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One hundred years of price change: the Consumer Price Index and the American inflation experience

For 100 years now, the Consumer Price Index has measured price change in the U.S. economy. Breaking the 100-year period into several distinct subperiods, this article examines major patterns and trends in price change during each one and highlights notable features of the CPI data. Also discussed are the reaction of the public and policymakers to the inflation of the day and the inflation experience of Americans in each subperiod.

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The year 2013 marked, in a sense, the 100th anniversary of the Consumer Price Index (CPI), because 1913 is the first year for which official CPI data became available. For 100 years, the index has been a major measure of consumer inflation in the U.S. economy, through war and peace, booms and recessions. Over those 100 years, the general public and policymakers have focused almost constantly on inflation; they have feared it, bemoaned it, sought it, and even tried to whip it. Different subperiods saw different trends in price movement, so each generation of Americans had a different experience of price change from the ones before and after it. This article looks at major trends in price change from one subperiod to the next and at how Americans and their leaders regarded those trends and reacted to them.

1913–1929

- Food prices are the focus as the modern CPI is created.
- Sharp inflation marks the World War I era.
- Prices fall during the postwar recession.
- Prices remain relatively stable during most of the 1920s.
- All-Items CPI: total increase, 72.7 percent; 3.5 percent annually

1913–1929 by the numbers

Largest 12-month increase: June 1919–June 1920, 23.7 percent

Largest 12-month decrease: June 1920–June 1921, 15.8 percent

Annualized increase of major components, 1913–1929:

- Food, 3.2 percent
- Rent, 2.7 percent
- Apparel, 3.2 percent
- Fuel, electricity, and ice, 3.8 percent
- Housefurnishings, 4.0 percent
- Miscellaneous, 4.6 percent

Prices of selected items, 1913:

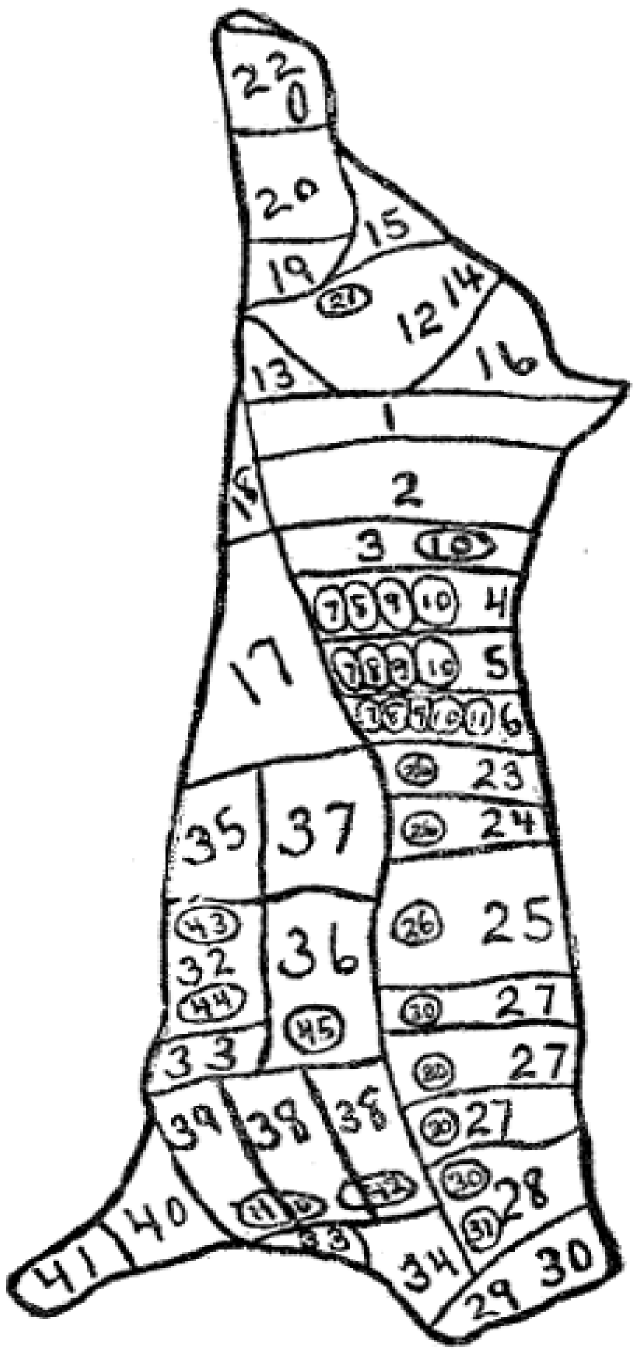
- Potatoes, 2.5 cents/pound
- Flour, 3.3 cents/pound
- Rice, 8.7 cents/pound
- White bread, 5.6 cents/pound
- Round steak, 22.3 cents/pound
- Butter, 38.3 cents/pound

It's March 15, 1913, and according to *The New York Times*, the National Housewives League is concerned. Meat prices are up, and the group wants something done about it. In huge print, a headline proclaims their solution: "Raise meat animals, housewives advise. Tell the home farmers that is up to them to check soaring prices."[1]

A few months later, the same newspaper reported on a bulletin issued by the Bureau of Labor Statistics (BLS, the Bureau). The bulletin's data showed the reason for the League's concern: although the price of several staples had fallen from January to February, meat prices were up. Moreover, most meat prices were considerably higher in 1913 than they were throughout the 1890s. Smoked bacon had increased 111.6 percent, for example. Round steak had risen 84.5 percent.[2]

Whatever the home farmers may or may not have done, however, the coming years would produce more price increases. When the CPI was finally created in 1921 and a time series back to 1913 was established, it would show food prices more than doubling from 1913 to 1920. Only a sharp recession in 1921 would produce a decline.

RETAIL PRICES, 1913 TO DECEMBER, 1921.



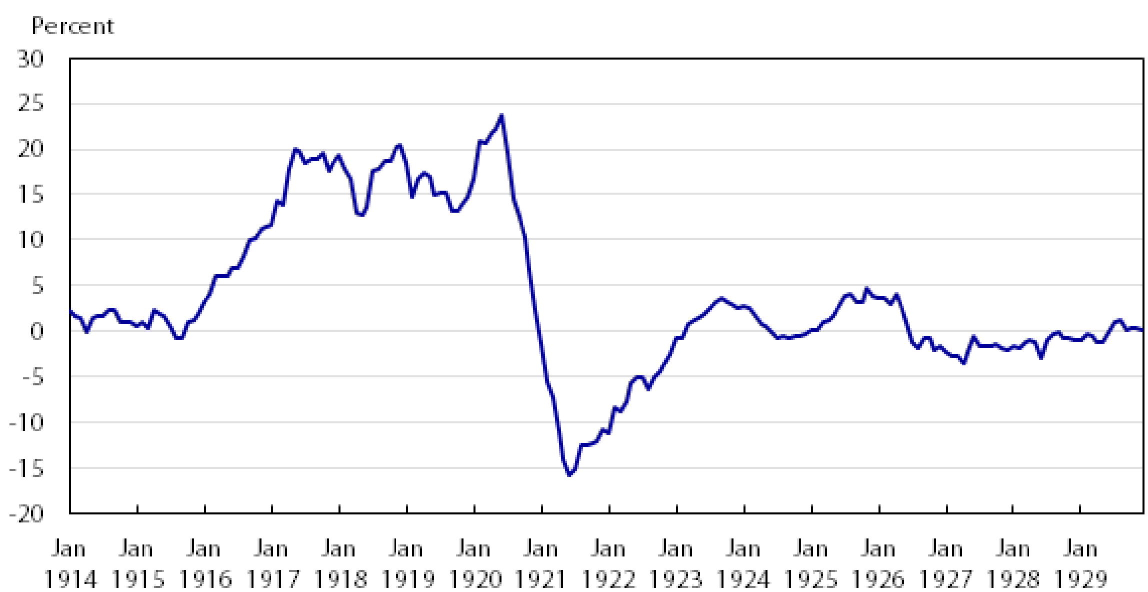
METHOD OF CUTTING MEAT IN PROVIDENCE, R. I.[1]

1. Trimmed steak.
2. Trimmed steak.
3. Trimmed steak.
4. Trimmed steak.
5. Rib roast.
6. Rib roast.
7. Suet.
8. Lean trimmings.
9. Tallow.
10. Bones.
11. Kidney.
12. Top round.
13. Vein steak.
14. Bottom round.
15. Stew meat.
16. Aitch bone.
17. Trimmed flank.
18. Cod fat.
19. Shin.
20. Shin.
21. Tallow.
22. Bones.
23. Rib roast.
24. Rib roast.
25. Blade roast.
26. Bones.
27. Chuck roast.
28. Rolled roast.
29. Boned neck.
30. Bones.
31. Tallow.
32. Trimmed brisket.
33. Trimmed brisket.
34. Sticken.
35. Navel.
36. Butcher's mark.
37. Flat rib.
38. Thick plate.
39. Thick plate.
40. Shin.
41. Shin.
42. Lean trimming
43. Brisket tallow.
44. Brisket bones.
45. Tallow.
46. Bones.

[1] Chart copyrighted by Mr. M. H. Wallace, deceased, but published by permission of Mr. Edwin Te of the Butchers, Grocers, and Marketmen's Association of Rhode Island.

So, even before the existence of the CPI, inflation was on the minds of the public and in the headlines of the news. Indeed, in some ways, little seems to have changed over the past 100 years. Price increases, particularly in frequently purchased goods, vex the public and greatly color its perception of the economy. Of course, BLS price data were controversial even before the existence of the CPI: a March 2, 1914, story published in *The New York Times* details criticism of BLS bulletins as providing misleading data about the cost of living. J. W. Sullivan, an author and activist, wrote to Secretary of Labor William B. Wilson, asserting that the bulletins were “inadequate as a basis for percentages representing the general cost of living.”[3] Indeed, general dissatisfaction with the state of price statistics helped lead to the creation of what became the official CPI. As prices increased during and following World War I, a consensus was reached that the existing data, consisting predominantly of food price measures, was inadequate as a basis for measuring the cost of living or the general price level. More comprehensive price collection in 92 cities began in 1917, and in 1919 the Bureau began publishing semiannual cost-of-living data for 32 cities. Estimates back to 1913 for the country as a whole also were created, although some wholesale price data were used to augment the retail price data. Regular publication of the official U.S. CPI began in February 1921.[4] A survey of White wage-earner families in 92 cities formed the basis of the market basket used to calculate the early CPI. The major groups of that CPI (then called the Cost of Living Index) were food, clothing, housing, fuel and light, housefurnishings, and miscellaneous.[5] A more detailed look at what was actually being priced provides a glimpse into the nation’s life at the time. Food staples dominated. Beef was of particular importance; indeed, one BLS bulletin from 1923 shows several diagrams of cows, illustrating the way beef was cut in different cities. The men’s clothing index of 1919 prominently included straw hats. Durable goods were few; there were no cars or radios priced in the early CPI.

Figure 1. All-Items Consumer Price Index, 12-month change, 1914–1929



Source: U.S. Bureau of Labor Statistics.

The All-Items CPI increased at a 3.5-percent annual rate from 1913 to 1929 (see figure 1), but that result was arrived at via a volatile path that featured both sharp inflation and deflation. Inflation was modest in 1914 and 1915, around 1 percent, but accelerated sharply in 1916 and was historically high through the World War I period and the immediate postwar era. Prices then fell sharply during the steep recession of the early 1920s. The years 1923 to 1929 were a much quieter time for price movements, with the CPI showing modest price changes throughout the period, although the slight deflation in 1927 and 1928 is perhaps surprising given the general perception of the middle and later 1920s as a time of economic boom.

