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What's Causing Accelerating Inflation: Pandemic or Policy Response?

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ABSTRACT

This paper examines the recent increase of the measured inflation rate to assess the degree to which the acceleration is due to problems created (largely on the supply side) by the pandemic versus pressures created on the demand side by pandemic relief. Some have attributed the inflation to excess demand, most notably Larry Summers, who had warned that the pandemic relief spending was too great. As evidence, one could point to the quick recovery of GDP and to reportedly tight labor markets. Others have variously blamed supply chain disruptions, shortages of certain inputs, OPEC's oil price increases, labor market disruptions because of COVID, and rising profit margins obtained through exercise of pricing power. We conclude that there is little evidence that excess demand is the problem, although we agree that in the absence of the relief checks, recovery would have been sufficiently slow to minimize inflation pressure. We closely examine the main contributors to rising overall prices and conclude that tighter monetary policy would not be an effective way to reduce price pressures. We also cast doubt on the expectations theory of inflation control. We present evidence that suggests there is currently little danger that higher inflation will become entrenched. If anything, rate hikes now will make it harder for the economy to adjust to current realities. The potential for lots of pain with little gain is great. The best course of action is to tackle problems on the supply side.

KEYWORDS: COVID-19; Inflation; Pandemic Relief; Pricing Power; Supply Chains

JEL CLASSIFICATIONS: E31; E32; E52; E520

INTRODUCTION

When the Biden administration proposed the $1.9 trillion American Rescue Plan Act after taking office in January of 2020, some economists—with Larry Summers (2021) as the most outspoken—warned of potential inflation. They claimed the size of the package was too big (relative to the GDP gap) and elementary macroeconomics showed that this would be inflationary. Others, including Paul Krugman (2021), countered this claim. Their argument was twofold. First, it wasn't clear what the size of the GDP gap was—the economy could potentially accommodate more demand before hitting the inflationary wall. Second, if inflation did materialize, they argued, the Fed had tools to get it under control.

The time to raise interest rates has arrived, according to Federal Reserve Chairman Jerome Powell. Some even think the Fed should have responded earlier to prevent inflation from getting out of control. The Fed has announced it will raise rates in a long series of steps, and a March 2022 rate hike seems all but inevitable.

One problem with asking the Fed to get inflation under control is that it is ill-equipped to do so. As Papadimitriou and Wray (2022) explain, the Fed has been stumbling in the dark since the early 1990s, pushing this and that lever in an attempt to get inflation to its desired rate. The mantra for the past two decades is that the Fed controls inflation through control over inflation expectations. Yet, even with zero interest rate targets (ZIRP) and trillions of dollars of unconventional monetary policy, the Fed was unable to get inflation up to its 2 percent target. Now that inflation has exceeded 6 percent, the Fed is supposed to bring it back down to the target by promising to raise rates and unwind its trillions of dollars of assets.

It is remarkable that the current run-up of inflation was not caused by inflationary expectations—as actual rates have tripled while expectations remained subdued. And even as all the pundits listen to the inflation worriers (such as Larry Summers), expectations seem to reject the view that inflation is going to remain high—much less accelerate. How is the Fed supposed to fight actual inflation by lowering inflation expectations when long-term expectations are already well below current inflation?

But more importantly, we believe the Fed's two tools—reversing quantitative easing (QE) and raising rates—are not the right approach for fighting our current inflation. Inflation hawks point their fingers at supposed excessive aggregate demand boosted by pandemic relief as the cause of inflation. We will argue that aggregate demand has played a relatively minor role in generating inflation pressure. Instead, most of the pressure has come on the supply side: supply chain disruptions, labor market disruptions, and corporations exercising pricing power.

If anything, rate hikes now will make it harder for the economy to adjust to current realities. The potential for lots of pain with little gain is great.

WHAT HAS CAUSED THE TRANSITION FROM LOW INFLATION TO HIGHER INFLATION?

The Fed has been happy to take credit for the low inflation that prevailed in the United States in recent years—especially since the global financial crisis (GFC), but inflation had been relatively tame for a decade before that. Paul Volcker's actions in the 1980s, which took the form of trying to restrain the growth of money supply by pushing the fed funds rate above 20 percent, supposedly broke the back of inflation, although—it is admitted—at a high cost in the form of a recession, several financial crises (the thrift crisis of the early 1980s, followed by the developing country debt crisis, and then the big bank problems at the beginning of the 1990s), and high unemployment. And the Fed's rate hikes after 2004 helped to bring on the GFC—the worst economic calamity (up to that point) since the Great Depression.

While it's true that the Volcker Fed might have broken a wage–price spiral (or more accurately a price–wage spiral, because it was not set off by rising wages) by punishing workers, it's hard to see why inflation would have stayed persistently below the Fed's target year after year since the GFC of 2007–9. Even trillions of dollars (and euros and pounds and yen) of QE could not get inflation up to central bank targets in any of the rich countries. This was a puzzle for all those who kept faith in the belief that central bankers control inflation rates.

So, what really explains low inflation rates over the past few decades? We think there were several factors, none of which were related to monetary policy. First, the increased use of globalized supply chains allowed companies to tap into cheap labor sources abroad thus helping them keep their costs and prices low. As more production moved abroad, domestic wage growth remained anemic as American workers had to compete with workers in developing nations. Essentially, low-wage Asian workers replaced higher-paid American workers. As a result, American wages had not increased in real terms since the mid-1970s.

Offshoring also allowed domestic firms to reduce business costs related to regulations and taxes—boosting profits. Further, the "just-in-time" nature of production allowed firms to lower their costs by eliminating inventories. Finally, all of these factors conspired to consolidate market power in the hands of fewer dominant firms. Smaller domestic producers could not compete: their wages for local workers cost more than wages paid by bigger firms that off-shored production. Further, smaller firms had to maintain inventories and if, they needed inputs from abroad, they paid higher prices because their negotiating power was lower; they also faced uneven access to retailers like Amazon. All of this helped to keep prices to consumers down, but at the cost of creating a production system that was highly oligopolized and not resilient. Even a small disruption—such as an earthquake in Taiwan—could cause the supply chains to clog. A major global pandemic was sure to wreak havoc.

That's probably not the only source of disinflationary pressures, however. In addition, governments generally turned toward more austere fiscal policy, with less reliance on use of spending to keep unemployment down (and more reliance on monetary policy). This was necessitated within the euro area—by Maastricht criteria as well as other features of the euro design.[1] In the United States, President Reagan's attack on the air traffic controllers' union presaged a new era of outright government hostility to labor unions, as power shifted permanently toward capital and away from labor. Technology and productivity advances—in addition to offshoring—eliminated a lot of higher-paid (formerly union) blue collar jobs. Deregulation of domestic energy markets and alternatives to OPEC's oil (natural gas, fracking) helped to temper the ability of the petroleum cartel to boost oil prices (which had been the major

[1] We won't go into those here; see Papadimitriou and Wray (2012).

cause of US stagflation throughout the 1970s). More frequent and more severe financial crises usually led to recessions and, unlike the Reagan recovery, every subsequent recovery was "jobless"—meaning that it took longer to recover jobs. This helped to prevent wage increases in recoveries, so the long-term trend of wages remained horizontal (at best). In real terms, wages at the bottom actually declined, leading to increasing inequality (often claimed to be due to a "skills gap" created by a shortage of highly educated workers and a surplus of workers with lower educational attainment—an argument that is only partially validated by the data).

The COVID-19 pandemic led to major supply-side disruptions. The offshoring and globalized supply chains that tamed inflation have of course come back to bite, as the lack of this or that component can delay production in whole industries (e.g., the trucker protests in Michigan and then across the Canadian border threatened to throw the US auto industry into disarray). As production has been broken into many pieces, with many countries involved in the process, a pandemic surge or other disruptions in different countries have ripple effects throughout the system. Not only has the United States been exposed to COVID-related shutdowns in China, but also to disruptions of, and sharply rising costs of, shipping, which has been a major driver of higher prices. Our overreliance on consumer goods manufactured overseas, especially in China, has made our economy vulnerable to even a minor disruption in shipping (e.g., a boat stuck in the Suez Canal or, more recently, a burning ship filled with Porsches). Thus, low wages, offshoring, globalized supply chains, and related factors should be credited with keeping inflation low—while offshoring and supply chains have been driving inflation higher over the past year as the fragile system unraveled.

Wages, on the other hand, have been trying to play catch up with rising prices rather than causing the inflation we are observing. With wage growth lagging prices, many expected initially that the inflation would only be temporary. Last spring it was reasonable to assume that the pandemic was coming under control—with effective vaccines and declining infections and hospitalizations. Unfortunately, that turned out to be a mirage. The Fed and many economists continued to believe even as inflation rose that production would recover and that would soon temper price increases. As of spring 2022, that now looks overly optimistic.

Fear has grown that inflation is becoming intransigent. Some claim labor markets are very tight—and there is some evidence to support the claim. Wages at the bottom are rising; recruiting bonuses at the top are skyrocketing. The Fed has concluded that price pressures are more generalized (which could mean pressure on wages). In other words, they are worried about workers asking for and getting higher wages, thus potentially setting off a wage–price spiral.

We will carefully examine that possibility by looking at current price pressures from both a microeconomic view (pricing decisions of firms and disruptions in different sectors) and a macroeconomic level (aggregate supply and demand).

WHY ECON 101 DOESN'T APPLY

The typical economist's explanation of price increases is that they are caused by demand outstripping supply. The pandemic caused both demand and supply to collapse, albeit not necessarily in step. Relief checks, extended unemployment benefits, the Paycheck Protection Program, and others were designed to restore demand—that (as we warned[2]) could be dangerous if spending exceeded resource availability—which became constrained by supply disruptions. As it turned out, the initial round of checks was used largely to pay overdue bills and to increase saving (data is presented below to support that view). After vaccinations started reducing the worst health impacts of COVID-19, supply started on a slow path to recovery. The second round of checks boosted spending (again, evidence is presented below). It looked like the economy was in good shape and would improve—but supply disruptions continued, in shipping, in chip-making, and in continuing Chinese lockdowns.

