

Double-Barreled Price Pressure

COVID-19 and its aftermath created an unusually fertile environment for inflation to thrive

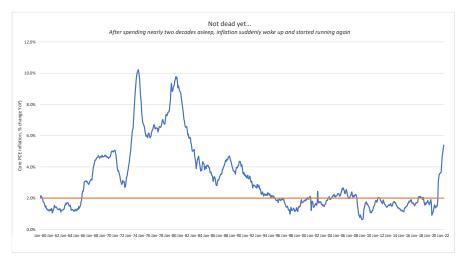


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- After nearly being declared dead by economists, inflation has made a stunning comeback in 2022.
- The pandemic and subsequent policy response created a fertile environment for inflation to thrive.
- · COVID-era stimulus checks sparked a tsunami of spending and encouraged "demand-pull" inflation.
- · Meanwhile, supply-chain stress and labor market tightness encouraged "supply-push" inflation.
- Because they share a common cause, it's not unreasonable to hope that inflation will cool once these COVID-related disruptions relent.
- But inflation is a psychological phenomenon that can't be easily predicted, and Russia's invasion of Ukraine introduced another variable that could continue to shock prices.

There's a famous scene in the 1975 cult classic *Monte Python and the Holy Grail* in which a sickly old man tries in vain to convince a younger relative that he isn't, in fact, dead. "I think I'll go for a walk," says the allegedly departed, to which the younger, healthier man replies: "You're not fooling anyone, you know."

Such it was in the realm of economics just a few short years ago when economists — here playing the part of the young man — tried in vain to convince inflation that it should just shut up already and go quietly into the afterlife. (Spoiler alert: As in the movie, inflation didn't oblige.)



But all those former inflation skeptics could perhaps be forgiven their enthusiasm to see inflation summarily dispatched into the land of the dead: After spending much of the '70s and '80s above 4% (and that entire period above the Federal Reserve's now-famous target of 2%), inflation had been more or less a no-show since the turn of the new century.¹ In fact, the central debate in central banking circles had begun to morph from "How much inflation is too much?" to "How little is not enough?"

Enter COVID-19. During the latter stages

of the pandemic, inflation not only stood up and went for a walk (as Monte Python's ill-fated old man had hoped to do), but it metaphorically rose from its deathbed and promptly ran the equivalent of a sub-two-hour marathon.

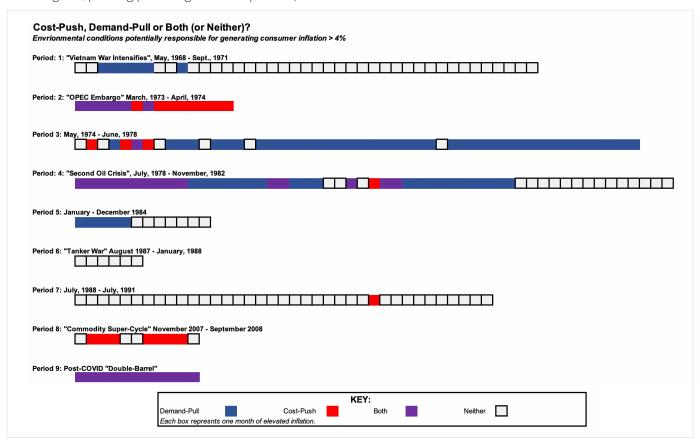
¹ Year-over-year change in the Personal Consumption Expenditures Index (excluding food and energy), 1960-2022. Data: U.S. Bureau of Economic Analysis, GWI calculations.



So what happened? What was it about COVID and its restrictions that created such fertile ground for the once-in-a-generation inflation that we're suffering today? To arrive at a potential answer, we have to first dip our toes into macroeconomic theory.

Cost-push or demand-pull?

Many economists believe there are two basic types of inflation: "cost-push" inflation (in which rising costs for things like labor, raw materials and other necessary inputs push businesses into rising prices in an effort to defend margins), and "demand-pull" inflation (where a sudden and sharp increase in demand effectively pits shoppers against one another in a bidding war, pushing prices higher in the process).



But separating one form of inflation from the other is not as simple as it may sound. We've tried to simplify things here by using exceptional growth in personal consumption as an indicator of conditions when demand-pull might be responsible for driving inflation higher — and a combination of wage pressure, commodity prices and interest rates to indicate when cost-push inflation might be to blame.²

We then used this framework to analyze all periods since 1960 (including the current episode), when consumer price inflation has been consistently above 4%³ (we've divided the longest of those periods, from March 1973 to November 1982, into three sub-periods for simplicity's sake).

Perhaps unsurprisingly, we found that in some cases demand-pull seems to have been the dominant factor contributing to inflation while in others cost-push was more likely the cause. Interestingly, there are also extended periods of unusually high inflation during which neither seems to have been in play, and a few where both seemed to be at work.

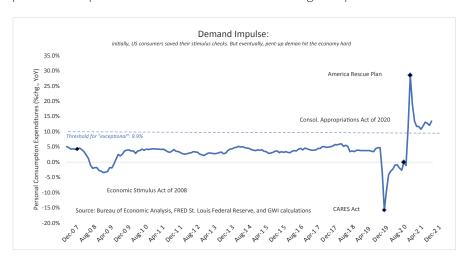
- 2 When personal consumption expenditures are rising at a rate in excess of one standard deviation above the long-term average, "demand-pull" conditions are indicated. "Cost-push" conditions are indicated when a composite consisting of wages (60%), commodity prices (30%) and interest rates (10%) are rising at a rate one standard deviation above the composite's long-term average
- 3 Consumer Price Index -All Urban Consumers (CPI-U), 1960-2022. Bureau of Economic Analysis (BEA) and GWI calculations. CPI-U was chosen in this instance for data availability and because it represents a more realistic experience for most U.S. consumers.



