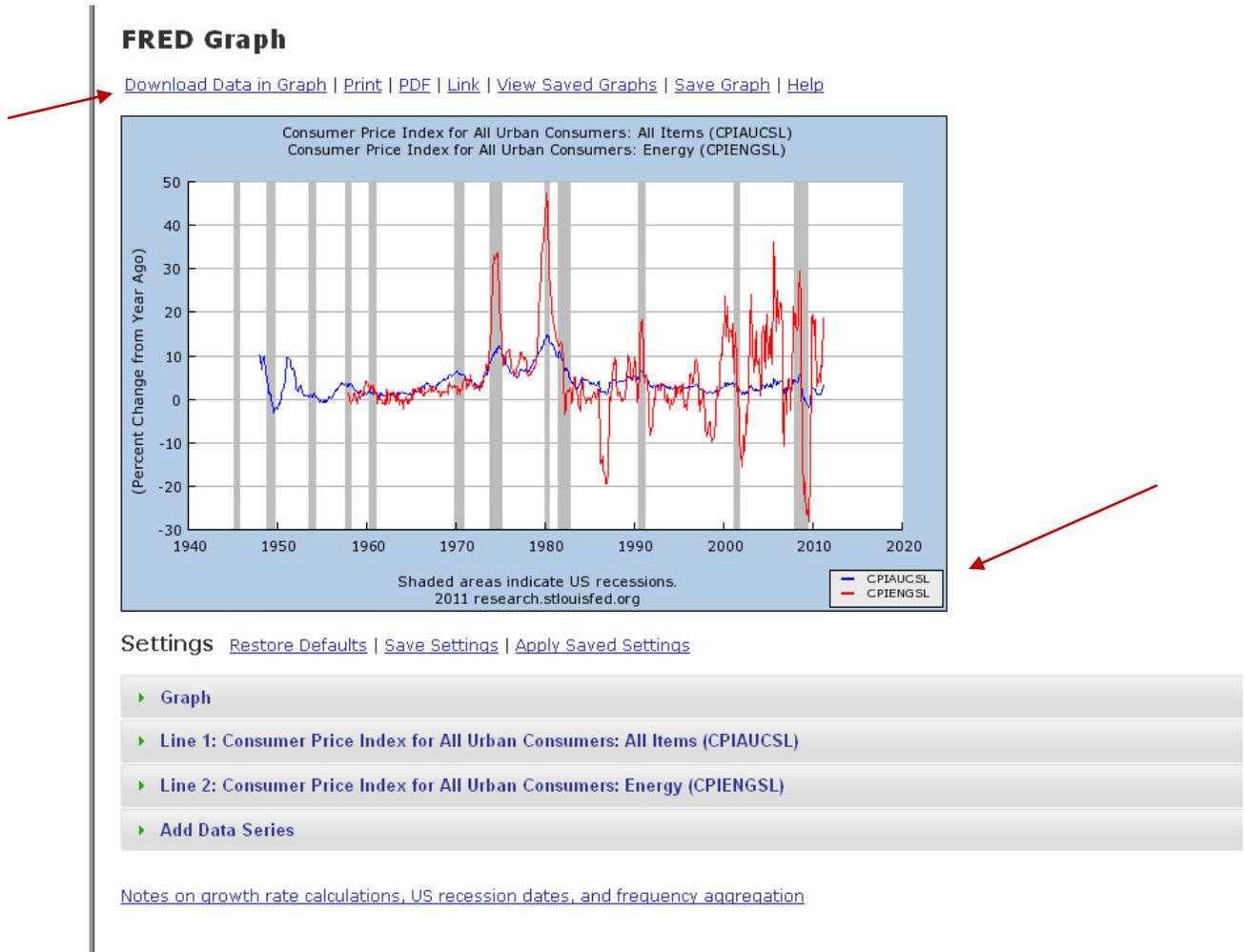
Monetary

CRE8®

Other Res...

Education Resources Register The FRED Network®

17. The graph below shows the **CPI-U All Items (in blue)** and the **CPI-U Energy (in red)**



Note: The legend for the graph is in the lower-right corner.