Prices in the World War I era

Data suggest that, despite the frustrations of the Housewives League, inflation was slight from 1913 to 1915, although some caveats are likely in order in considering the data of that period. The year 1916, however, saw rapid acceleration in the inflation rate. The 12-month change in the CPI rose from 3.3 percent in January to double digits by October. The World War I era and its aftermath, 1917–1920, then produced sustained inflation unmatched in the nation anytime since. Prices rose at an 18.5-percent annualized rate from December 1916 to June 1920, increasing more than 80 percent during that period.

Even a cursory examination of CPI component indexes of the World War I era reveals the breadth of price increases during that period: virtually every series shows sharp increases. Even the series that increased more slowly, such as housing and fuel, were half again more expensive in 1920 than they were in 1915. The prices of most foods, clothing, and dry goods more than doubled.[6]

The CPI as such didn't exist throughout most of the period, although there certainly were BLS data documenting the price increases, especially for food. Indeed, it is likely that, to some extent, the high inflation of that time helped lead to the formal creation of the CPI, because, clearly, the need for an accurate measure of the cost of living is greater when the cost of living is changing rapidly.

It is beyond the scope of this article to analyze in detail the World War I–era economy, but surely, the inflation of that time was a result of the war effort. The war's needs dominated policy and planning, with massive effects on resource allocation. One-fifth of the nation's resources were devoted to the war effort in 1918,[7] and the nonfarm labor force expanded sharply. Government involvement in the economy increased dramatically. Price controls were used, although in a rather haphazard way, with numerous agencies empowered to regulate specific prices. Beginning in August 1917, the U.S. Food Administration and the Federal Fuel Administration had authority over many retail prices.[8] There was some rationing, notably of sugar,[9] but not the extensive rationing the nation was to see during the World War II era.

Monetary policy during the era was expansionary and surely contributed to the inflation of the time. Money supply measures roughly doubled from 1914 to 1919, with gross national product rising only by about a quarter.[10] Fiscal policy featured both massive borrowing, much of it in the form of "Liberty Bonds," and an extensive set of tax increases and surtaxes.[11] Whatever the explanation, the late 1910s stand as the most inflationary period in U.S. history.

Price change in the 1920s

Price controls were allowed to lapse shortly after the November 1918 armistice, although there was considerable sentiment to continue them. The economy was contracting as the war ended, and many feared serious postwar deflation and recession without some coordinated plan.[12] However, the economy expanded in 1919, and prices continued to rise at a rate similar to that of the war period. Businesses rushing to rebuild depleted inventories and wage earners demanding and receiving cost-of-living increases based on high wartime inflation each contributed upward pressure on prices.[13] Various price control instruments were created, the most notable of which was the local "fair-price committees." These committees could establish fair prices for commodities and receive complaints against sellers for exceeding those prices. A 1919 *New York Times* article tells of sugar merchants confessing to selling sugar for 13 cents per pound and promising to issue refunds and sell for 11 cents per pound in the future.[14] Despite the efforts of these committees, prices continued to rise, and government efforts to curb inflation were widely viewed as a failure. The following tabulation shows the trend in price changes over three distinct periods from July 1916 to September 1922:

Name	*Period*	*Annualized percent change in All-Items CPI*
War era	July 1916–November 1918	19.1
Postwar expansion	November 1918–June 1920	17.3
Recession	June 1920–September 1922	-9.7

As it turned out, however, the feared postwar recession was only delayed, not avoided. Prices continued to rise sharply through June 1920, then abruptly started falling.

The recession of the early 1920s, while not remembered like the Great Depression of the next decade, was a severe one; indeed, it is sometimes termed a depression. Although it featured a significant drop in output and rise in unemployment, the recession is particularly striking for its extraordinary deflation: the CPI dropped more than 20 percent from June 1920 to September 1922, and wholesale price measures dropped even more sharply.

The 12-month increase in the CPI peaked at 23.7 percent in June 1920, just before prices turned downward. This rise exceeded the highs of both the post–World War II era and the early 1980s. The subsequent decline was sharp: the 15.8-percent drop from June 1920 to June 1921 represented a larger 12-month decrease than any registered during the Great Depression of the 1930s. So, it seems fair to say that the post–World War I era was the most volatile period of the last century for consumer prices.

After 1922, however, relative price stability reigned for the rest of the decade. Prices rose an average of 1.4 percent annually from 1922 to 1926, then fell an average of 1.1 percent annually from 1926 to 1929. The 12-month change in the CPI stayed between a rise of 4.1 percent and a decline of 2.8 percent for the entire period, a clear contrast to the double-digit increases and decreases seen from 1916 to 1922. Food prices showed a little more volatility, with a notable spike in 1925. The relative stability that held from 1922 to 1929 did not, however, mean that policymakers didn't concern themselves with price changes: vigorous debates about prices and attempts at major regulation characterized the period. The agricultural sector did not recover as well as the rest of the economy did from the recession of the early 1920s. Foreshadowing later efforts, concern about inadequately low agricultural prices sparked attempts at regulation in the late 1920s. President Coolidge repeatedly vetoed the McNary–Haugen bill, which would have established agricultural price supports in an attempt to restore relative prices received by agricultural producers to their 1909–1914 average.

Although not enacted, the bill presaged future efforts to control prices not because they were rising too rapidly, but because it was perceived that they were rising insufficiently for producers. As the relative stability and prosperity of the late 1920s turned into the grinding depression of the early 1930s, these efforts would grow in scope and magnitude.

1929–1941

- Deflation reigns through the early Depression era.
- Prices recover in mid-thirties, then turn downward again.
- Inflation reappears as the World War II era nears.
- Depression-era policy focuses on prices.
- All-Items CPI: total decrease, 14.0 percent; 1.3 percent annually

1929–1941 by the numbers

Largest 12-month increase: November 1940–November 1941, 10.0 percent

Largest 12-month decrease: September 1931–September 1932 and October 1931–October 1932, 10.8 percent each

Annualized increase of major components, 1929–1941:

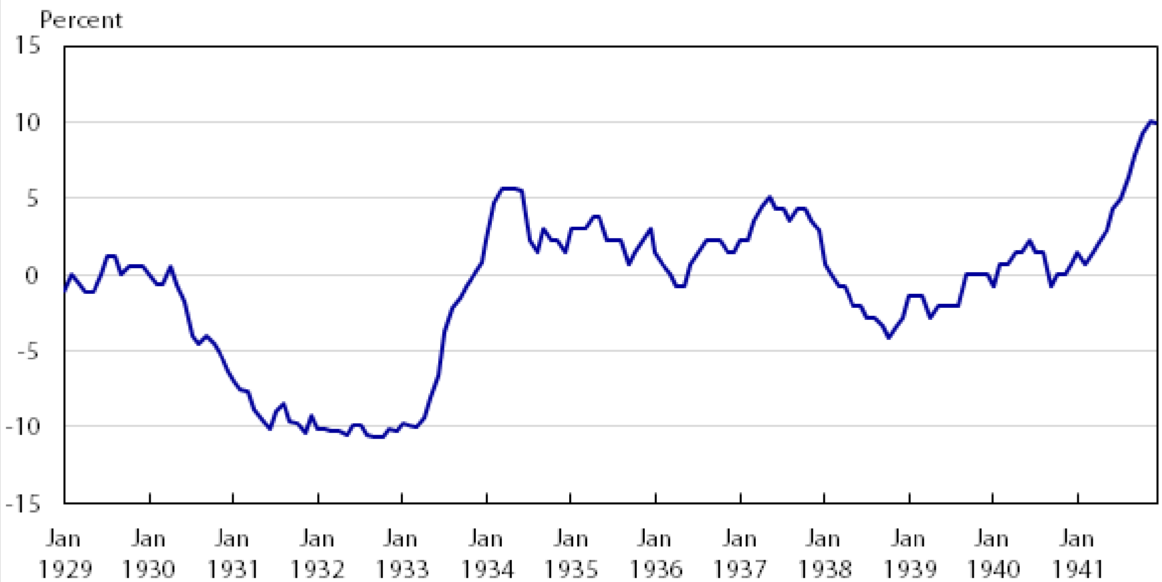
- Food, –1.9 percent
- Rent, –2.3 percent
- Apparel, –0.7 percent
- Fuel, electricity, and ice, –0.9 percent
- Housefurnishings, –0.5 percent
- Miscellaneous, –0.1 percent

Prices of selected items, 1934:[15]

- Potatoes, 1.7 cents/pound
- Flour, 5.1 cents/pound
- Rice, 8.1 cents/pound
- White bread, 8.3 cents/pound
- Round steak, 27.4 cents/pound
- Butter, 35.4 cents/pound
- Bituminous coal, $8.36/ton

After the relative stability of the 1920s, price change remerged as a major concern in the nation with the onset of what would become known as the Great Depression. This time, though, the concern was over prices falling. By the trough of the depression, prices of many goods were below their 1913 levels. As the economy faltered, falling prices became identified with the declining economy. A 1931 *New York Times* article speaks of retailers avoiding promotional discounts because they "remind consumers of the depression."[16]

Figure 2. All-Items Consumer Price Index, 12-month change, 1929–1941



Source: U.S. Bureau of Labor Statistics.

And prices were indeed falling in the early 1930s. From October 1929, the month of the famed crash, to the trough in April 1933, the All-Items CPI declined 27.4 percent. (See figure 2.) The deflation was deep and virtually across the board: essentially no categories of goods failed to show declines. All major CPI categories were lower in June 1933 than they were in June 1929. The following tabulation shows the percent changes in the major CPI components across three distinct subperiods from 1929 to 1941.

Group	*Subperiod, annualized percent change*		
	December 1929–June 1933	*June 1933–September 1937*	*September 1937–June 1941*
All items	-8.3	3.3	0.1
Food	-13.0	6.6	-.5
Clothing	-8.3	5.2	-.5
Rent	-9.1	.5	1.0
Fuel, electricity, and ice	-4.4	.7	.4
Housefurnishings	-8.5	6.5	-.4
Miscellaneous	-2.0	.9	.4

Food still accounted for more than 30 percent of a household's expenditures (and more than 30 percent of the weight of the CPI) and was more volatile than other groups. Food and clothing together accounted for nearly half of the weight of the index, compared with less than a fifth today. However, food was less dominant than in the World War I era, after which durable goods became a larger part of the lives of many consumers.

The CPI in the 1930s

The following tabulation lists the relative importance, as a percentage of the market basket, of each major CPI group for the period 1935–1939, as reported at the time:

Group	*Relative importance, percent*
All items	100.0
Food	33.9
Clothing	10.5
Rent	18.1
Fuel, electricity, and ice (including utilities)	6.4
Housefurnishings	4.2
Miscellaneous (including medical care and recreation)	26.9

Translated into the current item structure of the CPI, the percentages look like this:

Group	*Relative importance, percent*
All items	100.0
Food	35.4
Housing (including utilities)	33.7
Apparel	11.0
Transportation	8.2
Medical care	4.0
Recreation	2.9
Other goods and services	5.3

Under the old structure, the housefurnishings group included not only furniture, tables, and blankets, but also radios and washing machines. The "miscellaneous" group included what currently are the major groups of transportation, medical care, recreation, and "other goods and services." Household operations, now part of the housing group, also were included in the "miscellaneous" category, as were automobiles, which accounted for nearly 8 percent of the "miscellaneous" index (around 2 percent of the All-items index) by the late 1930s. Gasoline, in the "miscellaneous" group as well, accounted for almost as much.

