Inflation: How Can It End?

We see inflation declining from recent multi-decade records to more tolerable levels. But should you position for a whimper, or a bang?

Transitory inflation is dead. We've declared it and so have the headlines and Fed chairman Jay Powell. Yet we've also maintained that clients who are inflation-sensitive should incorporate protection in their long-term allocations. Meanwhile, our economics research team expects inflation to fall considerably over the course of 2022 and settle in at a pace that—while higher than the past decade's average—will not be worrisome.

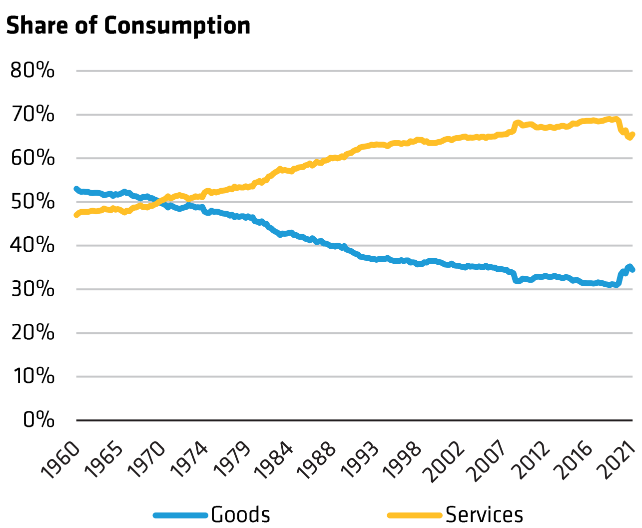
How does that square? Should you be worried about inflation or not? Should you protect against it or not?

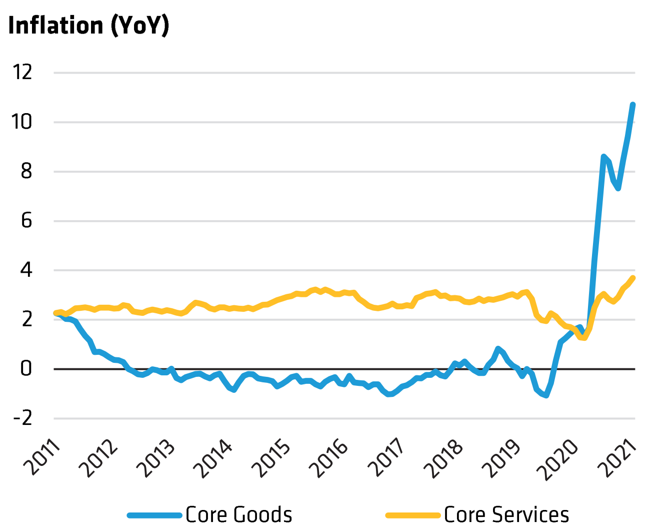
Keep in mind, our allocation advice pertains to your long-term, strategic asset allocation. It's based on the alignment of several secular drivers, which increase the risk of high inflation over the coming decade or more. It's not a tactical recommendation based on our view in 2022. Instead, our guidance reflects responsible risk management for those who are particularly exposed to the risk of inflation. **Inflation-sensitive investors should build protection into their strategic allocations.**

Still, our portfolio managers must navigate the market in the near term, too. And there, it helps to have a view on both the current economic environment and what's likely to unfold in the coming quarters. In this case, the likely path is a decline in inflation from recent multi-decade records to more tolerable levels. There are risks to the upside and downside, but that's our base case.

So how is this inflationary spell likely to end? To answer that, we need to probe which prices have been going up and why. Most notably, the biggest change in year-over-year inflation due to the pandemic has come from goods prices (**Display 1**).

DISPLAY 1: A MASSIVE SHIFT IN DEMAND TOWARD GOODS HAS FUELED INFLATION





Source: Bureau of Labor Statistics, Bureau of Economic Analysis, Haver Analytics, and Bernstein analysis

Goods Prices—Constrained Supply Meets Record Demand

The focus on supply constraints driving inflation shouldn't obscure an equally important factor: a demand shock (which we expect will be temporary). Over the past five decades, we've witnessed a steady shift in the economy from goods to services. The pandemic swiftly reversed roughly 15 years of that trend. Yet as the economy reopens and people seek out experiences, entertainment, and medical care once again, we expect demand for goods and services to revert to long-term averages. This should take some of the pressure off the demand side.