18. Using the **Download Data in Graph** link, what was the inflation rate for energy from the previous year—July 2009?
19. What is a noticeable difference between the rate of inflation of energy and the rate of inflation of overall goods?

20. CPI-U measures that have removed food and energy (the two most volatile parts of CPI) are often referred to as *core* or *underlying inflation*. When a news headline or the FOMC statement refers to a core inflation measure, it typically is referring to CPI-U Less Food and Energy. Using some of the earlier skills of locating data, locate the seasonally adjusted data for CPI-U less food and energy, and then add either CPI-U Food or the CPI-U Energy. The steps are illustrated below.

Home > FRED® Economic Data > Categories > Consumer Price Indexes

Special Indexes

Download Data Notify Me of Updates

Show Only :

Selected Series :

Series 1 - 50 of 64 1 2 Next »

<input type="checkbox"/>	Title	Observation Range	Start	End	Freq.	Units	Seas. Adj.	Popularity
<input type="checkbox"/>	Consumer Price Index for All Urban Consumers: All Items Less Food & Energy	1957-01	2011-04	M	Index 1982-84=100	SA		
<input type="checkbox"/>	Consumer Price Index for All Urban Consumers: All Items Less Food & Energy	1957-01	2011-04	M	Index 1982-84=100	NSA		
<input type="checkbox"/>	Consumer Price Index for All Urban Consumers: Energy	1957-01	2011-04	M	Index 1982-84=100	NSA		
<input type="checkbox"/>	Consumer Price Index for All Urban Consumers: Energy	1957-01	2011-04	M	Index 1982-84=100	SA		
<input type="checkbox"/>	Consumer Price Index for All Urban Consumers: All Items Less Energy	1957-01	2011-04	M	Index 1982-84=100	SA		
<input type="checkbox"/>	Consumer Price Index for All Urban Consumers: All Items Less Energy	1957-01	2011-04	M	Index 1982-84=100	NSA		

- 21.

Tools

-
-
-
-
-

Latest Observations

2011-04: 223.745
 2011-03: 223.331
 2011-02: 223.029
 2011-01: 222.587
 2010-12: 222.210

Other Formats

- Monthly, Not Seasonally Adjusted

Related Categories

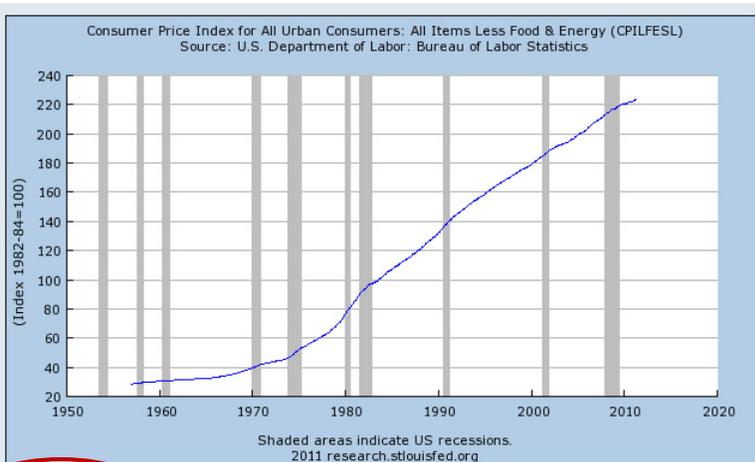
- Consumer Price Indexes
- Special Indexes

Need Help?