Medical care specifics of the time depict the very different state of health care. Prescription drugs were divided into "nonnarcotic liquid," "nonnarcotic capsules," and "narcotic liquid." Quinine, castor oil, and milk of magnesia were classified as nonprescription medications. Appendectomies, tonsillectomies, and house visits were among the medical care services listed.

Laundry service and telephone service were among the largest categories within household operations. Recreation was composed of newspapers, motion picture tickets, and tobacco. The "miscellaneous" group was less volatile than other groups, showing considerable stability through the whole decade.

Declining prices were seen by some as the fundamental problem afflicting the economy, the one that had to be solved to turn things around. There was great disagreement about the means of accomplishing that, however. At the same time, there were, on the one hand, fears of deflation and hoarding, and on the other, skepticism that measures to address these problems would prove inflationary. Even before President Roosevelt and the New Deal, the government's measures generated disagreement. A February 1932 *New York Times* letter to the editor is typical:[17]

> Much misunderstanding has resulted from the hurling back and forth of the words "inflation" and "deflation" by proponents and opponents of credit-relief proposals. The President [Hoover] and his advisers insist that their objective is merely to stop "deflation." "No." say both foreign and domestic critics; you are bringing about inflation." Now, which is which?

In any case, the measures failed to stop deflation, and by 1933 and the onset of the Roosevelt administration, public opinion and political will shifted toward activist policies (although sharp disagreement persisted). As faith in market forces diminished, competition that put downward pressure on prices was seen as destructive. The National Industrial Recovery Act arose out of a perspective that such competition had to be controlled if the economy were to be stabilized. The act represented the idea that planning, rather than the market forces, which seemed to be failing, was needed to achieve economic stability. In signing the act, President Roosevelt remarked,[18]

> Its goal is the assurance of a reasonable profit to industry and living wages for labor, with the elimination of the piratical methods and practices which have not only harassed honest business but also contributed to the ills of labor.

The National Industrial Recovery Act brought attempts at wage and price controls back into the economy on a large scale. Codes of “fair competition” were to be created to prevent what was termed “destructive competition.” The National Recovery Administration, the agency established to administer the act, had wide power to control prices. It was well known among those creating and enforcing the codes that the administration had sought to get prices moving upward.[19] Price increases were seen as patriotic. In some cases, minimum prices were set, effectively stopping any price competition. In other cases, various restrictions were placed on pricing behavior.

The act would have a short and perhaps rather ineffectual life, however. Congressional opposition to its reauthorization mounted, and it was deemed unconstitutional by a unanimous Supreme Court in May 1935.

Both during and after the National Recovery Administration’s attempts at price control, prices did move upward, although they did not return to their precrash levels. The All-Items CPI rose 16.5 percent from April 1933 to September 1937, but remained 15.6 percent below its precrash peak. Nonetheless, the upward trend in prices did not coincide with great progress in alleviating the depression: unemployment averaged around 18 percent and gross national product was far below its long-term trend.[20] Economists have posited different explanations for this persistent inflation during a time of very weak economic performance: the direct and indirect effects of the National Recovery Administration, monetary devaluation, and short-run increases in output.[21] Whatever the explanation, serious deflation characterizes only the early part of the Great Depression.

Prices did turn downward again in 1937, although price change from 1937 until the World War II era was generally modest. The All-Items CPI started falling after its September 1937 peak, decreasing by more than 4 percent by August of 1940. The decline in the food index was steeper: the index fell by more than 13 percent by June of 1939, although it did start to recover after that. Some attribute the downturn to tighter monetary policy, as Treasury Secretary Henry Morgenthau and Federal Reserve Chairman Marriner Eccles came to fear the possibility of simultaneous high unemployment and high inflation. The irony of fearing inflation after years of seeking it was not lost on John Maynard Keynes, who famously remarked, “They profess to fear that for which they dare not hope.”[22]

So, 10 years after the October 1929 crash, prices were still well below precrash levels (and even farther below the 1920 peak). The 1939 food index was about half of the 1920 index. Prices were relatively flat in 1940, but started to accelerate in earnest in 1941 as the depression yielded to the World War II era. However, as table 1 shows, even by mid-1941, the All-Items index and all of its major components were still below their 1929 levels.

Table 1. Consumer Price Index, selected periods, 1913–1941

Month and year	All items	Food	Clothing	Rent	Fuel, electricity, and ice	Housefurnishings	Miscellaneous
1913 average	70.7	79.9	69.3	92.2	61.9	59.1	50.9
June 1920	149.4	185	209.7	119.1	104.8	169.7	100.7
December 1929	122.8	133.8	114.7	139.9	113.6	111.3	104.9
June 1933	90.8	82.2	84.8	100.1	97.2	81.5	97.8
June 1941	104.6	105.9	103.3	105.8	101.4	105.3	103.3

Note: Average of 1935–1939 = 100. Source: U.S. Bureau of Labor Statistics.

Inflation experience before World War II

Ever since World War II, inflation of a greater or lesser degree has been so common as to be taken for granted. Most living Americans have essentially known nothing but inflation. The 12-month change in the All-Items CPI went nearly 54 years without showing a decline. (The last decline prior to March 2009 was in August 1955.) However, before World War II the experience of price change was very different. Prices zigged and zagged rather than following a consistent upward course. In 1941, a middle-age American reflecting on price change over his or her lifetime would recall the sharp price increases of the World War I era, deflationary periods in the early twenties and during the depression, and the relative price stability of most of the 1920s. The annual All-Items CPI increased 18 times and declined 10 times from 1913 through 1941. The limited price data from the 19th century also show no pattern of consistent inflation; indeed, evidence suggests that there was net deflation over the course of that century, with prices lower at the end than the beginning.[23]

In addition, Americans of that time experienced multiple serious attempts by the government to control prices in different ways. Though not necessarily successful and perhaps haphazardly implemented, various price control measures were at least considered in response to virtually every crisis of the era: World War I, post–World War I inflation, the agricultural recession of the 1920s, and the deflation of the early 1930s.

1941–1951

- Inflation reemerges as America enters World War II.
- Price controls and rationing check wartime inflation.
- Turbulent postwar era sees sharp inflation, then deflation.
- All-Items CPI: total increase, 76.4 percent; 5.8 percent annually

1941–1951 by the numbers

Largest 12-month increase: March 1946–March 1947, 20.1 percent

Largest 12-month decrease: July 1948–July 1949, 2.9 percent

Annualized increase of major components, 1941–1951:

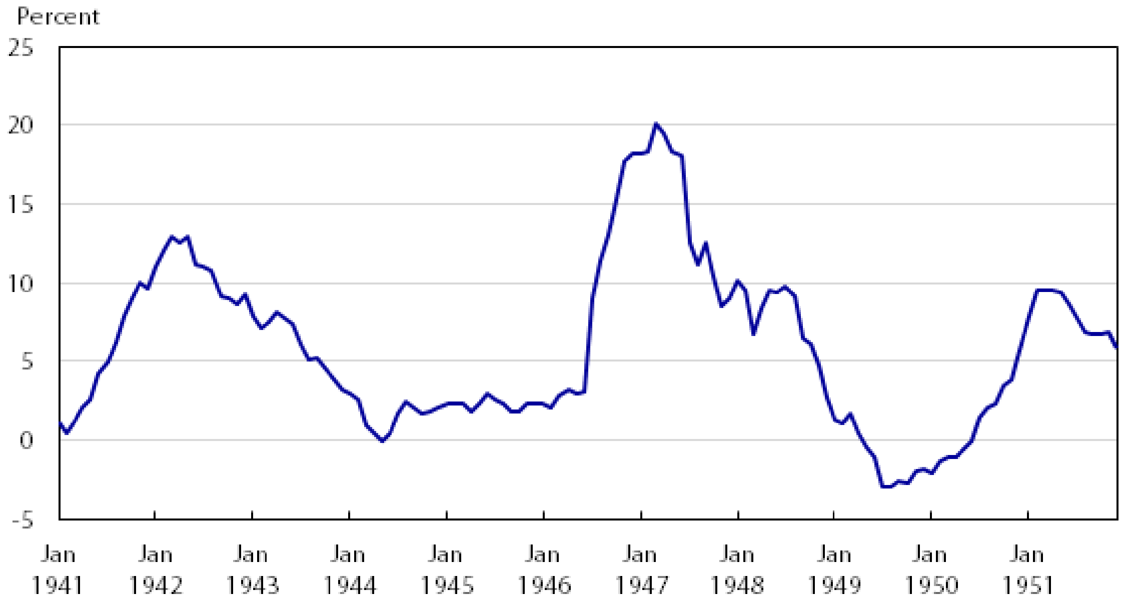
- Food, 8.0 percent
- Rent, 2.5 percent
- Apparel, 6.8 percent
- Medical care, 4.3 percent
- Transportation, 5.1 percent

Prices of selected food items, 1947:

- Apples, 12.8 cents/pound
- Potatoes, 5.0 cents/pound
- Bananas, 15 cents/pound
- Flour, 4.8 cents/pound
- Rice 18.4 cents/pound
- White bread 12.5 cents/pound
- Round steak 75.6 cents/pound
- Milk, 18.7 cents/quart

- Butter, 80.5 cents/pound

Figure 3. All-Items Consumer Price Index, 12-month change, 1941–1951



Source: U.S. Bureau of Labor Statistics.

A graph of the 12-month change in the All-Items CPI hints at the tumultuous wartime and postwar story of the index. (See figure 3.) Inflation rose sharply in the month before and after the onset of the war as the economy emerged from the Great Depression. The rapid rise in inflation was one factor that led to the price controls which reined inflation in during the rest of the war years. After the war, the suppressed inflation reemerged as controls were relaxed and pent-up demand was released. Prices then plunged back down as a postwar recession took hold. Prices then recovered, largely because of the outbreak of the Korean War. The 1941–1951 period divides neatly into five subperiods, shown in the following tabulation:

Subperiod	*Annualized percent change*	
	All items	*Food*
January 1941–May 1943	9.8	18.0
May 1943–February 1946	1.2	-1.0
February 1946–August 1948	12.8	19.3
August 1948–February 1950	-2.8	-6.8
February 1950–December 1951	6.8	10.0

Wartime inflation and price controls

Inflation was already accelerating by the time Pearl Harbor drew America into World War II. The All-Items CPI rose nearly 10 percent during 1941. Over the first 5 months of 1942, the index rose at almost a 13-percent annual rate, with food prices leading the way with a 20-percent yearly rise. Given that price controls had been used or considered repeatedly in response to various crises that had arisen over the previous few decades, it is hardly surprising that such controls would be viewed as the solution to wartime inflation.

Controls were administered and overseen by the Office of Price Administration (OPA), which became an independent agency in January 1942 and saw its powers extended and expanded in October of that year with the passage of the Emergency Stabilization Act.

An OPA training manual displays an example of the thinking of the time and lays out the case for price control:[24]

> Business as usual is impossible under conditions of total war. People have more money, but there is less for them to buy. As this greater amount of money bids for smaller quantities of goods, prices rise. It is the duty, then, of the OPA to keep the cost of living down so that everyone can have enough to eat, to wear, and a place to live—through price control.

Although there had been a number of efforts at controlling prices during World War I and the depression, World War II price controls were far broader and more effectual than previous efforts. Price controls and rationing dominated resource allocation during the war period. One estimate suggests that the general price controls reduced the price level more than 30 percent below what it would have been without them.[25] Price control on such a scale was truly a massive effort: in June 1943, the OPA established more than 200 Industry Advisory Committees to aid in the price control effort.