[2] As we argued, the US government faces resource (full employment) constraints, not financial constraints. What we emphasize is that sovereign governments face resource constraints, not financial constraints. "We have always argued that too much spending—whether by government or by the private sector—can cause inflation…. A country lives beyond its means only when it goes beyond full employment, when more government spending competes for resources already in use—which could cause inflation…. Ironically, the real limits faced by government before the pandemic were far less constraining than the limits faced after the virus had brought a huge part of our productive capacity to a halt" (Nersisyan and Wray 2020).

According to econ 101, as demand continued to rise, price pressures rose. Prices *are* rising quickly, supposedly due to demand pressures—not problems on the supply side. What is the main evidence? Well, spending has completely recovered—spending in the last quarter of 2021 more than matched what it was predicted to reach according to forecasts from 2019. So, it is believed, the problem cannot be supply. From the orthodox view, it makes no sense to claim that corporations with pricing power are simply jacking up prices *now*. If they could have raised them, they already would have done so. Prices rise because demand exceeds supply, not because of pricing power.

Further, according to conventional thinking about monopoly power, it does not really lead to price gouging. Megacorps must use "as if" pricing: they price as if they were in a competitive sector, because raising profit margins would induce new entrants who would underprice them and take away market share. Ability to set price does not mean that one would do so, because it would generate competition that would take away the pricing power! It is sort of like a nuclear bomb standoff. Yes, we've got the power to use it but the other side would retaliate so we cannot.

But it doesn't work that way in the real world, especially in a real world with complex supply chains and monopsonistic retailers. For a smaller producer to compete to produce anything but the simplest products, access to the complex chains that supply input components is necessary. But these are locked-up by contracts with the megacorps. Further, access to retailers requires "shelf space" and long-term agreements—again, big suppliers are given preferential treatment. And producers must have access to shippers that, again, are tied up in contracts that favor the existing megacorps. All of this was made very much worse by the pandemic's disruptions. With shortages, the preference for both inputs and retailing ensures that smaller firms are squeezed out (reducing competition), as suppliers must first fulfill their agreements with the biggest firms. And when a smaller firm does find a source of supply, it doubles up purchases—out of fear that it might not find supplies in the future. So smaller firms must build up inventories—which is expensive—and pay higher prices for inputs. All of this means that they cannot undercut the pricing of the large firms that dominate markets. And while margins are (anecdotally) high for the dominant firms, production by smaller firms may not be profitable even with high prices.

Econ 101 is useless in a world where prices are not determined by costs—that is, where they are determined by pricing power. It may well be true that if the relief checks had never been sent, demand would be so low that dominant firms could not raise prices—so measured inflation would have been lower. Indeed, we suspect that would have been the case. It is also probable that policy designed to depress demand toward low early pandemic levels could eventually relieve inflation pressure. The cost of that path would be severe in terms of lost income and lost employment. It also would do nothing to directly tackle the causes of our current dilemma: excessive pricing power of dominant firms, risky dependence on far-flung supply chains, long-term stagnation of American wages, and long-term depression of investment in America's public and private infrastructure.

Relying on one anti-inflation tool, i.e., Fed rate hikes, to deal with these complex problems on the supply side is a mistake; if the Fed doesn't raise rates to levels that could cause a deep recession, it will not be effective at fighting inflation. Yet, as we explain below, smaller rate hikes will not reduce inflation. But no matter what the impact on inflation might be, rate hikes are not going to reduce pricing power, strengthen supply chains, nor prepare the American economy for the future.

We are going to look at five reasons to doubt the econ 101 explanation. We first look at three causes of inflation from the macro level perspective, and then two from the micro level perspective.

THE MACRO VIEW: INFLATION PRESSURES

Let's first examine the growth of income, spending, and output to assess whether pressures on prices are coming from the demand side or from the supply side. If the problem is mainly on the supply side, that would indicate inflation is largely caused by disruptions created by the pandemic. If pressures largely come from the demand side, then we might blame the relief packages.

What Is Generating Pressure on Prices: Pandemic or Policy?

Soon after the pandemic hit, GDP fell by $2 trillion by 2020Q2. Pandemic relief stemmed the collapse and the losses were recovered over the course of the third quarter. Growth picked up and by the third quarter of 2021, actual GDP reached the level that had been forecasted for that quarter back in January 2020. GDP in 2021Q4 actually exceeded what had been forecast at the beginning of 2020, and was up by about $2.3 trillion over the 2019Q4 level. By those measures, we have fully recovered. The question is whether we have exceeded our production potential. Answering that question is not easy, but requires a deeper look into the data to shed some light on it. But even according to traditional measures, we only reached and exceeded potential GDP in the last quarter of 2021. Meanwhile, inflation has been high and increasing since at least March of 2021—a clue that maybe this is not a demand-driven problem.

Further, the estimates for potential GDP are just that, estimates. As table 1 shows, in their July 2020 estimates, the Congressional Budget Office downgraded the economy's potential, probably expecting a more prolonged recession. It then revised estimates back up in February and July of 2021 as significant fiscal policy action prevented a deep downturn. Still, the potential GDP estimate for 2021Q4 from July 2021 ($23,461.34 trillion) had hardly increased compared to its estimate from January 2020 ($23,442.03 trillion). These estimates were first lowered and then raised back up in the face of actual economic performance. Had they not been lowered due to the expectation of a prolonged and deeper recession, it's likely that estimates for potential GDP for 2021 would be higher than the January 2020 estimates. Even if the estimate had been upgraded by 1 percent (not unlikely given CBO revisions in the past), potential GDP for 2021Q4 would be about $23,676 trillion—approximately equal to what it turned out to be.

Table 1. Potential Nominal GDP Estimates

	2020				2021			
Projection date	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
January 2020	21846.51	22046.5	22273.91	22503.07	22735.34	22969.8	23203.75	23442.03
July 2020	21696.94	21657.16	21803.74	21896.21	22013.16	22166.47	22336.69	22513.25
February 2021	21723.49	21708.22	22002.26	22145.96	22361.51	22558.47	22781.58	22992.34
July 2021	21832.64	21818.96	22112.54	22315.43	22644.98	22983.26	23233.13	23461.34
Actual GDP	21481.40	19477.40	21138.60	21477.60	22038.20	22741.00	23202.30	23992.40

Source: Bureau of Economic Analysis

Looking at table 2, personal consumption expenditure is also up, by about $1.7 trillion over 2019Q4 levels as of 2021Q4—goods consumption grew by $1.1 trillion and outpaced the growth in the much-larger services sector, which increased by only $586 billion. Since a lot of goods are imported, it is not surprising that net exports fell (became more negative) to almost a negative trillion dollars—with exports almost constant (rising by only $154 billion) but imports rising by $585 billion and goods imports alone rising by $584 billion. All else equal, the growth of imports relative to exports helped to satisfy rising domestic demand and thereby reduced inflation pressure.

Table 2. GDP and Its Components

	2019	2020		2021	
	Q4	Q2	Q4	Q2	Q4
Gross domestic product ($bn)	21694.5	19477.4	21477.6	22741	23992.4
Personal consumption expenditures	14653.9	12989.7	14467.6	15681.7	16347.8
Goods	4540.8	4349.9	4867.3	5529.8	5649.2
Services	10113.2	8639.8	9600.4	10151.9	10698.6
Gross private domestic investment	3801.9	3167	3923.2	3925.1	4478.7
Nonresidential fixed investment	2952.6	2659.1	2862.7	3029.2	3145.5
Residential fixed investment	828.8	797.8	1003.2	1070.2	1108.5
Change in private inventories	20.6	-289.9	57.3	-174.3	224.7
Net exports of goods and services	-532.4	-538.9	-798.4	-881.7	-962.6
Exports	2508.7	1807.9	2220.7	2461.5	2663
Imports	3041.1	2346.7	3019.1	3343.2	3625.5
Government cons. and inv. exp.	3771.0	3859.6	3885.3	4015.9	4128.4

Source: Bureau of Economic Analysis

Nonresidential investment was up $193 billion and residential investment rose $287 billion. Throughout 2019, inventory investment was falling and it was largely negative throughout 2021, presumably as inventories were sold off because of supply disruption. Suddenly inventories grew by $225 billion in 2021Q4. This seems to reflect the hoarding we briefly mentioned earlier: firms are afraid of further supply disruptions so are "doubling up" purchases of inputs. Overall, investment in 2021Q4 was up $677 billion over 2019Q4 levels. Federal government purchases were up just $124 billion, and state and local government purchases were up $233 billion.

Ignoring net exports and totaling consumption, investment, and government spending we find that domestic demand grew by $2.7 trillion, but $430 billion of that growth of demand was

satisfied by net imports—meaning total demand on domestic output increased by about $2.3 trillion, as indicated above. If we apportion net imports across all categories of domestic spending according to each category's share of total demand, about $270 billion might have been spent by domestic consumers on imports. Perhaps consumption spending on domestic output amounted to about $1.4 trillion based on that assumption. As noted, net imports probably helped to reduce pressures on domestic output.[3]

Let's turn to the income side of the economy, looking at growth of its components from 2019Q4 to 2021Q4.