Meanwhile, the pandemic's ongoing and lagged effects continue to ripple through the supply side of the economy. These include semiconductor shortages, shipment delays, and hiring issues. The combination of elevated demand and constrained supply for goods has had an outsized impact on prices. Just as we expect the balance between goods and services to normalize in 2022, we also see these supply chain issues easing over time, further reducing inflationary pressures.

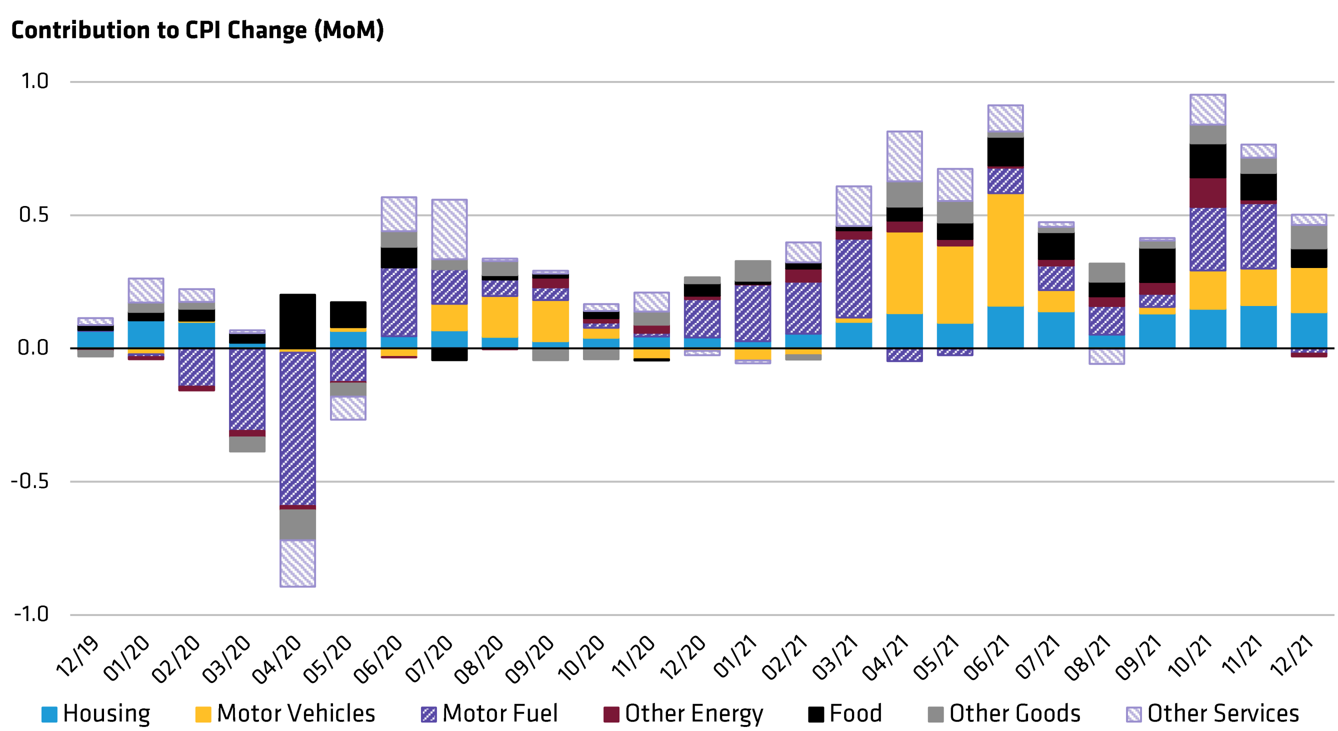
Inflation Whack-a-Mole

We recognize that everyone experiences inflation differently. Your inflation differs from mine because our consumption patterns are unique. A consumer buying a used car right now faces a substantially altered inflation calculus compared to someone who doesn't drive. Yet, when thinking about inflation across the entire economy, we focus on the widely representative inflation baskets used in the Consumer Price Index and the Personal Consumption Expenditure accounts of US GDP.