- Tutorials
- FAQs
- Email Us

Home > FRED® Economic Data > Categories > Consumer Price Indexes > Special Indexes

Consumer Price Index for All Urban Consumers: All Items Less Food & Energy (CPILFESL)



Type: Line Size: Medium Range: Max Recession Bars: On Log Scale: Left Units: Levels
 Notes: Growth Rate Calculations | US recession dates

Series ID: CPILFESL
Source(s): U.S. Department of Labor: Bureau of Labor Statistics
Release: Consumer Price Index
Units: Index 1982-84=100

22. **Settings** [Restore Defaults](#) | [Save Settings](#) | [Apply Saved Settings](#)

▶ Graph

▶ Line 1: Consumer Price Index for All Urban Consumers: All Items Less Food & Energy (CPILFESL)

▼ Add Data Series

To: New Line Line 1 [What's This?](#)

Search: [Browse](#)

[Notes on arc](#)

Research

Publicatio

Working F

Economic

Tracking 1

- Consumer Price Index for All Urban Consumers: All Items Less Food & Energy
CPILFESL, M, Index 1982-84=100, SA
- Consumer Price Index for All Urban Consumers: All Items Less Food & Energy
CPILFENS, M, Index 1982-84=100, NSA
- Consumer Price Index for All Urban Consumers: Energy
CPIENGNS, M, Index 1982-84=100, NSA
- Consumer Price Index for All Urban Consumers: Energy**
CPIENGSL, M, Index 1982-84=100, SA
- Consumer Price Index for All Urban Consumers: All Items Less Energy
CPILEGSL, M, Index 1982-84=100, SA

23. **Settings** [Restore Defaults](#) | [Save Settings](#) | [Apply Saved Settings](#)

▶ Graph

▶ Line 1: Consumer Price Index for All Urban Consumers: All Items Less Food & Energy (CPILFESL)

▼ Add Data Series

To: New Line Line 1 [What's This?](#)

Search: [Browse](#)

[Notes on arc](#)

Research

Publicatio

Working F

Economic

Tracking 1

Events

- Consumer Price Index for All Urban Consumers: All Items Less Food & Energy
CPILFESL, M, Index 1982-84=100, SA
- Consumer Price Index for All Urban Consumers: Food
CPIUFDNS, M, Index 1982-84=100, NSA
- Consumer Price Index for All Urban Consumers: All Items Less Food & Energy
CPILFENS, M, Index 1982-84=100, NSA
- Consumer Price Index for All Urban Consumers: Food**
CPIUFDL, M, Index 1982-84=100, SA
- Consumer Price Index for All Urban Consumers: Food and Beverages
CPIFABSL, M, Index 1982-84=100, SA
- Consumer Price Index for All Urban Consumers: Food and Beverages
CPIFABNS, M, Index 1982-84=100, NSA

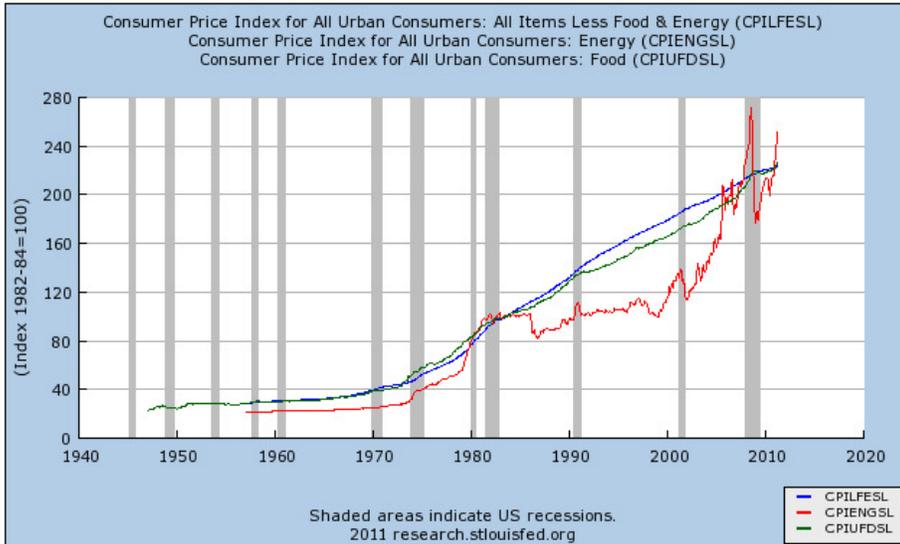
CPI-U: All Items Less Food & Energy is shown in blue