Table 3. Personal Income and Its Disposition

	2019		2020		2021	
	Q2	Q4	Q2	Q4	Q2	Q4
Personal income ($bn)	18345.4	18648.5	20348.7	19542.0	20669.9	20904.1
Wages and salaries	9275.4	9465.6	8979.0	9783.0	10180.4	10706.9
Proprietors' income	1572.8	1626.8	1471.1	1730.0	1848.2	1850.7
Rental income	691.0	699.0	709.5	710.0	716.3	749.9
Personal income receipts on assets	2972.5	2982.1	2910.9	2909.6	2932.1	2986.9
Government social benefits to persons	3074.1	3117.9	5570.5	3670.2	4257.8	3888.3
Social security	1026.4	1042.9	1074.8	1088.8	1109.7	1126.9
Medicare	781.1	801.3	821.6	821	815.3	847.9
Medicaid	614.5	620.5	654.2	678.3	730.5	792.2
Unemployment insurance	27.8	26.8	1039.4	299.9	480.4	37.6
Less: Contributions for gov't soc. ins.	1414.6	1441.4	1405.9	1501.3	1572.2	1640.1
Less: Personal current taxes	2222.8	2223.2	2099	2259.8	2532.5	2715.9
Equals: Disposable personal income (DPI)	16122.6	16425.3	18249.6	17282.2	18137.4	18188.2
Less: Personal outlays	14928.3	15216.9	13477.7	14936.8	16165	16845.6
Personal consumption expenditures	14375.7	14653.9	12989.7	14467.6	15681.7	16347.8
Personal interest payments	339.3	345.0	273.6	255.9	267.4	275.2
Equals: Personal saving	1194.4	1208.4	4772.0	2345.5	1972.4	1342.6
Personal saving as a percent of DPI	7.4	7.4	26.1	13.6	10.9	7.4

Source: Bureau of Economic Analysis

Personal income was relatively stagnant throughout 2019 (growing by only $400 billion over the year) but grew relatively quickly during 2020 and 2021—up $2.26 trillion since 2019Q4. However, that growth came in spurts: growth was particularly rapid in 2020Q1 and 2021Q1; it

[3] Import prices have, of course, been rising—for many of the reasons already discussed: much higher oil prices, higher shipping costs, and supply chain disruptions. Perhaps demand played some role, too. However, the point is that imports have sucked demand out of the domestic economy that might have otherwise gone toward pushing up inflation at home.

fell during 2020Q3 and 2020Q4 and again in 2021Q2, after which it was very subdued (growing by just $200 billion between 2021Q2 and 2021Q4). COVID shutdowns and relief checks played a role in this go-stop-go pattern. Wages and salaries grew slightly between 2019Q4 and 2020Q1 before falling sharply in 2020Q2, by $625 billion. Since that quarter, they've grown relatively consistently, up $1.2 trillion in 2021Q4 relative to 2019Q4. Proprietor's income is also up significantly, $224 billion over the period.

Government social benefits to persons grew by $2.4 trillion in 2020Q2 over payments the previous quarter; by the fourth quarter of 2020 they had fallen from their peak by almost $2 trillion. Another $2.3 trillion of social benefit payments was added in 2021Q1—bringing total social benefit payments that quarter to nearly $6 trillion—double what they had been in 2019. Over the next three quarters, social benefit payments fell by over $2 trillion, ending 2021 about $770 billion above where they had been in 2019Q4. Thus, we see large increases in two quarters, but the extra boost to income from social benefit payments has largely been played out by the beginning of 2022.

Personal taxes plus contributions for government social insurance reduced personal income by $3.7 trillion in 2019Q4 and by almost $4.4 trillion in 2021Q4. Taking account of all forms of personal income less taxes, disposable personal income grew by about $1.76 trillion between 2019Q4 and 2021Q4. Over that time, personal consumption expenditures grew by $1.7 trillion, as noted above—equal to the growth of disposable personal income. Personal saving took a rollercoaster ride over the period with the personal saving rate rising from 7.4 percent in 2019Q4 to 26.1 percent in 2020Q2; it fell by 10 percentage points in 2020Q3 and rose sharply again in 2021.Q1 to 20.5 percent. It ended 2021 back where it had been at the end of 2019Q4: 7.4 percent. Saving in 2020Q2 was $3.6 trillion higher than it had been in 2019Q4—indicating that pandemic relief was largely saved—and added to other precautionary saving. The same thing happened in 2021Q2 when relief checks helped boost saving by $1.6 trillion. However, saving quickly returned to a more normal rate by the end of the year.

To summarize, the pandemic slowdown initially hit wage income hard and would have hit both consumption and saving were it not for the COVID relief (plus regular social spending, such as the usual unemployment benefits that were boosted above normal by the relief package). That allowed for a relatively quick recovery from a deep recession that if we were to look only at the data on output and income seems to have been completed by the end of 2021.

Table 4. Nominal and Real GDP Growth Rate

	2019	2020	2021
Nominal GDP growth rate	4.1	-2.2	10.1
Real GDP growth	2.3	-3.4	5.7

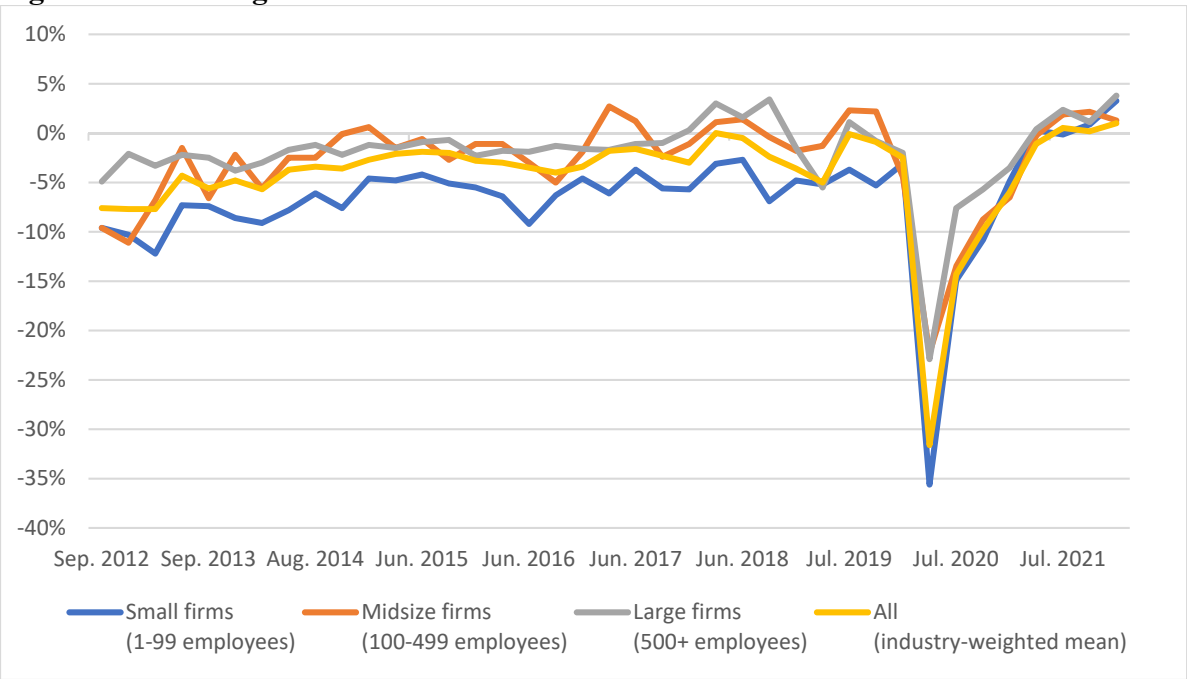
Source: Bureau of Economic Analysis

While output is up slightly over what had been projected a couple of years ago (prepandemic), growth relative to 2019 certainly would have raised no eyebrows if there had been no pandemic or if one ignored the ups and downs of disposable income and saving during the pandemic (real GDP growth averaged only 1.15 percent over 2020 and 2021). The consumption path was smoothed by government assistance, while the saving path was volatile because of the assistance. Wage income is up, but other income sources (with the exception of social benefits) are of relatively smaller importance and not up very much. Social benefit payments have settled down to about $770 billion over what they had been in 2019, but taxes are also up by about $700 billion—so government's contribution to personal income nets to only $70 billion. Government purchases (including state and local government) are up moderately compared with 2019—again nothing to worry about. Net imports are up, but that helps to contain inflation pressures. Investment is up, but that is driven mostly by housing construction and inventory restocking. Inventories can help to reduce inflation pressures, and housing construction could help dampen growth of rents if it increased supply where there are shortages.

Let's turn to possible price pressures on firms. The Business Inflation Expectation survey by the Federal Reserve Bank of Atlanta (2022) asks firms to estimate the percentage by which sales are above or below normal. As the Figure 1 shows, at the depths of the pandemic recession, sales were 30 percent (industry mean) below what firms thought was normal; in January 2022 they

were above normal by 3.3 percent for small, 1.3 percent for midsized, and 3.8 percent for large firms.[4]

Figure 1. Percentage Above/Below Normal Unit Sales Levels

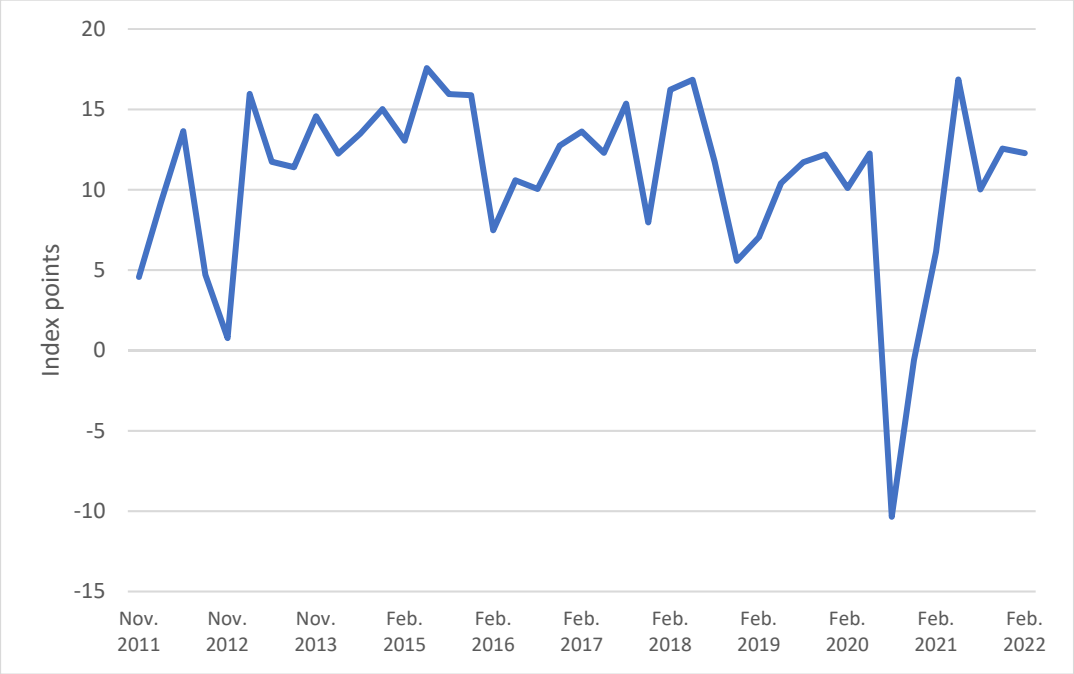


Source: Federal Reserve Bank of Atlanta, Business Expectations Survey (February 2022)

Turning to the future influence of sales levels on prices over the next 12 months, the index shows the expected price pressures due to sales have actually declined from a peak a few months ago. But the most important thing is that there is nothing unusual about the future influence of sales on expected prices. Since 2012 such expectations have typically been as high, or higher than they are now. That would not seem to indicate that firms are feeling unusually high pressure on capacity.