Of course, resource allocation in World War II was not only focused on controlling inflation; the overarching purpose was to direct resource allocation toward war needs. Consumer goods such as refrigerators and automobiles were banned from production. By 1943, the market basket of the typical consumer was dramatically different than it was before the war. Any durable goods purchased were likely used, rationing meant that less gasoline was being purchased, and many food staples were rationed or in short supply.

The interpretation of price behavior during such a time is conceptually difficult. Many prices were relatively low compared with prices that prevailed during other periods (e.g., the OPA proudly noted that egg prices were less than half of their 1920 levels),[26] but consumers were not free to take advantage of the low prices because of scarcity or rationing. Numerous goods, particularly durable goods such as cars and appliances, were essentially unavailable ("essentially" because black markets certainly existed). CPI weights were adjusted during wartime to reflect the new reality. New automobiles and new tires, for instance, were dropped from the index and replaced with their used counterparts or, in some areas, dropped from the index altogether. The weight applied to gasoline was sharply reduced as rationing took hold. By 1943, many durable goods, such as refrigerators and radios, were also dropped from the index as their stocks were exhausted.[27]

Many goods that could be obtained were likely of diminished quality, as war demands constrained resources and materials. Whereas the modern CPI attempts to account for quality change, the prices measurements of the time did not attempt to account for the decreases in quality during the war years or the likely improvement in quality after the war ended. (One exception, however, is changes in packaging sizes. For example, an 8-ounce package of corn flakes was reduced to 6 ounces. Similarly to the way BLS current procedures treat the matter, the Bureau recorded this reduction in size as a price increase.) One estimate is that decreases in quality caused the CPI to understate inflation by a cumulative 5 percent during the war years.[28]

Postwar inflation and deflation

Most price controls were lifted in 1946. Prices started increasing in March and jumped 5.9 percent in July alone. (Food prices rose 13.8 percent in July after many food price controls expired June 30.) Prices increased more than 15 percent in the second half of 1946. The surge was not merely the story of price controls being lifted, however: strong inflation continued through 1947, driven by increases in demand as well as shortages and diminished crops.[29] Food prices in particular rose dramatically during this period as the CPI food index increased by a third in the last 10 months of 1946 and by over 55 percent from February 1946 to its August 1948 peak. Prices for meats more than doubled over the period, and all the major CPI group indexes of the time increased, with only rent rising less than 20 percent.

The postwar inflationary boom ended abruptly in late 1948; prices that were rising sharply in the spring were falling by autumn. The abatement of pent-up demand from the war, bumper crops of several agricultural products, and tighter monetary policy were among the causes cited as contributing to the reversal.[30] In any case, food prices started falling in summer, and the prices of apparel and other commodities soon followed by the fall. (Rent prices, however, continued to rise modestly.) The following tabulation shows the total percent change for six major CPI groups over two distinct subperiods falling within the period from 1946 to 1950:[31]

Group	*Subperiod, percent change*	
	February 1946–August 1948	*August 1948–February 1950*
Food	55.2	-10.1

Apparel	32.7	-7.5
Rent	8.7	4.3
Fuel, electricity, and refrigeration	23.8	2.6
Housefurnishings	30.7	-5.6
Miscellaneous	21.3	1.8

The deflation seen in the tabulation was part of a broad recession that lasted from late 1948 through most of 1949; output fell and unemployment increased. Although history would come to regard this recession as a relatively mild one, it was worrisome at the time. With the memory of the Great Depression still fresh, the downturn in prices and output seemed all too familiar to many. The experience of the past few decades was one of periods of inflation followed by collapses in price and output. A return to normalcy after the war and the subsequent postwar surge in demand, might, it was feared, mean a return to the misery of the 1930s.[32]

The market basket of the era

The CPI market basket of 1950 was still one-third food and about 13 percent apparel. (Food and apparel made up about 46 percent of the weight of the index in 1950, compared with about 18 percent in 2013.) Streetcar and bus fares had a greater weight than gasoline (although gasoline did have more than twice the weight of bicycles, or velocipedes, as the tables of the time termed them.) Televisions appeared in the index, with 3 times the weight of radios.

The “miscellaneous” category, composed mostly of what would now be the transportation, medical care, recreation, and “other goods and services” groups, made up about a third of the index in 1950. Many services were included in the category. Services were becoming an increasingly large part of the CPI; including rent, they accounted for about a third of the index. It was observed at the time that the price movements of services seemed different from that of commodities (i.e., goods):[33]

> The steady rise in prices which has characterized the service group for so long a time is in striking contrast to the major fluctuations in the upward price movement of commodities….[T]he relatively steady upward movement of service prices since 1940, and their apparent strong resistance to price declines reflects the continued increase in real wages and consumer income over the war and postwar years, and the ever-increasing demand for services that accompanied this improved economic position of consumers.

Notably, the importance of services in the CPI has continued to grow since 1950 (services made up slightly more than 60 percent of the index in 2013), and the pricing behavior of services has continued to rise moderately but steadily, showing much less volatility than commodity prices.

A new war era and the return of price controls

The deflation of the late 1940s proved short lived. The economy showed signs of turning around in late 1949, and prices followed in early 1950. By mid-1950, the Korean conflict returned the economy to a semblance of a wartime status. Demand surged as consumers, mindful of World War II shortages, bought while they still could. Food prices rose nearly 10 percent over the last 8 months of 1950, and the housefurnishings index rose at a similar rate. These increases led yet again to price controls: after voluntary measures proved unsatisfactory, the Office of Price Stabilization was created and compulsory controls returned. The General Ceiling Price Regulation went into effect in early 1951, affecting primarily food and durable goods. Constrained by these controls, inflation was relatively modest through most of 1951, with the All-Items CPI increasing about 3 percent over the last 11 months of that year.

In retrospect, the early 1950s mark a turning point in the American inflation experience. The decades leading up to the Korean war[34] era featured alternating periods of sharp inflation and genuine deflation, with the former generating active efforts to control prices and the latter generating fears of recession and, sometimes, active efforts to raise prices. Although severe inflation and even price controls would return, the post–Korean war era would look different from the 1941–1951 period, with less volatility and a near absence of deflation.

1951–1968

- Price movements are less volatile.
- With no major crisis, rationing and price controls are absent.
- Inflation is feared even as prices are stable.
- Inflation returns in the late 1960s.
- All-Items CPI: total increase, 33.9 percent; 1.7 percent annually

1951–1968 by the numbers

Largest 12-month increase (from 1952 onward): 12-month periods ending October, November, and December 1968, 4.7 percent each

Largest 12-month decrease: October 1953–October 1954, 0.9 percent

Annualized increase of selected major components and aggregates, 1951–1968:

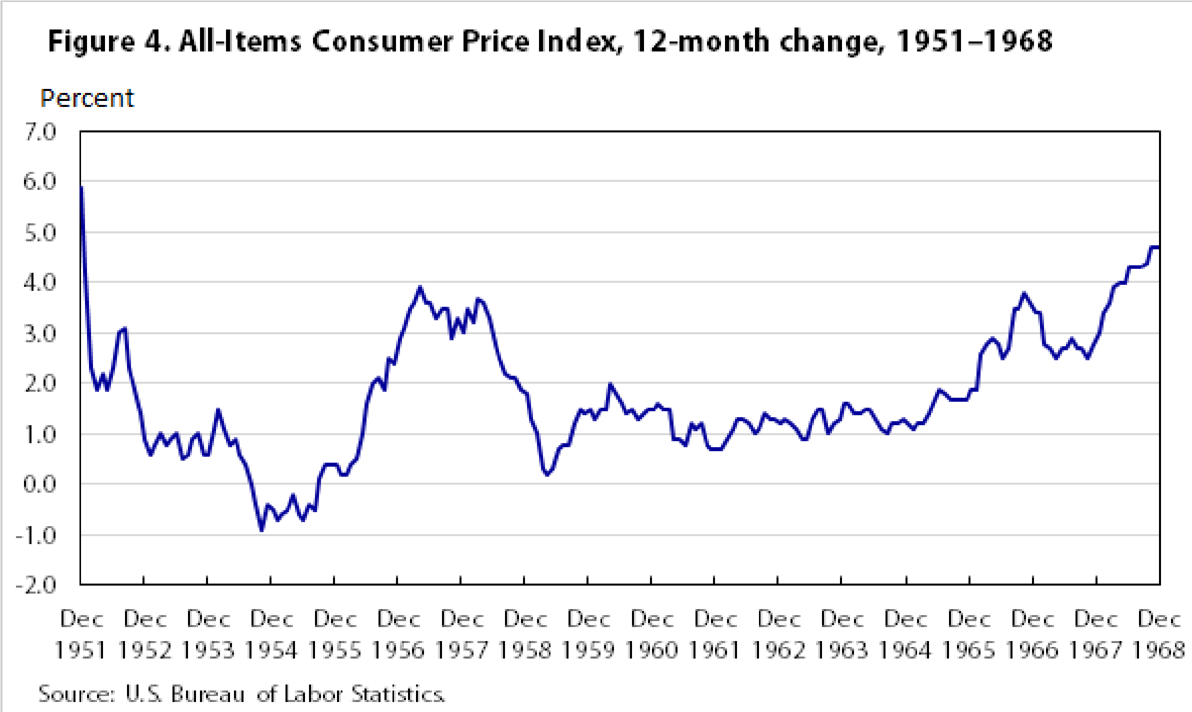
- Food, 1.3 percent
- Rent, 2.0 percent
- Apparel, 1.2 percent
- Medical care, 3.8 percent
- Transportation, 2.1 percent
- Services, 3.2 percent
- Commodities, 1.1 percent
- Gasoline, 1.9 percent

Prices of selected food items, 1955:[35]

- Apples, 15.1 cents/pound
- Potatoes, 5.6 cents/pound
- Bananas, 17.0 cents/pound
- Rice 17.7 cents/pound
- White bread 17.7 cents/pound
- Round steak 90.3 cents/pound
- Milk, 21.9 cents/quart
- Butter, 70.9 cents/pound

Average prices of selected nonfood items, December 1955 (arithmetic average of prices in selected large cities):[36]

- Living room suite, $172.44
- Toilet paper, $0.09/roll
- Men’s business shirt, $3.95
- Gasoline, $0.29/gallon
- Doctor’s office visit (general practitioner), $3.41
- Man’s haircut, $1.42
- Motion picture admission (adult), $0.73



The early 1950s mark the beginning of what could be called the modern era of inflation in the United States, with price changes that were nearly always positive, but usually relatively modest (see figure 4), at least in comparison to the peaks reached during each of the two World Wars. It is this experience that informs most American perceptions and expectations about inflation today.

As the decade of the 1950s opened, the market basket of the American consumer was beginning to resemble the modern one. Food expenditures became less dominant and durable goods increased in importance. This change reflected the postwar surge in demand for durable goods, as cars and televisions gained a foothold in American life. Food, which was about 40 percent of the market basket at the end of the 1940s, was less than 30 percent at the end of the 1950s and dropped to 22.7 percent by 1967. (By comparison, the percentage was about 14 percent in 2012.) New and used cars accounted for about 5 percent of the market basket in the 1950s, a percentage similar to current ones. The following tabulation shows the relative importance (i.e., the percentages) of selected items making up the market basket in December 1957:

Group	*Relative importance, percent*
All items	100.0
Food	28.6
Housing	32.9
Shelter	18.2
Housefurnishings	5.9
Apparel	9.0
Transportation	11.5
New automobiles	3.0
Used automobiles	1.6
Energy	5.8
Gasoline	2.4

The less-food-centered market basket is reflected in attitudes toward, and coverage of, price change over the period. Food prices were less dominant in the news, and price trends that persist today could be seen by the 1950s and 1960s. During that time, price change in services exceeded that of commodities and the rate of medical care inflation exceeded the overall rate; both of these trends have generally held true since.