Inflation, importantly, is not just a one-time change in prices. It's a persistent increase. To understand ongoing increases, it helps to look at inflation on a month-over-month basis. Doing so eliminates past price rises from the equation so you can focus on what's changing now and in the future.

On this basis, the largest contributors to inflation in recent months clearly shine through (**Display 2**).

DISPLAY 2: WHAT'S BEEN DRIVING INFLATION? CARS, GAS, AND HOUSING



Source: Bureau of Labor Statistics, Bureau of Economic Analysis, Haver Analytics, and Bernstein analysis

How Did Cars Get So Expensive?

Most notably, new and used cars have driven inflation to an unusual degree, with prices surging in both the spring and fall of 2021. The 13% and 49% increase in their respective prices since April 2020—and their relatively large weight in the average consumer's budget—have contributed meaningfully.

The surge can be traced to a lack of supply of new cars due to the semiconductor shortage. At the outset of the pandemic, auto manufacturers canceled their chip orders, leading semiconductor companies to reallocate production to the booming work-from-home electronics market. By the time the auto companies realized the government would backstop demand, their orders had already fallen to the back of the line. And by then, chip production was hampered by rolling pandemic-related outages.

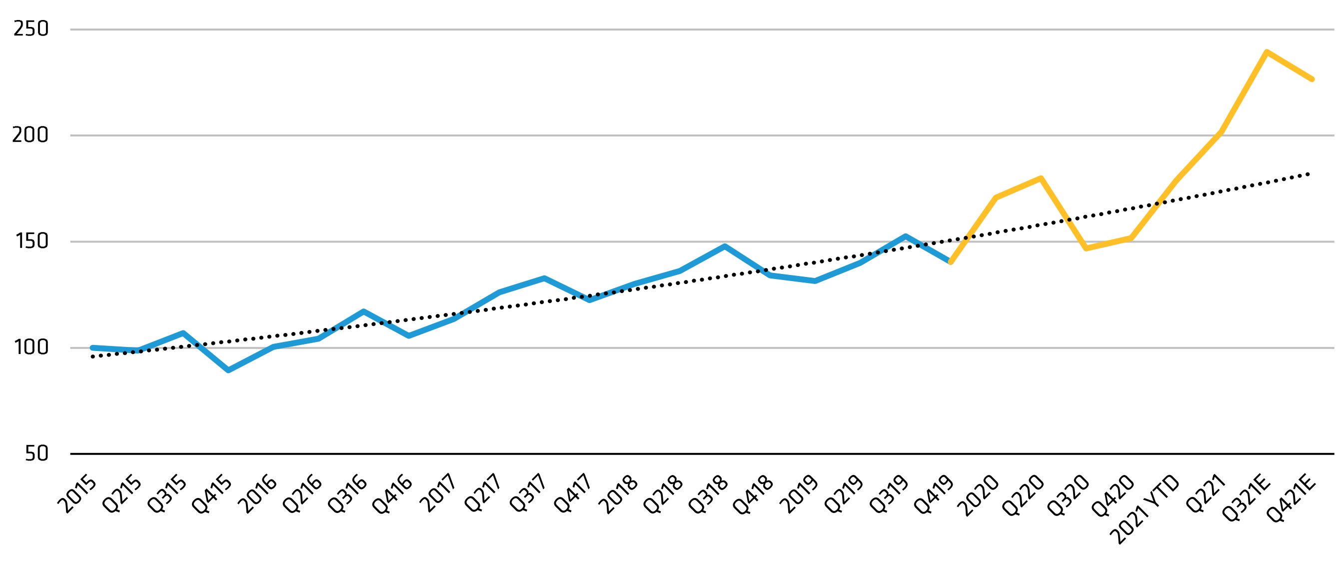
Yet Bernstein Research's semiconductors team believes the chip shortage may be on the brink of turning. Industry data and commentary both suggest chipmakers are overshipping, replenishing inventories, and resuming normal lead times (**Display 3**). In late October, GM scheduled overtime shifts at six North American plants for the first time since February. Earlier this month, they forecast a 25%–30% rise in vehicle shipments in 2022. As a result, looking ahead, we expect car inflation to decline significantly. What's more, if production ramps up, some car prices could even begin to fall, creating an inflationary headwind.