[4] It is curious that sales are persistently below "normal." This might indicate firms believe they could produce more if sales were "normal." But that is impossible to tell.

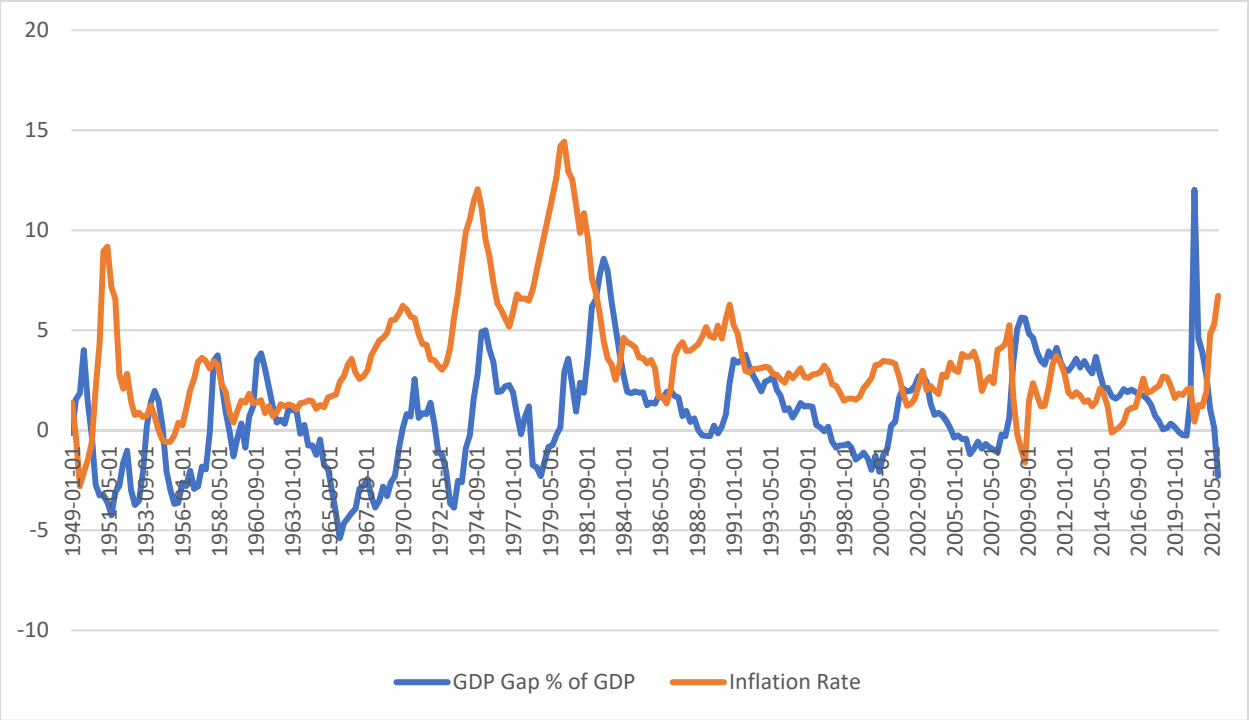
Figure 2. Future Influence of Sales Levels on Prices (over the next 12 months, diffusion index: 0+ = greater than normal times)



Source: Federal Reserve Bank of Atlanta, Business Expectations Survey (February 2022)

And even if GDP is indeed above potential GDP as measured by the CBO, that doesn't necessarily mean inflation is inevitable. As Figure 3 shows, since the 1990s inflation has been subdued, hardly crossing the 4 percent mark even when the GDP gap narrows and turns negative. Given that the factors driving the low collective bargaining power of US workers haven't fundamentally changed, it is unlikely that a smaller GDP gap and tighter labor markets would necessarily translate into continuously higher prices (in the absence of health-related concerns).

Figure 3. GDP Gap (percent of GDP) and Inflation Rate



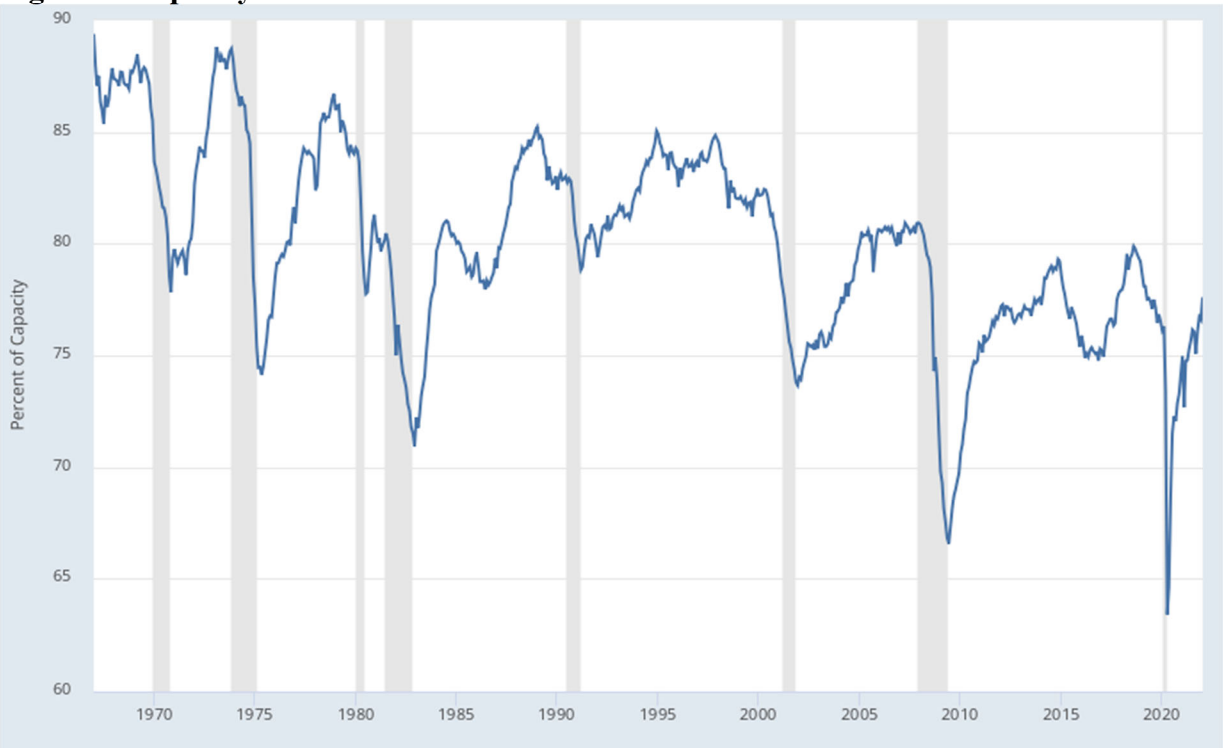
Source: Retrieved from FRED (Bureau of Labor Statistics for inflation; CBO for GDP gap)

In short, if there is anything in the data to "worry" about, it would appear to be mainly about growth of wages and salaries—that stand at about $1 trillion a year more than before the crisis, and account for most of the increase in consumption over the period (which is between $1.4 trillion and $1.7 trillion depending on how much of it was assumed to be imported). Households also seem to have socked away saving fueled by the pandemic relief payments, but current saving rates do not indicate that they are using them to finance consumption (the saving rate is at a normal level—if it were to drop below zero, that would indicate dissaving of the relief money that has been stockpiled). If savers decided to rapidly spend down accumulated saving, that could add demand pressure on production facilities.

Looking at the aggregate supply side, we can see that even though capacity utilization has recovered, it has not reached the pre-COVID levels, and is not even close to the pre-GFC levels. It's likely that firms are unable to utilize their operating capacity at the desired rate due to supply chain and labor market disruptions. It could also indicate that those with the power to set price are purposely constraining output in order to raise and hold prices higher—artificially creating scarcity. Still, figure 4 does not paint a picture of an economy that has reached its productive

capacity. Instead, this graph seems to be more consistent with a "long-term secular stagnation" thesis—aggregate demand is chronically too low.

Figure 4. Capacity Utilization: Total Index



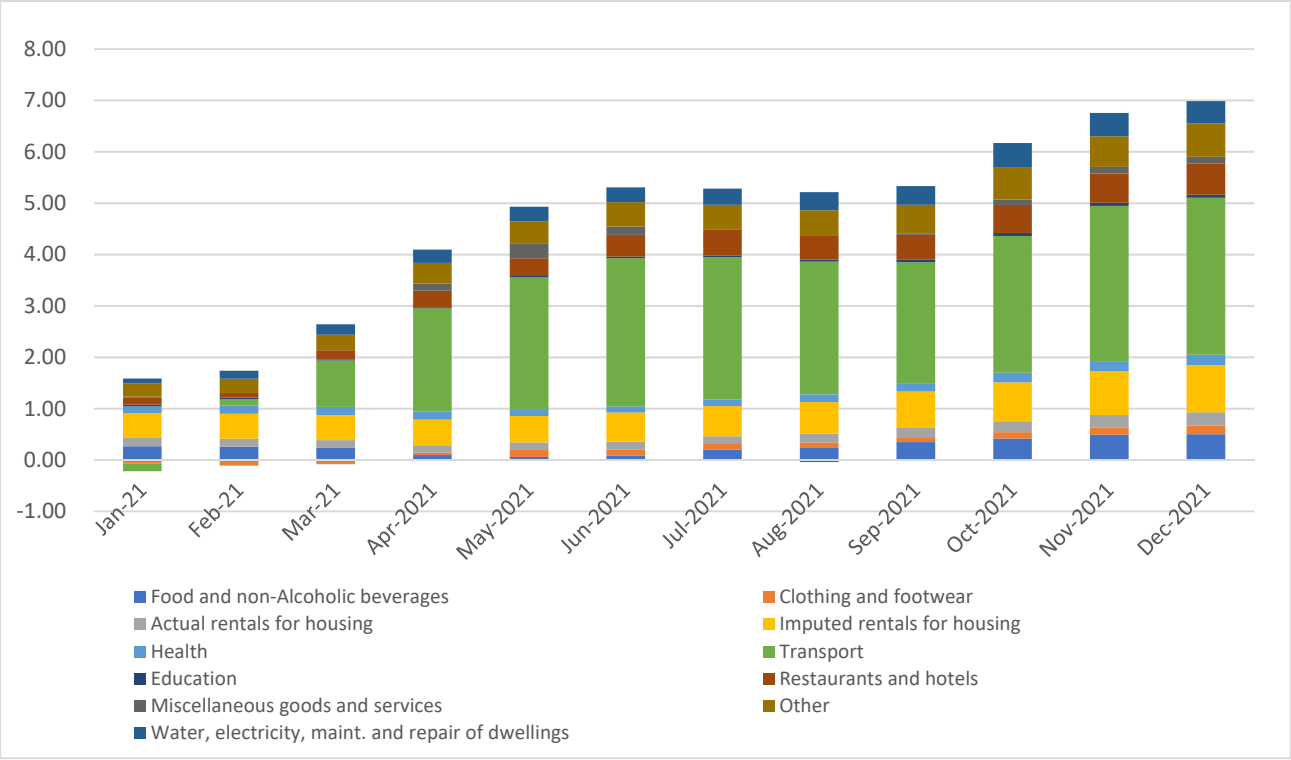
Source: Board of Governors of the Federal Reserve System (retrieved from FRED)

Let's turn to an analysis of prices at the aggregate level.