CPI-U: Energy is shown in red

CPI-U: Food is shown in green

FRED Graph

[Download Data in Graph](#) | [Print](#) | [PDF](#) | [Link](#) | [View Saved Graphs](#) | [Save Graph](#) | [Help](#)



Settings [Restore Defaults](#) | [Save Settings](#) | [Apply Saved Settings](#)

- ▶ Graph
- ▶ Line 1: Consumer Price Index for All Urban Consumers: All Items Less Food & Energy (CPILFESL)
- ▶ Line 2: Consumer Price Index for All Urban Consumers: Energy (CPIENGSL)
- ▶ Line 3: Consumer Price Index for All Urban Consumers: Food (CPIUFDSL)
- ▶ Add Data Series

24. Based on this graph, during the 1990s was the relative rise in the level of energy prices generally higher or lower than the overall price level? Is this what you expected? Why or why not?

25. Another measure of prices can be found in the data collected for calculating national income. The GDP deflator is the ratio of nominal GDP to real GDP. The GDP deflator is available in FRED.

There are two ways to locate the GDP deflator. You can use the FRED search box and type in **GDP deflator** (red arrow). Or you can go look under the Categories and then Gross Domestic Product (GDP) and Components (red circle) and choose **Price Indexes and Deflators**

The screenshot shows the FRED website interface. At the top, there is a search bar containing the text "GDP Deflator" with a red arrow pointing to it. Below the search bar, the navigation menu includes "FRED® Economic Data", "Publications", "Working Papers", and "Economists". On the left side, there is a "Browse Data" section with a list of categories and releases, and a "Tools" section with options like "Download All Data" and "Notify Me of Updates". The main content area is titled "Federal Reserve Economic Data" and features "FRED News" with two articles. Below the news, there is a "Data Categories" section with a grid of categories and their respective series counts. The category "Gross Domestic Product (GDP) and Components" is circled in red, and its subcategory "Price Indexes & Deflators" is also circled in red.

Data Categories	
Banking (432)	Monetary Aggregates (128)
Business/Fiscal (2,528)	Producer Price Indexes (PPI) (18)
Consumer Price Indexes (384)	Reserves and Monetary Base (148)
Employment & Population (1,266)	U.S. Trade & International Transactions (1,099)
Exchange Rates (95)	U.S. Financial Data (344)
Foreign Exchange Intervention (21)	Regional Data (21,693)
Gross Domestic Product (GDP) and Components (233)	International Data (1,839)
Interest Rates (400)	

26. If you choose the Category, you see subcategories. Choose **Price Indexes & Deflators**.

Home > FRED® Economic Data > Categories

Gross Domestic Product (GDP) and Components

Download Data | Notify Me of Updates

Categories

- GDP/GNP (23)
- Gov't Receipts, Expenditures & Investment (76)
- Imports & Exports (22)
- Industry (15)
- Personal Income & Outlays (59)
- Price Indexes & Deflators (9)
- Saving & Investment (29)

*Note that the number of series in a category and its subcategories is shown above in parentheses.

27. From this list, choose **Gross Domestic Product: Implicit Price Deflator**. (Note: Another frequently used measure of prices on the list is the Personal Consumption Expenditures: Chain-type Price Index.)