Pain at the Pump—Fuel Prices

Gasoline prices have also helped stoke inflation, contributing over a quarter of inflation in October and November before steadying in December. Yet as with car prices, it's hard to extrapolate large moves in oil prices into 2022.

DISPLAY 3: AUTO CHIPMAKERS ARE SHIPPING CHIPS WELL ABOVE TREND RATES

Auto Chip Shipments, Indexed to 100 in 1Q15

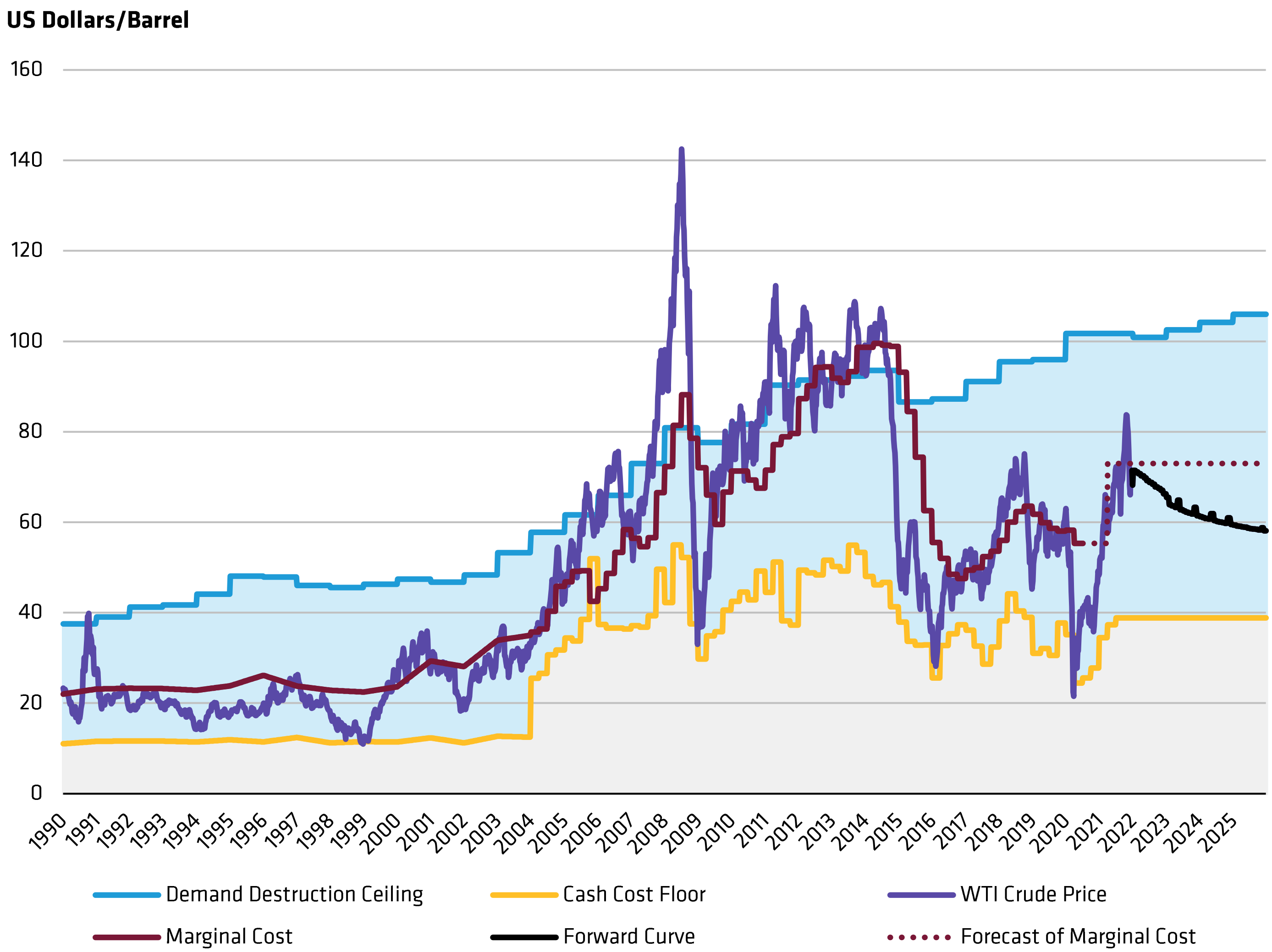


Source: IHS, World Semiconductor Trade Statistics, Bernstein US Semiconductors team analysis

As you'll recall, oil prices collapsed on weak demand in 2020, even trading briefly at negative $37.63/barrel. They closed the year at a more normal level in the low $40s. After the industry overproduced for several years, triggering a mini-recession in 2015/2016, the pandemic's demand shock seems like the intervention needed to instill discipline and limit supply.