Price Data at the Aggregate Level

As the following graph shows, the consumer price index (CPI) inflation rate picked up speed over 2021. Looking at the components of the consumer basket, we see inflation rates have generally risen—a point made by those who worry inflation is truly out of control. On the other hand, it is obvious that the biggest contributor to rising inflation was transportation—oil, shipping, and purchasing and fueling automobiles, in particular. However, that inflation appears to have leveled off—albeit at a high pace. Transportation has contributed about 3 percentage points to the measured CPI inflation rate.

Figure 5. Contribution to Inflation by CPI Component, January–December 2021



Source: OECD Stat

Oil is a major story in the rise of inflation in the transportation sector. Two years ago, the price of oil was $60 a barrel, then the pandemic hit and people stopped driving. The danger was a collapse of oil prices. The Saudis tried to get OPEC to cut production, but Russia balked; a price war broke out and oil prices did crash to $20. Buyers and speculators expected further cuts, given the sharp fall of demand, so oil purchases were postponed. The price fell to negative $40—in theory, you had to pay people to take it off your hands. The oil sat in tankers, while workers in the industry lost their jobs. Combined with the pandemic decline in demand plus the prospect that all the talk about greening economies was serious caused some to believe that prices would never recover to prepandemic levels. Investment in oil fell and shale oil production fell from 13 million barrels a day to 10.5 million—where it has remained.

However, the introduction of vaccines led to a faster rebound than expected, so as it turned out, the bottom of the demand for oil in April 2020 was reached at 70 percent of prepandemic levels. By 2020Q3 it was back to 90 percent of those levels. However, OPEC had taken 10 billion barrels a day off the market and kept it off; the Saudis cut production further in January of 2021.

By March 2021 the price had risen to $65 a barrel but shale oil production did not increase. In mid-2021, consumption was back to 98 percent of prepandemic production but supply was at only 95 percent. That has kept oil prices high, which feeds through not only to energy prices but to the price of almost everything—anything that uses oil derivatives (food, for example) or transportation (Herron et al. 2022). As of January 2022, according to the Bureau of Labor Statistics, the 12-month change in the price of "motor fuel" for urban consumers was 40 percent.

Moreover, in the past ten years, between December 2011 and December 2021, the "transport" component of the CPI has been subtracting from overall CPI inflation almost as many months as it had been adding to it. In other words, the value for contribution to CPI inflation for transport was negative in 60 months and positive in 61 months. So this component that in the past decade (when inflation was low) often lowered measured inflation has been only going up in the past year. In addition to the increase in the price of oil, the price of used cars and trucks went up by 40.5 percent and that of new vehicles by 12.2 percent from January 2021 to January 2022 according to BLS data.

The next most important component is imputed rentals for housing. This is not a "market price"—it is not directly based on house prices or the cost of owning a house. It is imputed based largely on rents paid for "comparable" rented housing.[5] It is historically the largest (or sometimes nearly the largest) contributor to measured inflation and can be quite misleading as a measure of pressure on prices coming from aggregate demand. Early in the year, it was the largest contributor until overtaken by the transport sector—and is now second, adding about 1 percentage point to inflation. Together, transport and housing account for 4 percentage points of the measured 7 percent pace of inflation. Actual rents account for about one-quarter of 1 percent—up from about 0.15 percent of inflation at the start of the year. As actual rents go up, imputed rentals will rise.

It is no surprise that rents ramp up now as rent hikes and evictions that were constrained by government initiatives during the pandemic resume. It is probable that both rents and imputed rents will continue to rise over this year. What that means is that even if transport inflation

[5] See Papadimitriou and Wray (2022).

subsides with recovery of the supply side of the sector, the shelter component is likely to grow in importance and continue to experience rising prices and imputed prices. There are housing shortages throughout the country—especially for low and moderate housing—and the construction sector has been hit hard by the pandemic. This is a long-term problem because housing construction really had not fully recovered from the collapse of the housing boom more than a decade ago. Raising interest rates is not going to help; combined with shortages in the building supply sector, higher borrowing costs will likely cause rents and imputed rents to continue to climb. That is because those who cannot buy a house (either because interest rates or prices are too high) will bid up rents.

Food is typically the third component of the basket in terms of contribution to measured inflation. The contribution of rising prices of food and nonalcoholic beverages to the CPI inflation measure has increased by a factor of more than two and a half times over the past year—now adding half a percentage point. There have been significant disruptions in supply chains (especially for meat), compounded by industry consolidation and conspiring to boost prices. Restaurants and hotels represent the remaining big contributor to measured inflation, at 0.6 percentage points. Obviously they have faced higher costs both because of safety concerns and higher pay for workers (their higher pay is also in part due to safety concerns). (The "other" component—that includes everything we have not discussed—has also just more than doubled its contribution.)

Table 5 shows the increase of the price index for the major categories from October to December 2021.

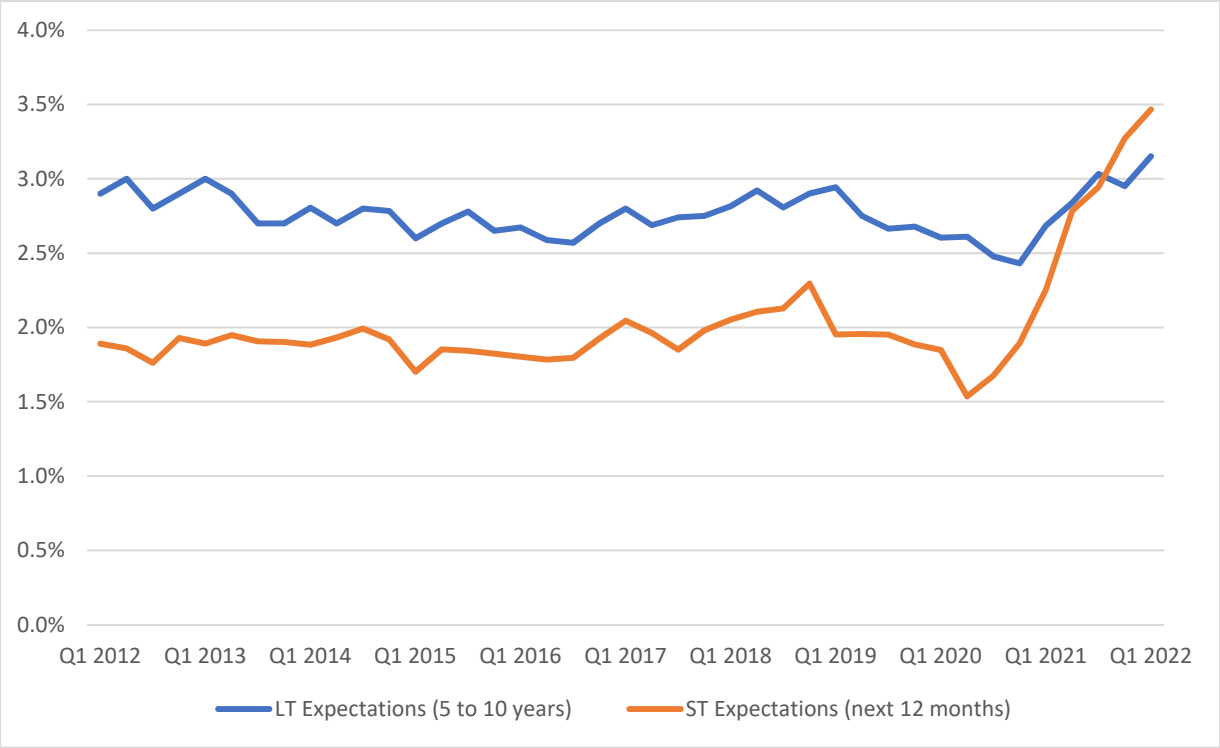
Table 5. Contribution to Inflation by Component, October–December 2021

	October	November	December
All Items	0.84	0.59	0.23
Food and nonalcoholic beverages	0.07	0.07	0.01
Clothing and footwear	0.03	0.02	0.02
Actual rentals for housing	0.02	0.03	0.02
Imputed rentals for housing	0.06	0.10	0.06
Health	0.04	0.01	0.01
Transport	0.29	0.36	0.04
Education	0.00	0.00	0.00
Restaurants and hotels	0.07	0.03	0.03
Miscellaneous goods and services	0.08	0.02	0.01
Other	0.08	-0.04	0.05
Water, electricity, maint., and repair of dwellings	0.10	-0.01	-0.02

The jump of inflation—which seemed to have settled at around a 5 percent pace through the summer and early fall—to nearly 7 percent in November and December is what has spooked the Fed and others. The overall price level rose by 1.65 percentage points in the final quarter of 2021. Transportation, alone, contributed 0.69 percentage points, and rents (actual and imputed) contributed another 0.29 points—so those two sectors alone accounted for almost two-thirds of the inflation spike. Food, restaurants, and hotels accounted for 17 percent. While price increases are indeed widespread across sectors of the economy, even in the most recent data the contributions to measured inflation are concentrated in these few sectors.