Price Indexes & Deflators

Download Data Notify Me of Updates

Show Only : ShowAll Go

Selected Series : Add to Data List Add to New Graph Series 1 - 9 of 9

<input type="checkbox"/>	Title	Observation Start	Observation End	Freq.	Units	Seas. Adj.	Popularity
<input checked="" type="checkbox"/>	Gross Domestic Product: Implicit Price Deflator	1947:Q1	2011:Q1	Q	Index 2005=100	SA	██████████
<input type="checkbox"/>	Personal Consumption Expenditures: Chain-type Price Index	1947:Q1	2011:Q1	Q	Index 2005=100	SA	██████████
<input type="checkbox"/>	Personal Consumption Expenditures: Chain-type Price Index	1959-01	2011-03	M	Index 2005=100	SA	██████████
<input type="checkbox"/>	Personal Consumption Expenditures: Chain-Type Price Index Less Food and Energy	1959-01	2011-03	M	Index 2005=100	SA	██████████
<input type="checkbox"/>	Gross Domestic Product: Chain-type Price Index	1947:Q1	2011:Q1	Q	Index 2005=100	SA	██████████
<input type="checkbox"/>	Personal Consumption Expenditures: Chain-type Price Index Less Food and Energy	1959:Q1	2011:Q1	Q	Index 2005=100	SA	██████████
<input type="checkbox"/>	Gross National Product: Implicit Price Deflator	1947:Q1	2010:Q4	Q	Index 2005=100	SA	██████████
<input type="checkbox"/>	Gross Private Domestic Investment: Chain-type Price Index	1947:Q1	2011:Q1	Q	Index 2005=100	SA	██████████
<input type="checkbox"/>	Gross National Product: Chain-type Price Index	1947:Q1	2010:Q4	Q	Index 2005=100	SA	██████████

Selected Series: Add to Data List Add to New Graph Series 1 - 9 of 9

28. Now, to add some information to this choice, **change the units to Percent Change from Year Ago (% Chg. from Yr. Ago)**

Tools

- View Data
- Download Data
- Notify Me of Updates
- Add to My Data List
- Vintage Series in ALFRED

Latest Observations

- 2011:Q1: 111.664
- 2010:Q4: 111.141
- 2010:Q3: 111.045
- 2010:Q2: 110.488
- 2010:Q1: 109.952

Related Categories

- Gross Domestic Product (GDP) and Components
- Price Indexes & Deflators

Need Help?

- Tutorials
- FAQs
- Email Us

Home > FRED® Economic Data > Categories > Gross Domestic Product (GDP) and Components > Price Indexes & Deflators

Gross Domestic Product: Implicit Price Deflator (GDPDEF) SHARE Twitter Facebook Email

Edit Graph Print PDF Save

Type: Line Size: Medium Range: Max Recession Bars: On Log Scale: Left
Notes: Growth Rate Calculations | US recession dates

Units: Levels
 Chg.
 Chg. from Yr. Ago
 % Chg.
 % Chg. from Yr. Ago
 Comp. Annual Rate of Chg.
 Cont. Comp. Rate of Chg.
 Cont. Comp. Annual Rate of Chg.

Series ID: GDPDEF

Source(s): U.S. Department of Commerce: Bureau of Economic Analysis

Release: Gross Domestic Product

Units: Index 2005=100

Frequency: Quarterly

Seasonal Adjustment: Seasonally Adjusted

Observation Range: 1947:Q1 to 2011:Q1

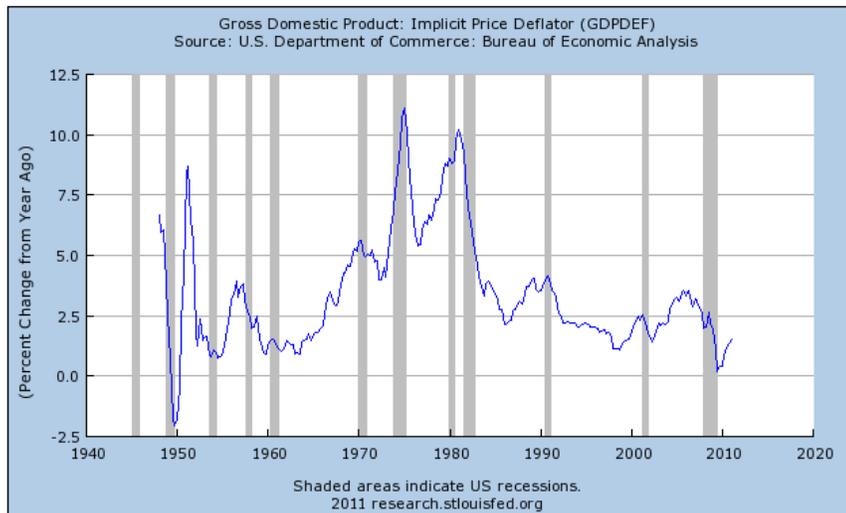
Last Updated: 2011-04-28 2:02 PM CDT

Notes: The number of decimal places reported varies over time. A Guide to the

29. Once you've done that, the options for editing the graph are available. Add the **CPI-U Less Food and Energy** (seasonally adjusted).