Oil tends to trade between the "cash cost" of existing production and the "demand destruction" price where consumers substantially reduce usage. It typically reverts to the marginal cost of drilling and operating the next-cheapest well (**Display 4**). In early 2021, our oil and gas research team pegged that marginal cost at $75/barrel, suggesting the price would rise to around that level (a call that was subsequently borne out). But that type of move is less likely from here—oil prices may still climb along with broader inflation as operating costs rise and producers are forced to tap more challenging and costly sources. However, another sharp ratchet upward seems remote.

DISPLAY 4: CRUDE OIL PRICES TYPICALLY HOVER AROUND THE MARGINAL COST OF PRODUCTION



Source: Company reports, Bloomberg, BP, EIA, IMF, and Bernstein US Exploration and Production team analysis

Food on the Table and a Roof Over Our Heads

Food prices have risen, too, largely due to high crop prices. 2021 was a particularly bad year for supply, as weather limited planting in many regions and interfered with the growing season. With climate change delivering more volatile weather and punishing droughts, it's hard to predict what 2022 will bring. Farmers in Brazil—the world's largest producer of corn and soybeans—planted record levels of those crops. But prices are already climbing in anticipation of drought-stricken harvests in the coming months. In the US, farmers may reinvest the gains from last year's higher prices into elevated planting, but still face high fertilizer prices and equally uncertain weather.

Beef and pork prices have also surged. These industries operate with a lag—as plant shutdowns in 2020 led to an oversupply of livestock, farmers culled their herds and scaled back production. Now those smaller herds are flowing through the plants, constricting supply, and pushing prices higher. It will take more time for the system to come back into balance

We do expect one major contributor to recent inflation to persist—the cost of shelter. Housing matters because it represents around one-third of the average American's consumption. It's reflected in the CPI in two ways—one for renters and another for homeowners—though both incorporate price changes based on actual rents. Because rents typically reset annually, each month's increase only affects an average of one-twelfth of the renting population. For that reason, it tends to move more slowly than home prices. And, while the latter have rapidly risen during the pandemic (with the Case-Shiller index up almost 27% since March 2020), rents have lagged. So even if home prices plateau, the housing component of the CPI will have to play catch-up.

That will unfold gradually. Plus, home prices appear expensive relative to personal income by roughly the same amount that rents seem to lag. In other words, they may offset one another. Even giving home prices the benefit of the doubt, we'd expect shelter to remain a contributing factor given the underproduction of housing in recent years, near-record-low interest rates, and the possibility of further appreciation in 2022. That said, we don't consider it sufficient to drive worrisome inflation on its own.

Policy—From Tailwind to Headwind

Looking ahead to 2022, we expect fiscal and monetary policy to be much less accommodative, reducing inflationary pressures. The Federal Reserve has accelerated the timeline for its reduction of bond purchases, and indicated rate hikes are imminent. With an unusually hawkish group setting monetary policy on the Federal Open Markets Committee, they're also less likely to make an inflationary policy mistake.

On the fiscal side, the economy no longer needs a multi-trillion-dollar stimulus backstop. Even with infrastructure spending—spread over 7-10 years—we foresee a nearly $1.5 trillion drop in the budget deficit in 2022. While the rebounding private sector will likely generate growth to fill that gap, that's still a large headwind to aggregate demand and prices.

Finally, there's the number that we (and the folks at the Federal Reserve) look at every day—the market's long-term inflation expectations. The longer inflation persists, the higher the chance for those expectations become untethered. Yet so far, the markets believe that long-term inflation will essentially line up with the Fed's guidance, despite inflation data coming in at the highest levels in decades. In fact, the Fed has so much credibility that even floating the idea of accelerated tapering pushed down the market's expectations.