The Atlanta Fed's survey of firms shows that short-term expectations have risen sharply, as actual inflation becomes incorporated into expectations.

Figure 6. Short-term and Long-term Inflation Expectations



Source: Federal Reserve Bank of Atlanta, Business Expectations Survey (February 2022)

Still, while short-term inflation expectations have increased, long-term (5–10 years) expectations have moved much less, as shown above. Other measures of inflation expectations, such as the 10-year break-even inflation rate or the Cleveland Fed's inflation expectation are subdued as well (and comparable to that during other recoveries). While we do not subscribe to the notion that inflation is largely determined by inflation expectations, it is inconsistent for those who do to persist in arguing that inflation is going to accelerate given that expectations seem to have remained relatively grounded—especially long-term expectations, which have more to do with intransigent inflation.

Are Labor "Markets" too Tight?

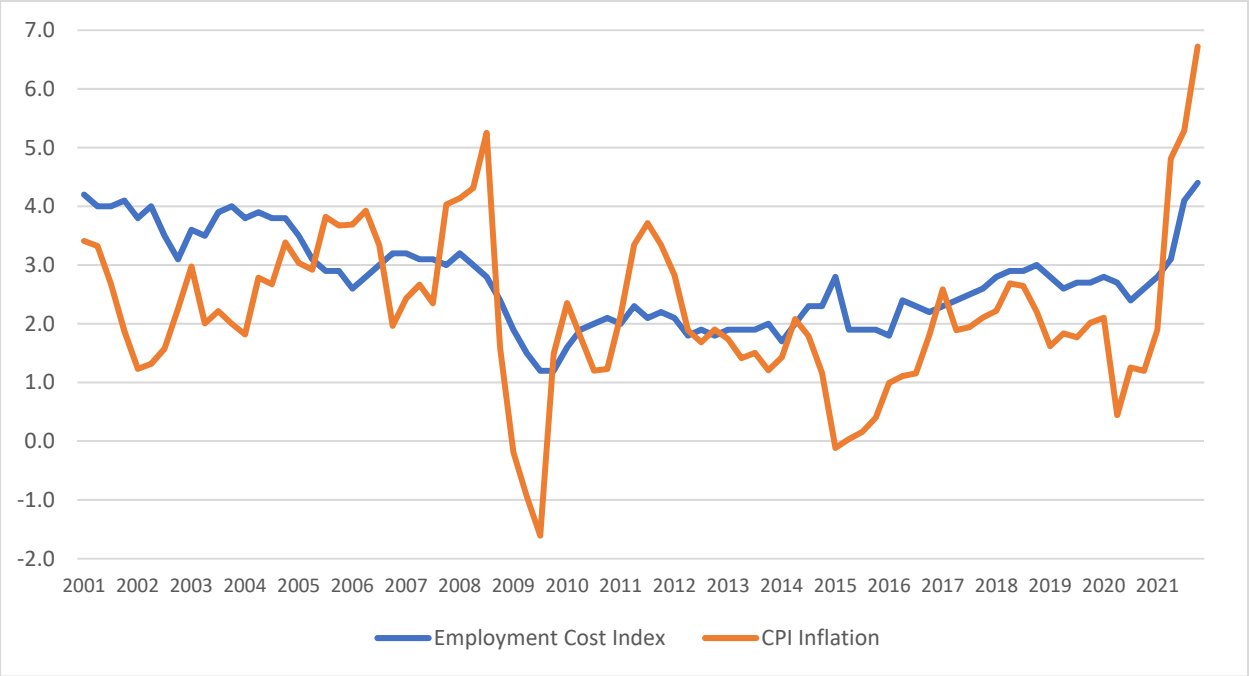
While the labor market has tightened (and that should be celebrated not feared), it is far from recovered. Total employment is still two million below the level of 2019 (and given population growth, we would need even more jobs). Compared to the weak labor market conditions that we have become accustomed to, even a slight strengthening of the labor market is seen as a problem. Many report that the employment cost index has increased (which it has, as seen in figure 7). At

the same time the 12-month change in the employment cost index is comparable to that of the early 2000s.

Still, the labor market is not yet back to its prepandemic state based on a number of indicators. The employment rate of the 15–64 age group was at 70.72 percent in January 2022, below its level of 71.77 percent before the pandemic. And even that was below its peak of 74 percent in the early 2000s. The labor force participation rate tells a similar story. At 62.2 percent as of January 2022, it is below its prepandemic level of 63.4 percent, which itself was significantly below the pre-Great Recession levels of about 66 percent (still not our postwar peak). Even before COVID, Fed Chair Powell was worried about the low labor force participation rate and saw it as an important issue.

What's important to keep in mind is that wages are playing catch up with prices, as shown in Figure 7 rather than driving the price changes. The fear is that if workers demand higher wages, they will set off a wage–price spiral, propagating more inflation. However, the likelihood of that happening in the US economy in 2022 is low. Unionization rates are very low, so workers are unable to negotiate collectively to enhance their bargaining power. Further, as argued, the evidence for an overheated *economy* (leaving to the side labor markets) is weak.

Figure 7. Employment Cost Index versus Inflation



Source: Bureau of Labor Statistics

Of course, workers can try to bargain on an individual level and, if openings are plentiful, they might obtain wage increases. However, if wages are growing at the bottom—especially in the low-paid service sector (where openings do seem to be common), they are equalizing the wage inequality that has become an issue in the United States. While these may affect firms that are largely relying on underpaid, low-wage workers, it need not set off inflationary pressures. Rising labor costs at the low end in the service sector—especially in retail sales—do not have to generate large price increases because labor is often a relatively small part of total costs.

Indeed, what we see is that price increases are outpacing labor cost increases by a wide margin, as shown above in Figure 7. Probably more important is the rising costs of inputs (including energy costs), rising finance costs, rising costs of holding extra inventories, and costs directly associated with the pandemic (limiting contact, masking, cleaning, testing).

MICRO-LEVEL PRICING: COSTS OR PROFIT MARGINS?

Everyone is now aware of significant disruptions on the supply side, caused by problems in the supply chains. When these first became apparent, it was presumed that they would be sorted out with recovery, and so would at most cause a temporary increase of inflation. However, many now argue that inflation is becoming entrenched—it is not a temporary problem that will go away on its own. One piece of evidence is said to be (i.e., by Summers [2021b]) that prices are rising across a great swath of products (and, to a lesser extent, services). And that is because costs are rising—especially labor costs, but also energy (and other utilities) costs. Others point their finger at profit margins—while some costs are indeed rising, firms are taking advantage of the situation by raising markups over costs. In this section we will examine the evidence from the micro level.

Rising Profit Margins as a Source of Price Pressure

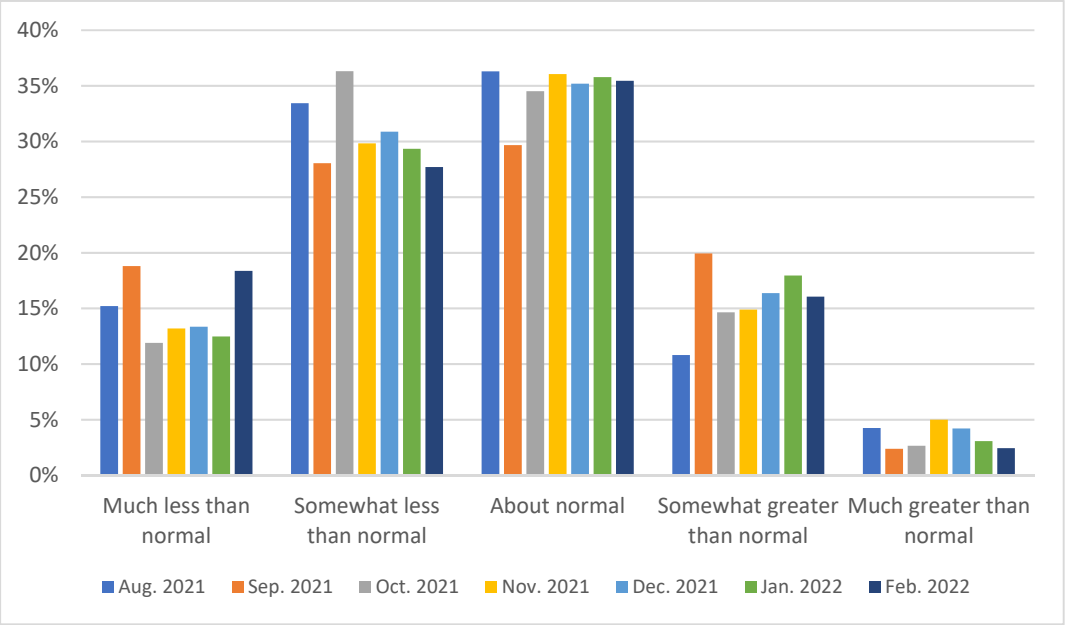
Mainstream economics treats prices as if they were determined by markets. In the real world, only a limited set of prices is determined this way (some commodity prices, for instance). Most prices are set by firms with the degree of pricing power dependent on the amount of competition that exists in the industry. Traditionally, firms with monopoly power are believed to restrict output and raise prices (above marginal cost) to maximize profit. There is an incentive to restrain capacity to keep prices up. At the same time, the threat of new entry by competitors can temper exercise of pricing power.

Many have argued that the rising prices we see are due to firms with pricing power taking advantage of the pandemic to boost profit margins. Let's examine the evidence, much of which is admittedly anecdotal. Matt Stoller (2021) has argued that as much as 60 percent of the rise of inflation can be attributed to rising profits due to pricing power—that allows megacorps to increase profits by raising the margin over costs. He estimates that this, alone, has cost the average American $2,126 a year. While one might quibble with his methodology, there's plenty of evidence that large corporations are taking this opportunity to raise prices—indeed, they directly say so in their earnings calls as well as in surveys.