Graph: Gross Domestic Product: Implicit Price Deflator (GDPDEF)

[Download Data in Graph](#) | [Print](#) | [PDF](#) | [Link](#) | [View Saved Graphs](#) | [Save Graph](#) | [Help](#)



Settings [Restore Defaults](#) | [Save Settings](#) | [Apply Saved Settings](#)

► **Graph**

► **Line 1: Gross Domestic Product: Implicit Price Deflator (GDPDEF)**

▼ **Add Data Series**

To: New Line Line 1 [What's This?](#)

Search: [Browse](#)

Notes on arc

Research

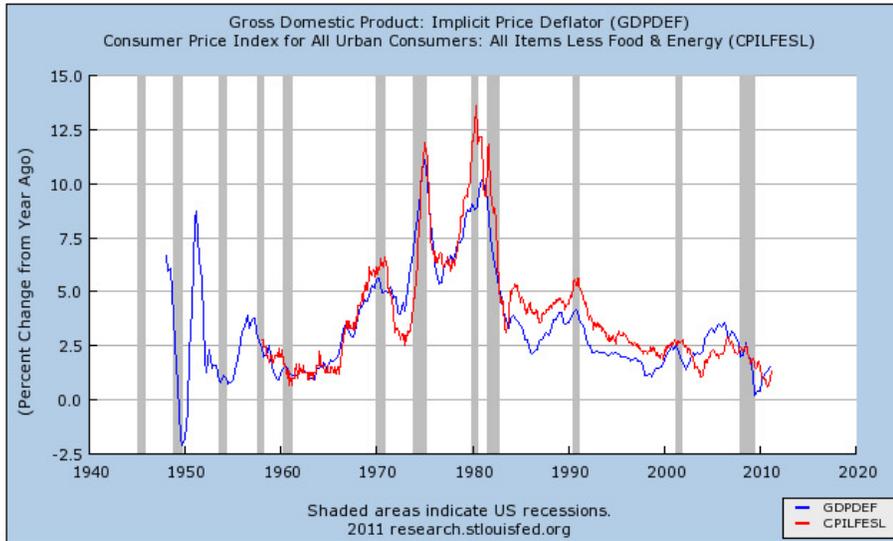
- Consumer Price Index for All Urban Consumers: All Items Less Food & Energy
CPILFESL, M, Index 1982-84=100, SA
- Consumer Price Index for All Urban Consumers: All Items Less Food & Energy
CPILFENS, M, Index 1982-84=100, NSA
- Chained Consumer Price Index for all Urban Consumers: All items less food and energy
SUUR0000SA0L1E, M, Index Dec 1999=100, NSA

30. The GDP deflator (blue line in the graph below) reflects the prices of all goods and services produced domestically, while the CPI (red line below) reflects prices of all goods and services bought by consumers. Knowing this difference, explain why the GDP deflator might sometimes have a different measure in the level of price increases than CPI.

Measuring inflation is crucial to the FOMC’s mandate for price stability. And, understanding inflation and how it is measured is key to being an informed citizen. We hope that you have found FRED to be a useful tool in your understanding of inflation and price stability.

FRED Graph

[Download Data in Graph](#) | [Print](#) | [PDF](#) | [Link](#) | [View Saved Graphs](#) | [Save Graph](#) | [Help](#)



Settings [Restore Defaults](#) | [Save Settings](#) | [Apply Saved Settings](#)

- ▶ Graph
- ▶ Line 1: Gross Domestic Product: Implicit Price Deflator (GDPDEF)
- ▶ Line 2: Consumer Price Index for All Urban Consumers: All Items Less Food & Energy (CPILFESL)
- ▶ Add Data Series

[Notes on growth rate calculations, US recession dates, and frequency aggregation](#)