The popular image of the 1950s is that the period was a time of stability and quiescence, and this perception seems valid enough when it comes to price change. In contrast to the experience after World War II, the end of Korean war–era price controls clearly did not unleash suppressed inflation: by 1953, the controls had lapsed but prices increased less than 1 percent during the year. From October 1952 through June 1956, the

12-month change in the All-items CPI remained below 2 percent. The early to mid–1950s are probably as close as the United States has come to price stability.

A mild recession lasted from late 1953 through much of 1954, with unemployment exceeding 6 percent in January 1954. It has been posited that President Eisenhower tolerated the recession in order to reduce postwar inflation.[37] If so, the tactic appears to have been effective: prices increased only slightly in 1953 and declined in 1954, with the 12-month change in the All-Items CPI remaining negative into 1955. (It would not be negative again until 2009.) From July 1952 to April 1956, the All-Items CPI rose at a paltry 0.2-percent annualized rate.

Inflation reemerged, at least to a modest degree, in the spring of 1956, with the All-Items CPI rising 3.6 percent from April 1956 to April 1957. Another recession arrived, however, and by the spring of 1958 the growth in the price level slowed back to a crawl.

Food prices exhibited even sharper trends than the overall CPI did. The food index peaked in August 1952 and declined slowly, but fairly steadily, until March 1956. Food prices recovered after that and helped drive the increase in the All-Items CPI. The food index stood at about the same level in 1957 as it was in 1952. Food prices accelerated in 1957 and early 1958, with the 12-month change reaching a peak of 7.0 percent in April 1958. Prices then leveled off and turned downward later in the year.

As an aside, in current times consumers often note that the size of items they purchase frequently decreases, and they wonder if the shrinkage masks a price change. This perception, however, is apparently not a new issue: a contemporaneous BLS bulletin notes a 14.3-percent increase in chocolate bar prices, explaining that prices “for this item were relatively stable…but a general reduction on the size of bars resulted in a sharp increase in prices from April through June [of 1958].”[38] Then, as now, BLS noted and adjusted for changes in the size of products.

One might imagine that the relative price stability of the 1950s meant that inflation had receded from public attention and was not at the forefront of politics. However, perhaps because postwar inflationary periods still loomed so large in people’s minds, inflation continued to generate fear and was a dominant issue in the U.S. political debate. “The threat of inflation looms again as a darkening shadow upon the horizon of the American economy,” proclaims an August 1956 editorial.[39] A week later, a headline booms: “Threat of inflation shadows the economy.” The article goes on to explain, “Your dollar is looking slightly ill again. It’s losing some of its purchasing power, that is. Prices are on the rise…inflation is rearing its head.”[40] Inflation at the time was around 2 percent.

Policymakers also seemed focused on inflation even as it existed only as a future possibility. In August 1959, with the All-Items CPI less than 1 percent, a *New York Times* article asserted, “Ever since the present session of Congress began, President Eisenhower’s overriding interest on the domestic front has been inflation and the means of dealing with it.” The same article proclaims that “A powerful school of opinion…has decided that it’s imperative that postwar inflation in the United States be stopped convincingly and once and for all.”[41]

Inflation in the 1960s

The feared postwar inflation might not have been stopped for good, but it was held off for several years. Price change remained consistently modest through the end of the 1950s and into the mid-1960s. Indeed, the era is most notable for its lack of volatility. From November 1958 through January 1966, the 12-month change in the All-Items CPI stayed positive, but low, remaining in the range from 0.7 percent to 2.0 percent throughout the period. Food and energy, the traditional sources of volatility in the CPI, were unusually stable. From 1959 through 1965, the 12-month change in the food index never reached even 4 percent and the energy index (first published by the Bureau in 1957) never reached 5 percent. In fact, the 12-month energy increase exceeded 3 percent only for a single 3-month period (November 1959–January 1960).

And yet, the public and its leaders still were vexed. A 1964 *New York Times* piece discussing President Johnson’s appeals to business and labor to keep wages and prices from rising summarizes the existing state of affairs:[42]

> The constant discussion of inflation in the United States is reminiscent of the family that calls off the picnic when the sun is shining because something in their bones tells them it’s going to rain. There is no inflation in this country and has not been for six years—certainly none to speak of by measure of the price indexes. While some prices have gone up others have gone down. Yet Americans are so used to

> associating good business with rising prices that they cannot believe the strengthening of the boom forecast for this year could possibly take place without a revival of inflation.

Perhaps the public's worries were justified, however, as the much feared inflation did indeed finally arrive, albeit gradually, and it would be decades before sustained modest price change returned. Food prices started accelerating early at the end of 1965, and shelter costs followed in 1966. By October 1966, the 12-month change in the All-Items CPI reached 3.8 percent, its highest level since 1957. After decelerating briefly in 1967 as food prices receded for a short time, the index surged again in 1968, hitting 4.7 percent in October of that year. Interestingly, the inflation of the late 1960s was not at all fueled by energy prices. The tabulation that follows shows the annualized change for selected CPI components for the two periods December 1957–December 1965 and December 1965–December 1968; note that the energy index was modest and not especially volatile throughout the period:

Group	*Subperiod, annualized percent change*	
	December 1957–December 1965	*December 1965–December 1968*
All items	1.4	3.7
Food	1.5	3.2
Energy	.8	1.7
All items less food and energy	1.5	4.1
Shelter	1.5	4.4

Why the return of inflation when it seemed to be guarded against and feared? One possibility is a change in the perspective of policymakers. Some have argued that inflation was tempered in the 1950s by a Federal Reserve that, believing that inflation would reduce unemployment in the short term but increase it in the long term, was willing to contract the economy to prevent inflation from growing. By the 1960s, however, the notion of the Phillips curve, a straightforward tradeoff between inflation and unemployment, ruled the day. Citing the curve, policymakers believed that unemployment could be permanently reduced by accepting higher inflation. This view led to expansionary monetary and fiscal policies that in turn led to booming growth, but also inflationary pressures.[43] However much policymakers professed to fear inflation, the policies they pursued seemed to reflect other priorities. The federal government ran deficits throughout the 1960s, with steadily increasing deficits starting in 1966. Military spending increased with the Vietnam War, domestic spending increased, and taxes were cut.[44] The inflation of the late 1960s might be seen as a classic case of demand outstripping capacity in a highly stimulated economy.

In any case, by 1968 serious inflation had returned, likely a symptom of a booming economy. The years ahead, however, would prove that serious inflation need not be accompanied by a boom.

1968–1983

- Inflation surges and price controls reemerge.
- Energy shocks generate inflationary pressure.
- Inflation persists through the seventies despite a sluggish economy.
- The decade of the early 1980s sees inflation reach its highest peaks since the 1940s.
- All-Items CPI: total increase, 186.4 percent; 7.3 percent annually

1968–1983 by the numbers

Largest 12-month increase: March 1979–March 1980, 14.8 percent

Smallest 12-month increase: July 1982–July 1983, 2.4 percent

Annualized increases in selected major components and aggregates, 1968-1983:

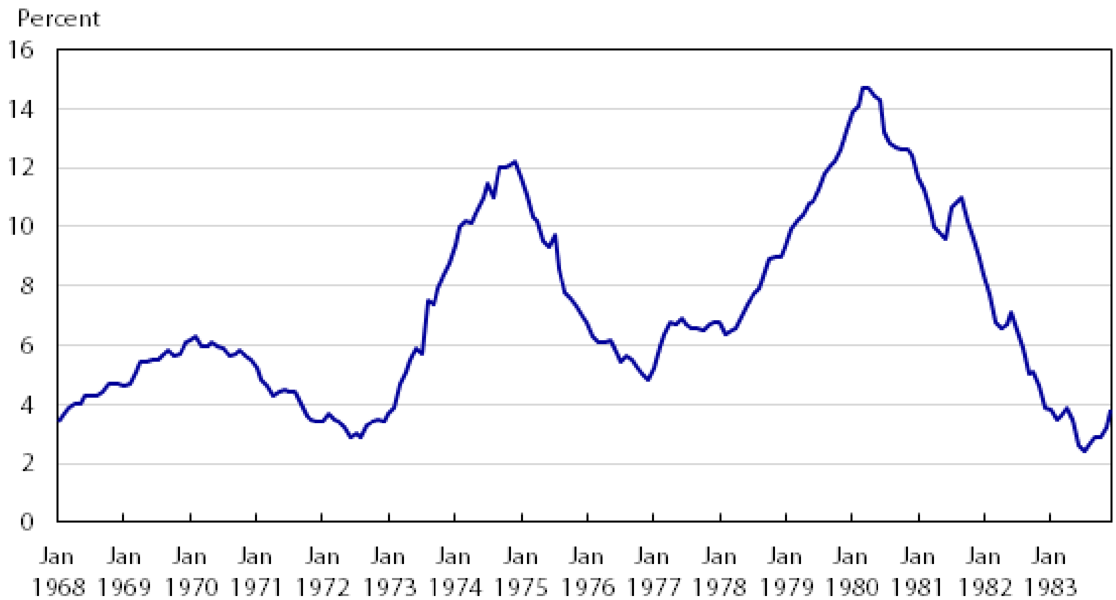
- Food, 7.1 percent
- Energy, 9.9 percent

- All items less food and energy, 7.0 percent
- Rent, 5.7 percent
- Apparel, 4.2 percent
- Medical care, 8.4 percent
- Transportation, 7.3 percent
- Services, 8.2 percent
- Commodities, 6.6 percent
- Gasoline, 9.1 percent

Prices of selected food items, 1975:

- Apples, 34.0 cents/pound
- Potatoes, 13.4 cents/pound
- Bananas, 23.2 cents/pound
- Rice, 47.0 cents/pound
- White bread, 36.0 cents/pound
- Round steak, $1.89/pound
- Milk, 78.5 cents/half gallon
- Butter, $1.03/pound

Figure 5. All-Items Consumer Price Index for All Urban Consumers (CPI-U), 12-month change, 1968–1983



Source: U.S. Bureau of Labor Statistics.

As can be seen from the path of the change in the All-Items CPI, shown in figure 5, the period from 1968 to 1983 stands out as the definitive era of sustained inflation in the 20th-century United States. The period spanned the boom-time inflation of the late 1960s, the frustrating stagflation of much of the 1970s, and the double-digit inflation of the early 1980s. More than ever before, inflation was the most pressing economic concern of the public and policymakers, and it proved to be an issue that dominated elections.

By this period, the composition of the American market basket, and thus the composition of the market basket used to calculate the CPI, had become much closer to that of the current era. The relative importance of food in the index continued to decline: in 1968 it was over 22 percent, while by the early 1980s it was under 20 percent. Notably, in 1978 the CPI published a new measure, the Consumer Price Index for All Urban Consumers (CPI-U), based on the spending patterns of a broader subset of the population.