For example, Stoller reports that in a survey of retailers by Digital.com, 56 percent said "inflation has given them the ability to raise prices beyond what's required to offset higher costs." Not surprisingly, the bigger the firm, the easier it is to do this: 63 percent of large firms versus 52 percent of small and medium-sized businesses agreed with the statement. In fact, 28 percent of large firms increased prices by 50 percent or more! No wonder investors are celebrating. As Stoller reports, one portfolio manager reported that "[w]hat we really want to find are companies with pricing power. In an inflationary environment, that's the gift that keeps on giving because companies can pass along their pricing on the way up, and don't necessarily need to get it back on the way down." As Bloomberg (Boesler, Deaux, and Dmitrieva 2021) reports corporate profit margins are at a 70-year record and corporate profits are up 37 percent from a year ago. According to Matt Stoller (2021), US corporations made a record of 1.73 trillion in profits in 2021, up from the 2012–19 average of about $1 trillion a year. That number has risen to $1.73 trillion now. John Nichols (2022) cites the example of Chipotle, which increased profits by 181 percent last year and gave its CEO a 137 percent pay raise (to $38 million).

In the Atlanta Fed surveys there is further evidence of rising profit margins. In the November 2021 survey, for example, 23 percent of firms indicated that their profit margins were higher than usual and about half of these said it was because they had raised their prices. Another 44 percent of the remaining firms whose profit margins were not above normal indicated that they planned to increase their prices to improve or maintain their profit margins.

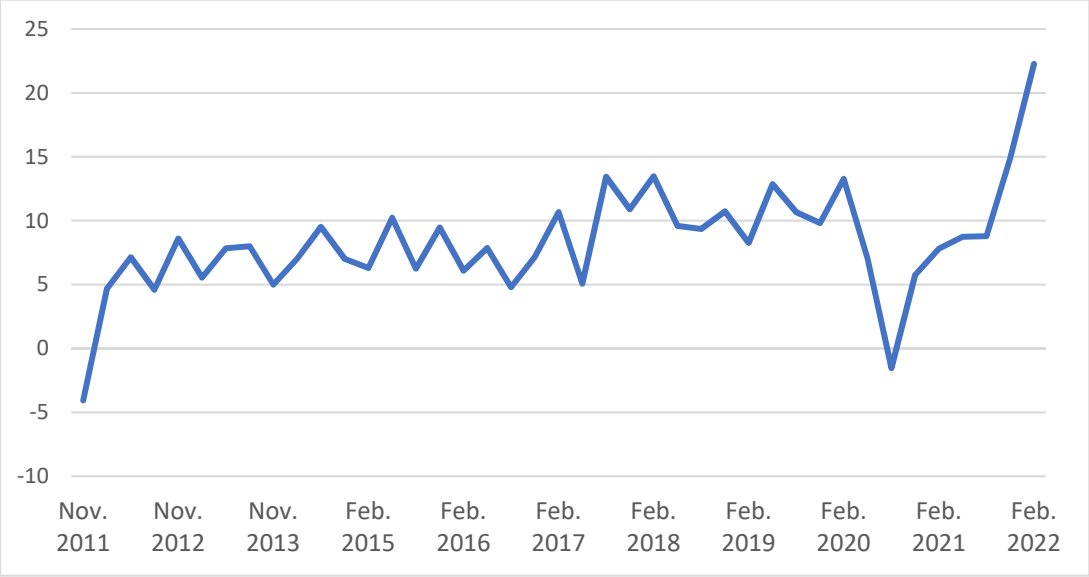
Figure 8. Current Profit Margins (compared to normal times)



Source: Federal Reserve Bank of Atlanta, Business Expectations Survey (February 2022)

Still the vast majority of firms do not see current profit margins as higher than normal. Indeed, far more see them as below normal than the percent who see them as above normal. Paradoxically, as the chart below shows, firms are optimistic about their ability to raise margins over the next twelve months. Indeed, they have not been so optimistic over the past decade. This stands in stark contrast to data from the Atlanta Fed presented above showing that firms do not expect sales or costs to pressure them to raise prices. It is their pricing ability that they believe will cause prices to rise. It is a little hard to know what to make of this data: firms say current mark-ups are not extraordinary but expect to be able to raise them in the future. At the same time, they say that it is neither sales nor costs that are pressuring them to do so.

Figure 9. Future Influence of Margin Adjustment on Prices (over the next 12 months, diffusion index: 0+ = greater than normal times)



Source: Federal Reserve Bank of Atlanta, Business Expectations Survey (February 2022)

Of course, this survey includes a large number of firms of various sizes. The anecdotal evidence that shows large markups over costs is generally limited to the biggest firms—those with substantial market power and, by definition, a small proportion of firms. It is possible that smaller firms are watching the biggest and anticipating they will be able to do the same. They might be disappointed to find that they do not have enough pricing power to do that. But the big ones have already demonstrated their ability to do so.

President Biden's office (White House 2021) has also pointed its finger at markups, which have tripled as concentration of pricing power across 75 percent of America's industries has risen over the past 20 years. His "fact sheet" cites examples of industry dominance, such as in airline carriers, where the top four carriers control two-thirds of the market; in the railroads where the number of freight carriers declined from thirty-three in 1980 to seven today, with four dominating their respective regions; in shipping where the largest ten controlled 51 percent of the market, and now 80 percent; and in agriculture where four firms control most of the world's seeds and have increased as much as 30 percent a year, and where four meatpackers control 80 percent of the beef market (with the farmer's share of the revenue dropping from 51.5 percent to just 37.3 percent in the past five years). Such consolidation has increased pricing power, has reduced new business formation, productivity growth, investment and innovation, and has

increased income, wealth, and racial inequality. These trends made our economy vulnerable to price hikes that are now being realized.

David Dayen and Rakeen Mabud (2022) report that ocean "shippers made nearly $80 billion in the first three quarters of 2021, twice as much as in the entire ten-year period from 2010 to 2020." The CEO of Kroger boasted that "[a] little bit of inflation is always good in our business," and the CEO of Colgate-Palmolive crowed that "[w]hat we are very good at is pricing." Dayen and Mabud have likened our current situation to that of the Soviet Union: there appear to be random shortages everywhere. You go to the grocery store to find an unlikely absence of boxes of facial tissues or your local fast food purveyor cannot provide fries with the burger because they are out of cooking oil. He attributes this to a half-century of letting financiers take control of supply chains so that we are ill-prepared for disruptions while the world's biggest traffic jam is piling up at the ports in southern California that handle 40 percent of all seaborne imports. He recalls General Electric's CEO Jack Welch recommending: "Ideally, you'd have every plant you own on a barge." That barge become China, and China's COVID lockdowns disrupted supply.

Meanwhile, Wall Street insisted on ever-greater efficiency, smaller inventories, deregulation, and mergers to wipe out competition and maximize profit. Supply chains had nothing to do with "reliably getting things to people," but rather with maximum profit by cutting costs, escaping regulation and taxes, and increasing pricing power. The 1999 earthquake in Taiwan cut off the supply of semiconductor chips, but that raised no alarm—the United States got rid of most of its chip productive capacity. And then COVID-19 surfaced in "the Detroit of China," stopping the flow of manufactured goods. Dayen and Mabud blame economists "like Larry Summers and other defenders of the status quo" who now claim price hikes are due to either fiscal policy that provided pandemic relief or the Fed's delay of rate hikes for too long.

In their view, the "pandemic was a catalyst, not a cause. Corporate interests structured a supply chain that can't withstand shocks, can't meet increases in demand, and invites profit extraction in moments of crisis" (Dayen and Mabud 2022). The American Economic Liberties Project[6] in

[6] See their website at https://www.economicliberties.us/problem/

conjunction with the Groundwork Collaborative (2022) reached a similar conclusion, as detailed in reports showing that decades of mergers & acquisitions weakened supply chains, lowered wages, and increased pricing power. In other words, the supply chains themselves helped to concentrate pricing power that is now taking advantage of disruption of the supply chains.

Larry Summers has strongly dismissed the pricing power explanation of inflation (Anstey 2022). It is all supply and demand, he claims—with demand rising beyond the capacity to produce. Demand, in turn, was boosted by the relief payments. The solution is simple: we must reduce demand pressures. It is all basic economic science, as presented in first-year economics. However, as we have argued above, econ 101 arguments cannot apply when firms have pricing power. Further, we argued above that evidence of macroeconomic conditions do not support the argument that aggregate demand is excessive. Still, we accept that firms will try to pass higher costs along to buyers. Given severe disruptions on the supply side,[7] it seems likely that some of the inflation is coming from the cost channel. On the other hand, consumer goods—that are largely dominated by a few large firms producing each type—are not the major source of inflation. As we've discussed, it is rentals and oil prices, although other transportation costs as well as food (both of which are dominated by a few large players) do make major contributions to measured inflation.