Inflation swaps (investors' direct bets on inflation) are currently pricing in roughly 2.4% inflation for the five years between 2026 and 2031. This sits just above the Fed's 2% guidance and well below the levels expected by the market at any time prior to 2014 (**Display 5**). We continue to look for any signs of those expectations breaking out. Notably, that wouldn't automatically lead to an inflationary spike. Should that occur, we'd expect the Fed to swiftly tighten monetary policy to bring expectations (and inflation levels) back in line.

The Forest and the Trees

This has been an extremely micro-driven view, which begs the question: are we missing some larger macro forces? For instance, as demand shifts back to services, will those prices begin to rise meaningfully, offsetting any benefits from the fading pressures mentioned above? Yes, to some degree. Yet bear in mind that capacity constraints on the goods side are comparatively tighter than what's likely to unfold in the service sector.

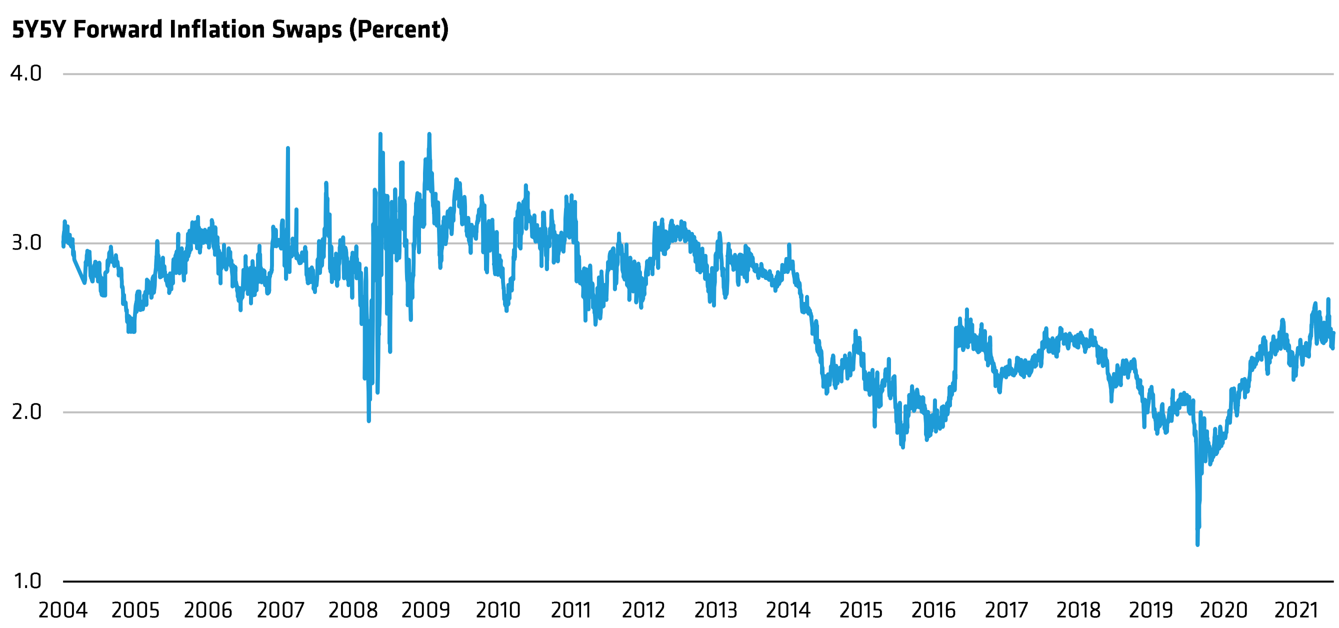
Americans consume around twice as many services as goods. So, while the shift of $500 billion of excess demand into goods strained "normal" capacity (at 10% above trend), the dollars flowing back into services should be more readily absorbed as the makeup of consumption normalizes. On the flip side, the shift would take the services side of the economy from around 95% of trend back to 100%, where it shouldn't face such severe capacity constraints and inflationary pressures.