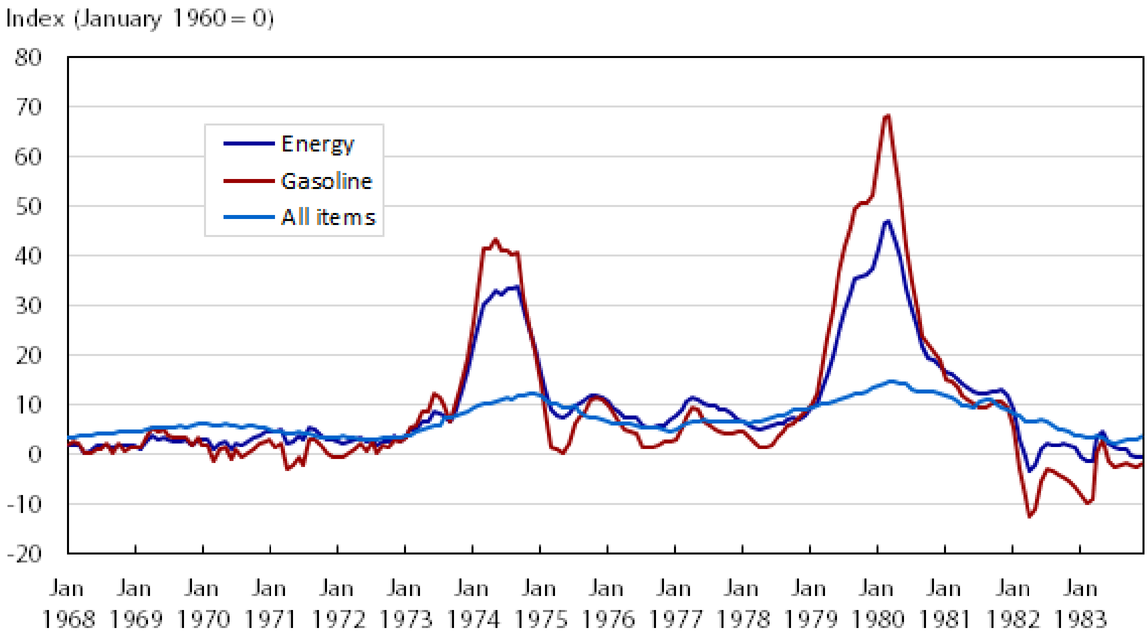
Moreover, many of the broad trends in relative price movements that are still in place today came into focus during the 1968–1983 period. Short-term movements in the index often were driven by energy, especially gasoline. Shelter and medical care price changes usually ran above overall inflation, while apparel price changes ran consistently below. Inflation for services outstripped inflation for commodities.

Inflation was accelerating in 1968, but was still below 5 percent. The inflation of the late 1960s seems relatively innocuous in hindsight, especially given what would follow in the 1970s and early 1980s. However, after nearly two decades of relative price stability (the All-Items CPI hadn't been above 5 percent since 1951), rising prices were vexing to policymakers at the time and engendered an active response. It was the inflation of a booming economy. In 1969 high levels of business investment were pushing prices up, and policymakers responded by focusing on slowing the economy down; the Nixon administration sought, it said, to stop inflation without causing a recession.

Prices rose 6.1 percent in 1969 and 5.5 percent in 1970. By mid-1971, the growth in the All-Items CPI was less than 5 percent. However, the slowing of inflation was due at least partly to a recession, and the public was dissatisfied with inflation and with the economic situation as a whole. In this frustrating climate, President Nixon undertook dramatic steps. He issued an executive order taking the United States off the gold standard and instituted a freeze on wages and prices—price controls yet again, as had occurred during World War I, the 1930s, World War II, and the Korean war. Reflecting the public's frustration, the policies were popular, at least at first. Inflation continued to moderate, with the All-Items CPI rising 3.4 percent in both 1971 and 1972. Following several phases of varying strictness, wage and price controls lapsed in 1973, after Nixon was reelected.

As frustrating as the inflation of 1968–1972 might have been, it was only a prelude to the difficult era that followed. In 1973 and 1974, surging energy prices propelled inflation and made a mockery of the notion that there was a simple tradeoff between higher inflation and lower unemployment. The inflation of 1968–1972 does not appear to have been energy driven: energy inflation generally lagged behind overall inflation until 1973. However, by late 1973, surging energy prices amid an oil crisis, and perhaps suppressed inflation from the price control period, ushered in a new era in American inflation. The CPI for energy rose by a third from mid-1973 to mid-1974, and the All-items CPI soared with it: the 12-month change in the all-items index reached 12 percent by September of 1974. The economy plunged into recession during this period, a more severe recession than the one that had taken hold in 1970. Output declined through 1974 and unemployment reached 9 percent by mid-1975.

Figure 6. Consumer Price Indexes for energy, gasoline, and all items, 1968–1983

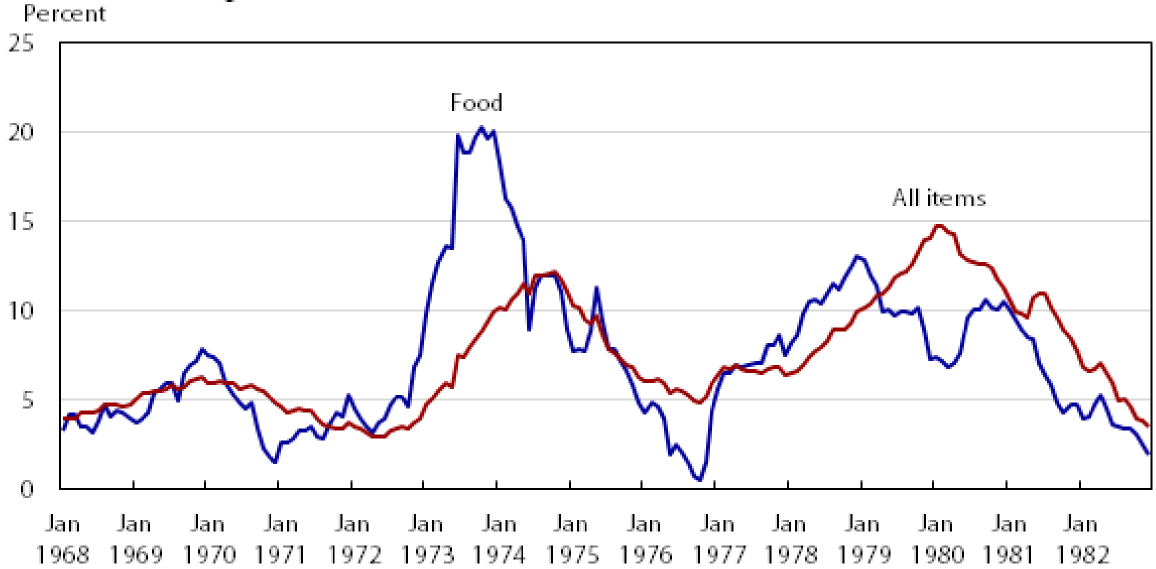


Source: U.S. Bureau of Labor Statistics.

The difficult inflation of the 1970s often is associated with the energy supply shocks of the era. Energy prices were indeed exceptionally volatile during the period. Surges in gasoline prices created two towering peaks in the CPI-U that explain much of the overall inflation of the era. As figure 6 shows, superimposing the energy and gasoline movements reveals their extraordinary volatility and their powerful influence on overall inflation.

Energy inflation was fairly modest until the first big shock in 1973.The scale of figure 6 obscures the fact that energy prices were increasing sharply even between the peaks, rising about 8 percent annually from 1975 to 1978. The second shock, in 1979–1980, reached an even higher peak than the first, before the index became negative in 1982, the year when the high-inflation era ended. Gasoline prices increased roughly fourfold from 1968 to their 1981 peak of around $1.39 per gallon.

Figure 7. Consumer Price Indexes for food and all items, 12-month percent change, 1968–1982



Source: U.S. Bureau of Labor Statistics.

Though not rising to the same heights as gasoline inflation, food inflation also was an important story in this era. (See figure 7.)

Showing some volatility, but relatively restrained in the early part of the period, food inflation accelerated sharply, peaking at more than 20 percent at the end of 1973. Subsequently, a sharp decline pulled the overall rate of food inflation down to more modest levels in 1975 and 1976. Notably, food prices did not decline over any 12-month subperiod during the 1968–1983 period.

In 1974, the Nixon administration, which in 1969 had faced the problem of taming inflation of around 5 or 6 percent without causing a recession, faced an economy with inflation twice that high and that was already in a deep recession. A *New York Times* editorial assessed the grim situation:[45]

> The problem of how to deal with the recession is greatly complicated by the persistence of the worst inflation the nation has experienced since the Civil War—and the worst ever in its peacetime history.

Nixon, of course, had other problems in 1974, and President Ford inherited the difficult inflation situation. In late 1974, he declared inflation to be "public enemy number one." He solicited inflation-fighting ideas from the public, and his signature "Whip Inflation Now" (WIN) campaign was started. Citizens could receive their WIN button by signing this pledge:

> I enlist as an Inflation Fighter and Energy Saver for the duration. I will do the very best I can for America.

An October 1974 newspaper reprints the form containing the pledge. Tellingly, the story next to the form asserts that relief from food prices was unlikely before 1976, while another account details the administration's efforts to advance price-fixing legislation.[46] Buttons were hardly the only WIN product: there were WIN duffel bags (as shown below), WIN earrings, and even a WIN football. The following tabulation shows annualized inflation rates for major categories for three subperiods between 1968 and 1976:

Period	Annualized percent increase			
	All items	*All items less food and energy*	*Food*	*Energy*
December 1968–December 1972	4.6	4.7	4.6	3.3
December 1972–December 1974	10.5	7.9	16.1	19.3
December 1974–December 1976	5.9	6.4	3.5	9.2

Despite the WIN earrings and football, total victory over inflation was not achieved. However, inflation did decline somewhat after the worst of the energy crisis passed. Following an increase of more than 12 percent in 1974, prices rose 7 percent in 1975 and just under 5 percent in 1976, with food prices nearly flat. The 1975 and 1976 levels were as modest as inflation got in the 1970s: energy prices surged again in late 1976 and early 1977, and the All-Items CPI would not drop below 5 percent again until 1982.

Inflation steadily worsened during the Carter era: prices rose nearly 7 percent in 1977 and 9 percent in 1978. By this time, inflation seemed to have momentum, and it was recognized that inflationary expectations could generate inflation. As President Carter put it,[47]

> In the last 10 years, in our attempts to protect ourselves from inflation, we've developed attitudes and habits that actually keep inflation going once it has begun. Most companies raise their prices because they expect costs to rise. Unions call for large wage settlements because they expect it to happen, and once it's started, wages and prices chase each other up and up. It's like a crowd standing at a football stadium. No one can see any better than when everyone is sitting down, but no one is willing to be the first to sit down.

The Carter administration steadfastly sought to reverse the acceleration. Though not resorting to Nixon-style mandatory wage and price controls, President Carter advocated (1) voluntary controls backed by various government sanctions and incentives, (2) reducing the inflationary effects of fiscal policy through deficit reduction, and (3) deregulation to increase competition and limit price increases.[48] Any success these measures had, however, was extinguished by a fresh burst of energy inflation in 1979, pushing the 12-month increase in the All-Items CPI over 13 percent by the end of 1979.