Our framework is admittedly only an approximation, but there seems to be at least some intuitive sense to our results. For example, the inflationary period between May 1968 and September 1971 was primarily a demand-pull episode. That squares nicely with the economic realities of the day: Economic growth was generally strong for much of that period, and aggregate demand was quite likely being stoked by the increasing U.S. commitment to the war in Vietnam. Similarly, the OPEC crisis (which corresponded to the inflationary episode between March 1973 and April 1974) began with both cost-push and demand-pull pressures in play, but ultimately it became primarily a cost-push story as oil and commodity prices rose in response to the cartel's embargo of western oil-consuming countries between October 1973 and March 1974. In a similar way, those who remember the hectic days immediately before the Great Financial Crisis and subsequent Great Recession might be familiar with the so-called "commodity super-cycle" that corresponds well with the nearly year-long spike in inflation — driven exclusively by cost-push forces according to our framework — that occurred in 2007-2008.

The double-barreled blast of COVID-era inflation

But what about our current, post-COVID-restriction bout with inflation? Here, the story seems clear: Both demand-pull and cost-push forces seem to be at work. This again squares well with the economic realities of the pandemic. For



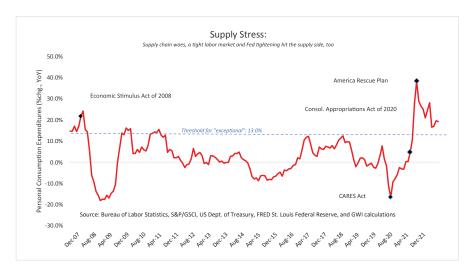
example, on three separate occasions, the Federal government provided direct-to-taxpayer stimulus payments to partially offset demand lost to pandemic-related shutdowns.⁴ Initially, savings rates spiked as housebound consumers found little reason to spend the largesse (and even fewer places to spend it). Over time, though, lockdowns eased, people returned to work and all that stimulus found its way into the economy, resulting in a massive impulse of demand-pull inflation.

If it had occurred in isolation, the economy might have been able to absorb that shock without generating the massive inflation we see today. But of course, this tsunami of spending didn't occur in isolation. It was instead accompanied by an equally disruptive distortion on the supply side of the economy in the form of supply-chain bottlenecks, accelerating wages and, eventually, rising interest rates.

These were of course related to the very same conditions that made the direct-to-taxpayer stimulus necessary in the first place: Warehouses, maritime facilities and factory floors were initially locked down just as tightly as suburban homes, creating the well-known shortages and disruptions we've all become familiar with. Remember the semiconductor shortage that forced auto production to shut down just as autoworkers got the green light to return to the shop floor? Or the breathless media accounting of the number of ships at anchor offshore at Long Beach just as the holiday buying season was starting?

And then there's post-pandemic labor tightness and "The Great Resignation" — incidentally, one of the more curious side effects of the economy's bout with COVID — that served only to intensify wage pressures and other labor market issues lying in wait just under the surface before the pandemic even arrived.





More recently, the Federal Reserve has begun to unwind all the excesses built up during the pandemic, finally pegging the federal funds rate above zero for the first time since early 2020, when it met in mid-March. That was clearly a wise and necessary step toward normalcy, but it also had the unfortunate side effect of potentially fostering inflation in the meantime. And today, as I write this, Russia's tragic invasion of Ukraine has provided yet another supply-side shock by pressuring prices for critical commodities like oil, metals and grains.⁵

What next?

The upshot is this: The COVID-19 pandemic was perhaps unique in that it created both demand-pull and cost-push inflation simultaneously. That's not unprecedented (as the occasional presence of purple in the table above illustrates), but the intensity of those inflationary impulses — together with the fact that the same set of underlying circumstances (namely, the COVID-19 pandemic) generated them — feels utterly unique.

And that may be good news. If the pandemic and the policy response to it were largely to blame for starting the current brushfire of inflation, then it wouldn't be unreasonable to assume that the flames would burn themselves out rather quickly once the restrictions, wage and interest rate increases, and supply chain bottlenecks finally relent for good.

But inflation is, like many things in economics, a psychological phenomenon. In past episodes, inflation has shown a troubling tendency to become self-reinforcing when inflationary psychology takes hold and consumers are compelled into panic-buying, or when a wage-price spiral develops that forces businesses to continually raise prices in an effort to defend profit margins and remain viable.

So far, there doesn't seem to be much evidence that either of these self-perpetuating conditions have taken hold. But it remains a risk — as does the fact that the global economy has temporarily ceded control over huge swaths of the commodity market to a Russian dictator predisposed toward empire-building.

That leaves us at the same place where almost all efforts to understand macroeconomic trends seem to end up: with a convincing and heartfelt "it depends." But our hope here was to build some context around the current spike in prices and give you a framework to better understand it so you might be able to make informed decisions as this once-in-ageneration fight with inflation rages on. Hopefully, we've succeeded in that endeavor (or at least reminded you that news of inflation's untimely demise has been greatly exaggerated).

5 It's also interesting to note that consumption patterns were markedly different during the three COVID-era stimulus programs than they were during the Economic Stimulus Act of 2008, which was designed to stimulate the economy in the wake of the recession.

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