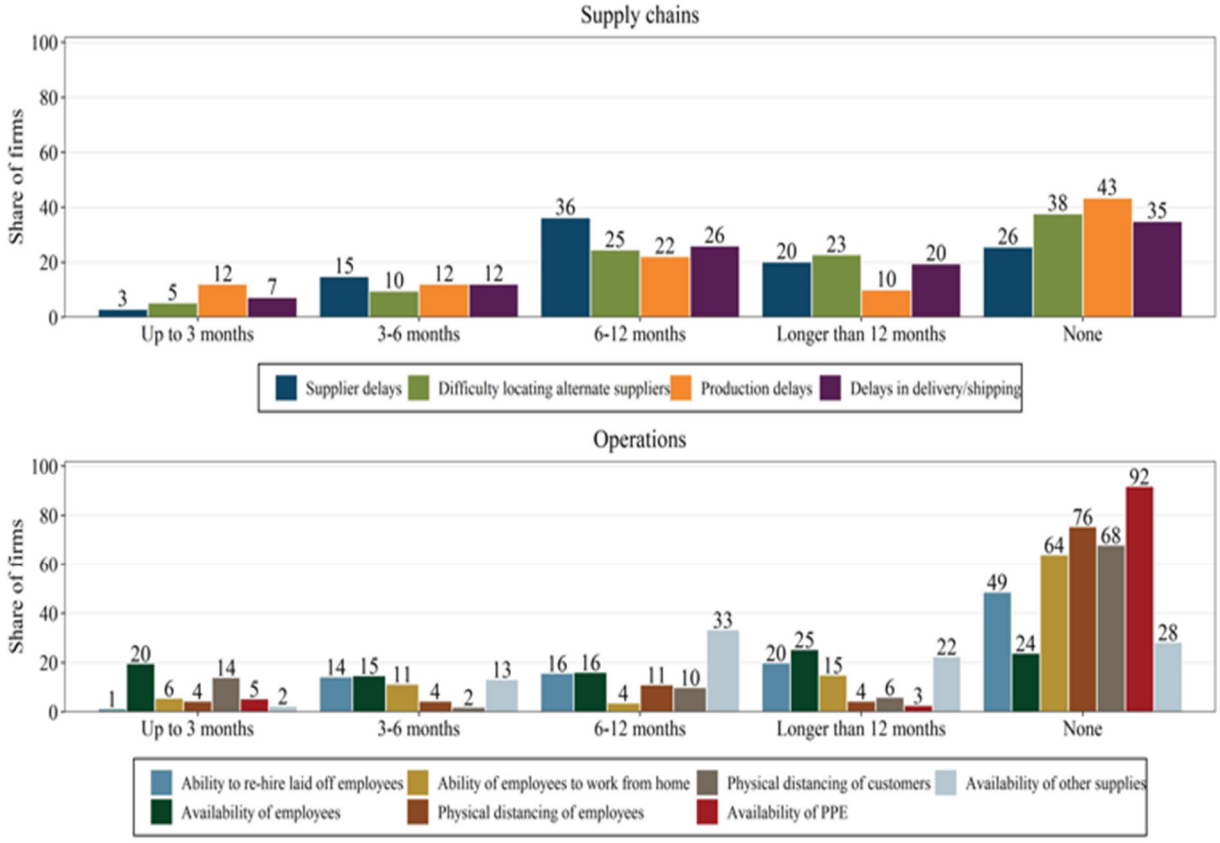
Supply-Side Disruptions

While disruptions in the energy, chip, and auto industry grabbed headlines, problems are not limited to these sectors. In a February 2022 survey by the Atlanta Fed, 71 percent of firms in the sample reported supplier delays in the previous week, with 60 percent of these indicating that the disruption to their business was moderate to severe. Further, 40 percent reported difficulty locating alternate suppliers, with half of these reporting a moderate to severe disruption and 45 percent reported delays to delivery/shipping to customers (52 percent reporting moderate to severe disruption). While only 21 percent reported difficulty in rehiring furloughed or laid employees as a source of disruption, 62 percent noted the availability of workers to work affected their operating capacity (with 57 percent reporting a moderate to severe disruption). The availability of other suppliers or inputs used to provide goods and services affected 50 percent of

[7] See Goodman (2021)

the firms, with 64 percent of these reporting moderate to severe disruption to their business; 55 percent of firms expected the availability of supplies to affect operations 6–12 months or longer. (Data for other months in 2021 were comparable, so these supply disruptions have been affecting firms throughout 2021 if not longer.)

Figure 10. How Long Do You Anticipate these Disruptions Will Continue to Impact your Business?



Source: Federal Reserve Bank of Atlanta, Business Expectations Survey (February 2022)
Notes: Tables are based on 177 responses.

Firms are certainly more worried about supply chains than about operations impacting their business. Even availability of employees is not a serious a concern of firms—20 percent in the next three months and falling to 14 percent midway through the year. Concern about "other supplies" grows the farther into the future firms look—presumably because they have built some inventories. So far as supply chains go, firms are worried about supplier delays for the near future, and worries rise the farther in the future firms look. Again, there seems to be some evidence in the data that firms have inventoried supplies they need.

In the Atlanta Fed's December 2021 Business Expectations Survey, 57 percent of firms had said they were extremely concerned about supply chain issues in 2022. The availability/quality of labor was at the top of the concerns for 2022 (23 percent of firms). At the same time, only 5.6 percent thought labor costs were a significant concern—a surprising result given all the worry about rising wages. Around 13 percent of firms indicated inflation and supply chains as areas of concern. As we have argued this is not likely due to "excess demand" driven by "COVID stimulus"—although it is almost certainly related to COVID, which impacts labor's decision over reentering the labor force. More importantly, trying to fight these supply-side issues through rate hikes is not likely going to help.

WHAT CAN THE FED DO?

If supply chain disruptions, rental housing shortages, and agricultural sector consolidation are causing inflation, how can the Fed can solve the inflation problem by raising interest rates? Or if the problem is the shortage of labor, how is the Fed supposed to solve it if not by significantly cooling the economy (and solving the shortage by lowering demand for labor, rather than increasing its supply, which it cannot do)? And what exactly is the Fed supposed to do about OPEC (and now, sanctions on Russian oil), the lack of containers, shipping delays, shortages of truckers, and lack of housing? Importantly, since it's a global problem in an age of a global pandemic and global supply chains, how are the Fed's actions supposed to solve the inflation problem?

A recent report by Skanda Amarnath and Alex Williams (2022)[8] argues that a small number of items in the consumption basket drive the procyclical movement of inflation; most components do not "move reliably with the business cycle." The ones that do are rent (including owner's equivalent rent, as discussed above), groceries (food and beverages for home consumption), and food services and accommodations (restaurants and hotels). (Note they have identified most of the major categories that we have shown contribute to recent inflation.) And it seems that wage

[8] Their discussion includes work from a 2020 study by James H. Stock and Mark W. Watson, "Slack and Cyclically Sensitive Inflation."

growth that accompanies tight labor markets drives the rising prices—workers with lower wages can afford to spend more on rent and groceries, and rising wages in lowly paid service sector jobs raises costs.

There are two implications from that: fighting inflation by raising borrowing rates is not likely to have much impact—workers do not normally borrow to buy groceries or pay rent. That means that high interest rates can only work by causing unemployment (not by reducing debt-fueled spending). It may take a large rate hike to cause mass layoffs through that route, making it more probable that the rate hikes will work by causing financial problems, insolvencies, and defaults. Second, if monetary policy is effective, it is by stopping wage growth. The distributional effects of that will likely enhance inequality. The pandemic has been very, very good for those at the top, but recovery has just started to improve conditions at the bottom. Killing the recovery also means reversing the progress made recently on raising incomes at the bottom. James K. Galbraith (2022) argues along the same lines: to keep the overall inflation rate at 2 percent means some prices must rise by less to offset those that are rising by more than 2 percent. Production in the United States is overwhelmingly in the service sector, and in the service sector the main cost that can be controlled is wages. So, again, we conclude that if Fed policy is to work, it must attack wage growth, particularly in the service sector.

Mainstream economics likes to posit that disinflation can be costless and that the Fed can engineer a soft landing by managing expectations. In reality, monetary policy can only affect inflation by slowing down the economy, raising unemployment to alleviate wage pressures, and thereby lowering spending. It is questionable whether it can do so with marginal adjustments to the interest rate. Many point to Volcker's rate hikes—to 20 percent and beyond (and above 15 percent for a couple of years)—as a successful example of using monetary policy to quell inflation. Were the Fed to take rates up to double digits over the coming year, causing widespread unemployment, falling sales, and perhaps defaults on debts that could create a financial crisis, its policy might "work" to tame inflation. But is that really the medicine we need? Is our economy really growing too fast?

The believers in monetary policy are not advocating Volcker-level hikes precisely because they believe policy to be powerful even with marginal changes to rates (despite lack of evidence; see Papadimitriou and Wray 2022). That is wishful thinking. The usual transmission mechanism referenced is through higher rates that reduce borrowing. But as we've argued, whatever inflation we have is not due to debt-financed consumption. Indeed, consumers have accumulated large savings—many do not need to borrow. And rising rates will (marginally) increase income on their now-larger savings. It is hard to see how that is going to reduce consumption, lower aggregate demand, reduce pressure on labor's wages, and thereby offset the inflation pressure coming from supply chain issues plus the exercise of pricing power.

Modern Money Theory (MMT) has always explained that the real issue in the economy is the availability (or lack thereof) of real resources. In the past few recoveries, aggregate demand growth has been sluggish due to austere fiscal policy, preventing us from reaching a full utilization of all of our available resources. The aftermath of the COVID crisis, with robust fiscal intervention, is the first time in a long time where the economy is not stagnating due to insufficient demand. But what we have is not a problem of too much demand, but a situation where demand is not stagnant like it has been in past recoveries. It only seems remarkable because sluggish demand and jobless recoveries over the past 30 years have become our new normal.

The COVID-19 crisis clearly started as a supply-side crisis that spilled over into demand. It has continued to be a supply-side problem because of the pandemic, while policy has been able to temper the demand problem. One could of course argue that if we didn't provide pandemic relief, which prevented a downward spiral in the economy, we might have less measured inflation, as Americans would be much poorer and unable to buy so much gasoline and used cars, or pay the higher rent demanded by landlords. Similarly, we could now solve the current inflation problem by making Americans unemployed and poorer to prevent them from being able to buy as much stuff. While this wouldn't solve the supply chain problems, the inflation rate would likely be lower. And America would be worse off.

This is ultimately the conventional approach to inflation control—disguised under an unrealistic and bizarre theory about inflation expectations—keeping a portion of the population unemployed to keep wages and demand low. The more appropriate solution would of course be to work to alleviate supply-side constraints. That, however, cannot really be achieved by monetary policy. In fact, if monetary policy is supposed to work by cutting interest-sensitive spending, such as investment, it would work to constrain our capacity/supply in the future.

We must find a better way to think about, and deal with, inflation. The high inflation we see today is not due to excess demand. Indeed, one could go much farther and argue that our two high inflation periods (the early and late 1970s) were not periods of high aggregate demand. But that is too obvious to require embellishment: these were, famously, called periods of stagflation. There is some danger that inappropriate tightening by the Fed now could reproduce stagflation.

In the past few decades discretionary fiscal policy in recessions has increasingly taken the form of transfers and tax cuts. It is a "free market" approach to policymaking that provides little guidance to where spending will flow, only setting its level. While MMT explains that government can financially afford to spend as much as it wants, in general it does not advocate for indiscriminate stimulus spending to fight unemployment. Similarly, cutting spending or raising taxes indiscriminately will not be effective in fighting inflation. Different sectors of the economy grow at difference paces. Bottlenecks in the economy can create inflation before full employment is achieved. The pandemic has exacerbated existing bottlenecks and created new ones. Hence MMT's preference for targeted spending in the form of a job guarantee, which serves to constrain instability both on the downturn (preventing unemployment) as well as on the upturn (providing price stability).

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