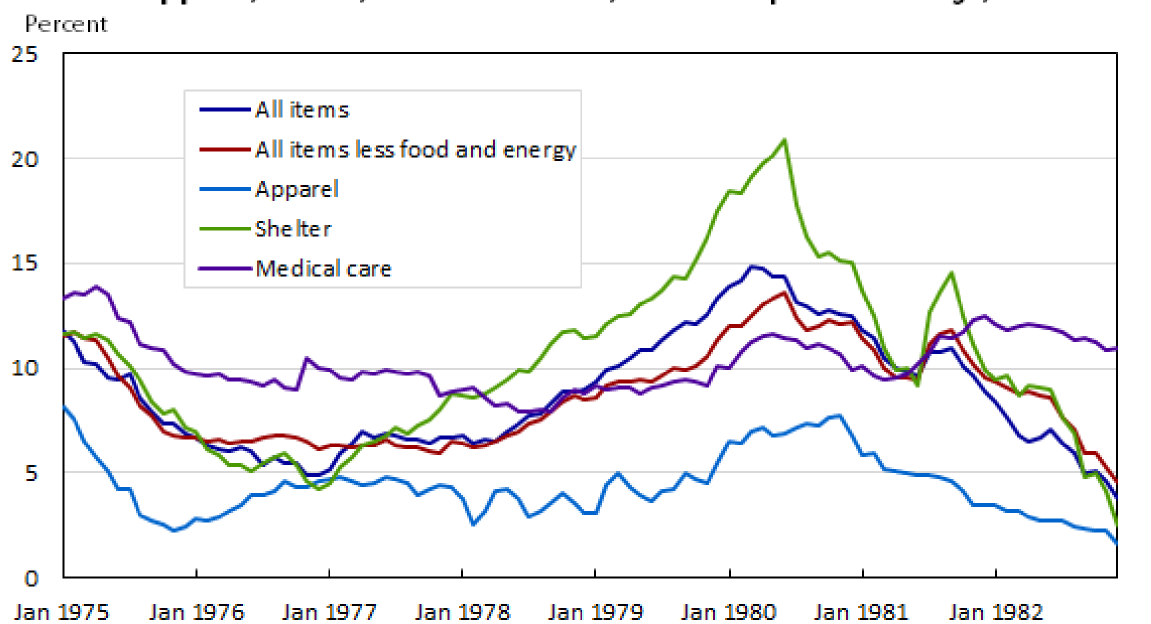
As the decade closed, inflation surpassed that of the peak of the energy crisis earlier in the decade and was the highest it had been since the post–World War II spike in 1947. The inflation of the late 1970s accompanied relatively dismal economic conditions. During the boom-time inflation of the late 1960s, unemployment had been under 4 percent. The unemployment of the late 1970s, though declining, was much higher than it was in the 1960s, and economic growth was sluggish. In 1979, President Carter gave a speech detailing some of the nation's problems. Speaking of a "crisis of confidence," he said,[49]

> It is a crisis that strikes at the very heart and soul and spirit of our national will. We can see this crisis in the growing doubt about the meaning of our own lives and in the loss of a unity of purpose for our nation.

Although the President never actually used the word, the speech came to be known as the "malaise" speech, and the word is now associated with the era.[50]

Although energy shocks (and, to a lesser extent, food shocks) are often cited as a major cause of the inflation of the 1970s, inflation excluding food and energy remained high throughout the era. (Energy inflation can, of course, put upward pressure on other prices.) The CPI for all items less food and energy exceeded 5 percent from February 1974 through November 1982. Also, shelter costs increased sharply in the late 1970s, with the rent index rising 7.1 percent annually from 1975 through 1981. With interest rates high, homeownership costs rose even more sharply;[51] the CPI shelter index rose at a 10.5-percent annual rate from 1975 through 1981, peaking at 20.9 percent in June 1980. (See figure 8.)

Figure 8. Consumer Price Indexes for all items, all items less food and energy, apparel, shelter, and medical care, 12-month percent change, 1975–1982



Source: U.S. Bureau of Labor Statistics.

As figure 8 shows, apparel costs increased more slowly than overall inflation during the late 1970s, and the trend has continued ever since. Also, medical care inflation ran high from 1975 to 1982, usually exceeding overall inflation; this trend has continued in recent decades.

With low productivity growth and an oil embargo on Iran, 1980 was a challenging time in the United States. Perhaps foremost among the problems, though, was inflation that had continued to accelerate since the late 1970s. "Inflation at 13.3 percent? What is this rapacious thing?" was a question posed in a *New York Times* piece that depicted inflation as an enormous dragon.[52] Inflation peaked in March and April 1980, with the all-items index registering a 14.7-percent 12-month increase.

Inflation finally started to abate in 1981 and fell sharply in 1982. The reverberations of the energy supply shock quieted, and a Federal Reserve Board determined to rein inflation in pursued a tighter monetary policy. The result was a plunging CPI but a soaring unemployment rate; the era of high inflation ended, but left in its wake a bitter recession. Fortunately, the economy would recover, and 1983 would mark the end of a frustrating era that combined high inflation with substantial unemployment and sluggish growth. Better times lay ahead, with the coming years eventually witnessing the retreat of inflation, as well as the fear of inflation, as a dominant feature of the American economic landscape.

1983–2013

- Dramatic inflation recedes.
- The late eighties and early nineties see the reemergence of sustained substantial inflation.
- Modest inflation and low unemployment characterize a long boom.
- Deflationary fears emerge during recession.
- All-Items CPI: total increase, 133.9 percent; 2.9 percent annually

1983–2013 by the numbers

Largest 12-month increase: October 1989–October 1990 and November 1989–November 1990, 6.3 percent each

Largest 12-month decrease: July 2008–July 2009, 2.1 percent

Annualized increase of selected major components and aggregates, 1983–2013:

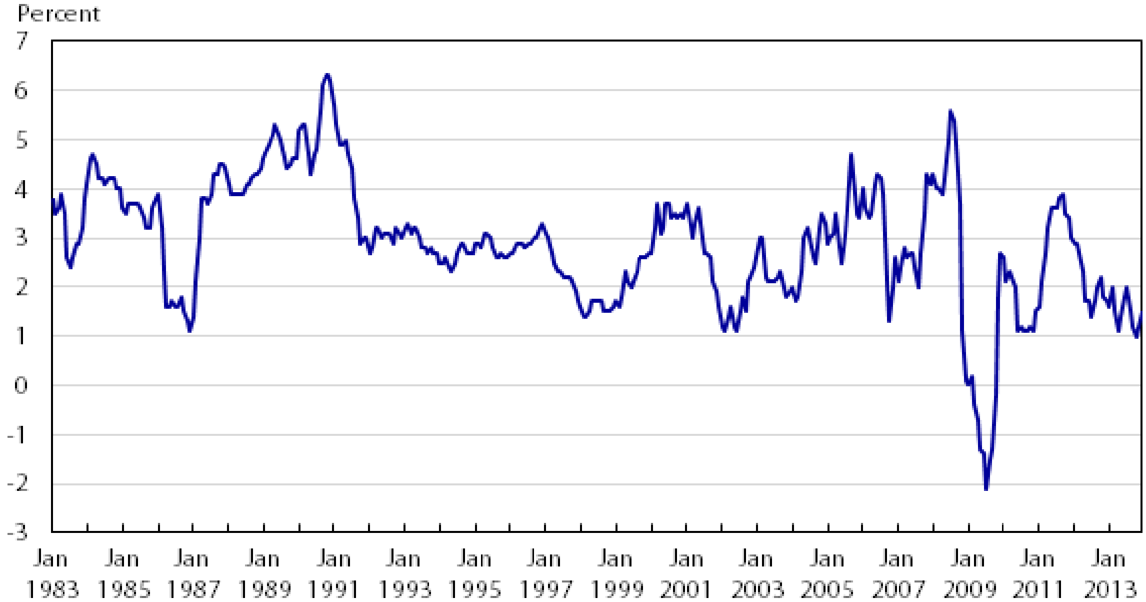
- Food, 2.9 percent
- Energy, 3.0 percent
- All items less food and energy, 2.9 percent
- Rent, 3.3 percent
- Apparel, 0.8 percent
- Medical care, 4.9 percent
- New vehicles, 1.3 percent
- Services, 3.5 percent
- Commodities, 2.1 percent
- Gasoline, 3.8 percent

Prices of selected items, 1987:

- Gasoline, 97.0 cents/gallon
- Apples, 73.0 cents/pound
- Potatoes, 24.7 cents/pound
- Bananas, 37.5 cents/pound
- Rice 42.2 cents/pound
- White bread 57.1 cents/pound
- Round steak $2.93 /pound
- Milk, $1.09/half gallon
- Butter, $2.15/pound

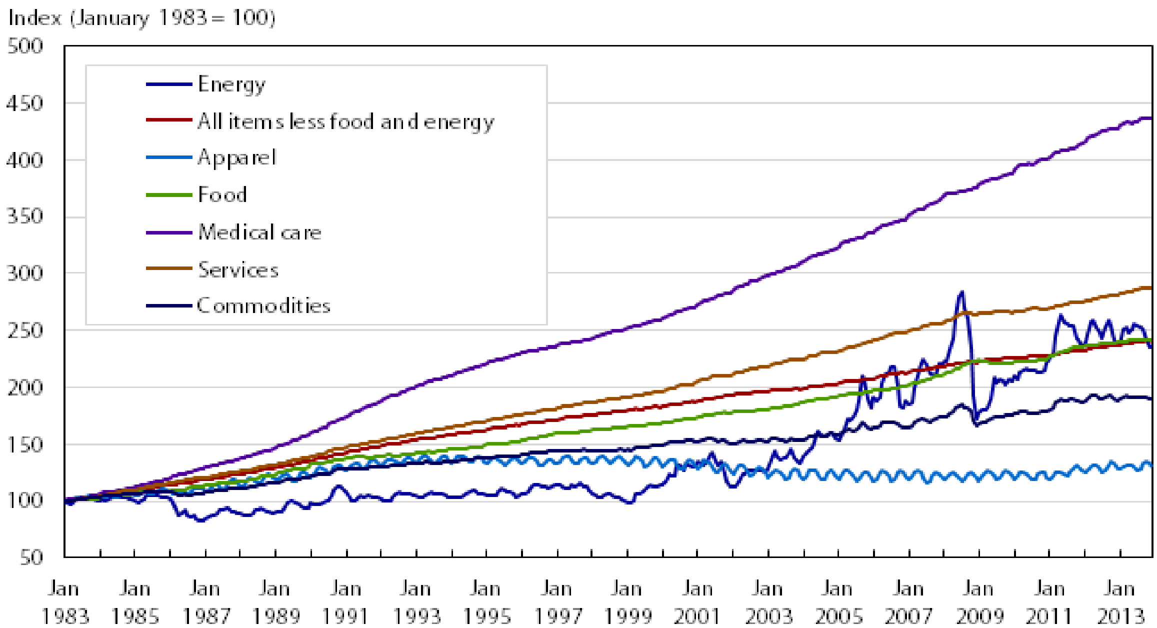
By 1983, the typical American was surely weary of inflation. Prices had roughly doubled in just the previous 9 years, and inflation had been over 3 percent annually—usually far over 3 percent—for 15 consecutive years. A combination of relentless inflation and a sluggish economy had confounded policymakers and exasperated the public. Substantial inflation was more a fact of life than a possibility.

Figure 9. All-Items Consumer Price Index, 12-month change, 1983–2013



Source: U.S. Bureau of Labor Statistics.

Figure 10. Selected Consumer Price Index series, 1983–2013



Source: U.S. Bureau of Labor Statistics.

Fortunately, the dramatic energy inflation that was a strong contributor to the difficulties of the 1970s did not continue. From 1983 to 2013, energy inflation was 3 percent annually, barely higher than the 2.9-percent annual increase in the All-Items CPI. (See figures 9 and 10.) Indeed, the prices of food, energy, and all items less food and energy have increased at virtually the same rate over the past three decades, although, of course, energy prices have been more volatile. Other trends that had started earlier persisted: services continued to rise more rapidly in price than commodities, medical care inflation outpaced overall inflation, and apparel prices grew very slowly. (See figure 10.) Both the magnitude of inflation and its volatility were dramatically less than in the 1970s.

The market basket of the CPI in the 1980s was not all that different from the one of today, especially after a major CPI revision introduced new weights in 1986. With that revision, services (including rent) surpassed commodities in the marketplace; services now account for more than 60 percent of the weight of the CPI. The contribution of food to the market basket dropped to around 16 percent in 1986 and is about 14 percent today.

The economy performed better after recovering from the 1982 recession, with the 1980s generally recalled as a prosperous decade. From 1983 to 1985, inflation stayed around the neighborhood of 4 percent. This behavior was an improvement from the 1970s, but still fairly high by historical standards. In 1986, energy prices dropped sharply, falling nearly 20 percent as gasoline prices declined by more than 30 percent. (In December 1986, gasoline prices were about 83 cents per gallon.) The large decrease in gasoline prices temporarily pushed overall inflation down near 1 percent, but when energy prices recovered, inflation returned to about 4 percent per year and then edged a little higher from 1988 to 1990. With the experience of double-digit inflation still fresh, the situation was enough to create tension. “The CPI on the surface looked terrible. When you went into detail, it looked worse,” said one economist in April 1990.[53]

By late 1990, inflation, as measured by the All-Items CPI, had climbed to 6.3 percent, its highest level since July 1982. An energy spike in the midst of the Gulf War was part of the story, but even excluding food and energy, inflation stood at 5.5 percent. After the end of the Gulf War, a reversal of the rising energy prices contributed to slowing inflation. Another factor was a substantial recession that extended from July 1990 to March 1991. Whatever the reasons, by the beginning of 1992 the All-Items CPI was below 3 percent and the CPI for all items excluding food and energy was below 4 percent. Neither measure has reached its 1990 peak in the more than 20 years since. Inflation, if not “whipped,” as President Ford had sought nearly two decades earlier, seemed to have at least finally been more successfully contained.

The 1990s would prove to be an exceptionally quiet decade. Inflation not only remained modest compared with its behavior in the previous two decades, but was much less volatile.[54] The All-Items CPI stayed within the range from 1.4 percent to 3.3 percent from 1992 until 2000 and did not exceed 3.7 percent until 2005.

What might be termed the modern experience of inflation in the United States dates essentially to 1992. Since that time, prices have increased about 2 percent to 3 percent per year (2.4 percent is the average annualized increase), with modest volatility that can be traced mostly to energy price fluctuations. Despite the tumultuous conditions related to the terrorist attacks of September 11, 2001, and to subsequent wars, price change in the first years of the new millennium was very much a continuation of what was happening at the end of the old one. The following tabulation showing the annualized change, taken from annual averages, in selected CPI categories is indicative of just how little prices changed between the last years of the 20th century and the first years of the 21st:

Group	*Subperiod, annualized percent change*	
	1992–2000	*2000–2007*
All items	2.59	2.69
Food	2.48	2.75
Food at home	2.59	2.62
Energy	2.41	7.57
Gasoline	3.32	9.19
All items less food and energy	2.64	2.16
Shelter	3.12	3.17
Apparel	-.22	-1.21
Medical care	4.03	4.34
New vehicles	1.26	.67
Commodities	1.83	1.67
Services	3.18	3.4

As the tabulation indicates, the all-items index increased at nearly the same rate in the new millennium as the old, with food prices rising at a similar steady pace. The energy index accelerated, led by gasoline prices, but the index for all items less food and energy decelerated modestly as apparel prices fell more quickly and new-vehicle prices rose more sharply. Throughout the entire era, medical care and shelter prices rose more quickly than the overall price level. Inflation in services outpaced that of commodities, with prices of durable goods remaining nearly flat over the whole timespan. Education and tobacco prices also rose sharply during the entire period.

Although a full analysis of monetary policy is beyond the scope of this article, it must be noted that explanations for the reduced inflation since the early 1980s have concentrated on the leadership of the Federal Reserve Board and its monetary policy. Some analysts have argued that, under Paul Volcker and Alan Greenspan, the central banking system focused more strongly on its role in promoting price stability than it had under previous chairmen. The Fed, it is believed, fought inflation with tighter monetary policies and showed a greater willingness to endure recession in order to squeeze inflation out of the economy.

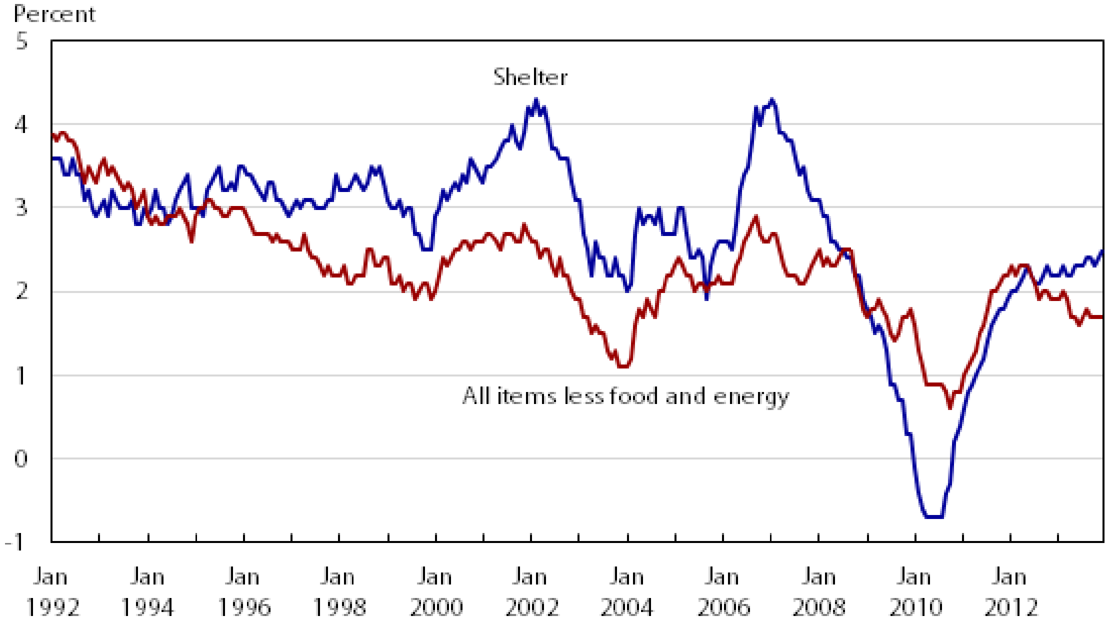
By the late 1980s, economists had formed a new conception about the relationship between inflation and unemployment. Rather than viewing the situation as a tradeoff between inflation and unemployment, a notion that had been discredited by the experience of the 1970s, analysts posited that there was some lowest rate of unemployment which could be achieved that would not cause inflation to accelerate. This rate was the "nonaccelerating inflation rate of unemployment," or NAIRU.[55] There was, of course, some debate over what percentage the NAIRU was, but in the early 1990s estimates centered around 6 percent.[56]

The late 1990s proved to be the opposite of the 1970s: inflation was modest, even as the economy boomed and unemployment plummeted. Estimates of the NAIRU proved to be too pessimistic (or perhaps the NAIRU changed over time), and the economy demonstrated that it was able to sustain low unemployment without generating inflationary pressure. The unemployment rate sank below 5 percent by 1997 and even below 4 percent by 2000, with inflation excluding food and energy remaining comfortably under 3 percent. This trend continued in the new millennium: a mild recession in the early 2000s pushed the unemployment rate back up, but by the end of 2005 it was again under 5 percent, seemingly without generating inflationary momentum.

Then the Great Recession struck in 2008. As the economy contracted and the unemployment rate soared, gasoline prices took off, reaching an all-time high in July 2008, 37.9 percent higher than a year earlier. This increase helped pull the All-items CPI 12-month change over 5 percent for the first time since 1991. However, gas prices then receded, dropping from $4.14 per gallon in July 2008 to $1.74 per gallon by December, the lowest price since 2004. Together with a weak economy, the falling gasoline prices led the All-Items CPI 12-month change into negative territory in March 2009; it was the first 12-month decrease in the index since 1955. So, the recession was accompanied by price volatility that had not been seen in decades. Social Security recipients, whose cost-of-living adjustments were based on the increase in the CPI, received their largest percent increase in decades in 2009 but then no increase at all in 2010 or 2011.

As the housing sector of the economy weakened, the shelter index, which tended to be stable and for many years had been running above overall inflation, gradually decelerated and eventually declined. The shelter index composed nearly a third of the weight of the All-Items CPI toward the end of the first decade of the 21st century, so the shift was important. The 12-month change in the CPI for all items excluding food and energy fell below 1 percent in 2010, the slowest increase in the index in its entire history, which dates to 1957. The shelter index recovered somewhat as the economy began to emerge from the recession, but it is still increasing more slowly than it did before the recession. Figure 11 shows the 12-month change in both indexes.

Figure 11. CPI for shelter and CPI for all items less food and energy, 12-month change, 1992–2013



Source: U.S. Bureau of Labor Statistics.

During the recession, much of the attention of the public and policymakers was focused on jobs but prices also generated fears: fears of a return to the depression-era deflation, fears that the United States might go down the same path it had gone down in the 1930s, and fears that the nation might experience a "lost decade," as was believed that Japan had recently suffered amid persistent deflation. Peter Goodman summarized the issues in a typical story in October 2008:[57]

> The end of inflation may be the beginning of something malevolent: a long, slow retrenchment in which consumers and businesses worldwide lose the wherewithal to buy, sending prices down for many goods. Though still considered unlikely, that would prompt businesses to slow production and accelerate layoffs, taking more paychecks out of the economy and further weakening demand.

As things turned out, the All-items CPI would become negative several months later, but the downturn was due mostly to energy prices plummeting from the new highs they had reached. Excluding energy, the All-Items CPI never fell below 0.7 percent.

In contrast, as stimulative fiscal and monetary policies were applied to the recession-plagued economy, fears arose that these policies would eventually lead to a return of dangerous inflation. "Gold Hits Record Highs as Dollar Sinks and Inflation Fears Revive" was a typical headline of the time.[58] Debates raged between those who saw inflation as an inevitable outcome of the policies and those who thought such fears overblown. The anticipated inflation has not emerged—at least, not yet: the All-Items CPI remained under 2 percent in 2012 and 2013.

One thing that has been absent in the modern era of U.S. inflation is the application of broad price controls. The reason may be simply that inflation generally is lower and less volatile, or it may be that such policies have lost favor on the basis of their dubious reputation in economics or perhaps in part because they were perceived as unsuccessful during the Nixon era. In any case, this long absence of controls has been the exception in the nation's inflation experience, not the rule.

Some durable goods trends have emerged in the recent U.S. inflation experience: slow price growth of apparel and durable goods, and faster growth of services in medical care. Also, despite their greater volatility, food and energy prices appear to increase at about the same rate as other prices in the long run.

Conclusions: 100 years of price change in the United States

What is the takeaway, then, from the U.S. inflation experience of the past 100 years? Certain truths seem constant over almost the whole timespan: energy prices are the most volatile of all prices of commodities and services, both policymakers and the public alternately fret over inflation (most of the time) and deflation, and activist policies aimed at directly controlling prices were a regular feature of the nation's economy until the last few decades.

As the CPI enters its second century, inflation, along with unemployment, remains one of the two economic indicators that receive the most attention from the public and, perhaps as a result, from policymakers. Still, despite the nearly omnipresent fears of both deflation and renewed inflation, the behavior of prices in the United States since the early 1990s has been dramatically closer to what policymakers proclaim as their goal than at any other time in the 100 years examined in this article. Whether this is simply a fortunate era or whether there has been some permanent improvement in the ability of the economy and its policymakers to achieve greater price stability will perhaps remain an unanswerable question.

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