What's more, temporary supply shocks tend to have less impact on services. Carmakers have been struggling to finish enough cars because they were missing one or two critical chips and household goods have been stuck off the coast of California. The same can't be said for services. Airlines are idling planes and transporting around one-third less traffic, hotels are still operating below 2019 occupancy (which itself was only around 70% of overall capacity), and medical care services are running 10% below long-term trends. Ultimately, every dollar that shifts from goods to services consumption should be less inflationary.

How Could We Be Wrong?

Still, we have three main concerns. First, barring a serious negative shock to demand, we expect the labor market to run unequivocally hot by the middle of 2022, which should result in some combination of higher rates, higher inflation, lower output, or faster technology adoption. When the pre-pandemic expansion reached that point, the Fed was well into hiking rates and interest rates were more than two percentage points higher.

DISPLAY 5: THE MARKET'S EXPECTATIONS OF INFLATION ARE STILL WELL ANCHORED



Source: Bloomberg and Bernstein analysis

Second, while shipping channels from Asia should benefit from actively higher throughput in US ports and a seasonal lull over the next few months, we have yet to see evidence of a clearing backlog. Rather, it appears that the logjam has just moved further from shore (**Display 6**). If that bottleneck persists into mid-2022 when seasonal volumes pick up—and keeps shipping prices from falling—our current inflation expectations may look overly optimistic. In addition, COVID-related shutdowns in Asian supply chains and ports could introduce new shocks.

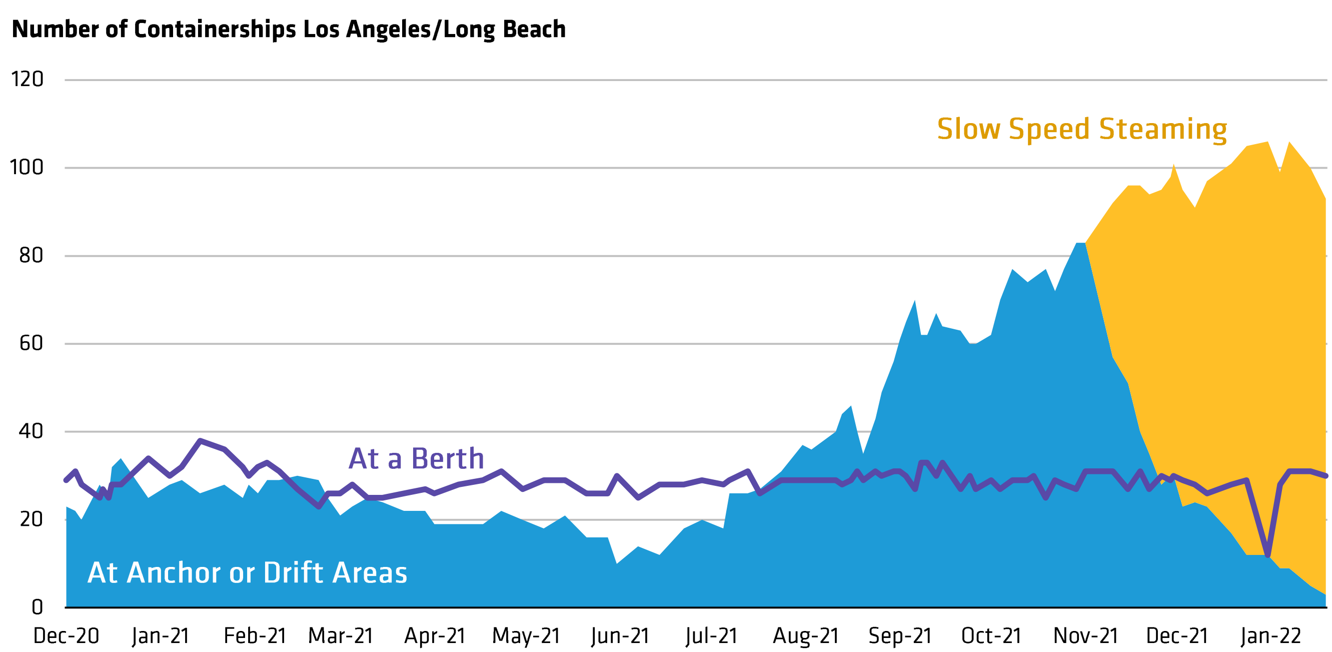
Finally, the shift from goods consumption back to services may take longer than expected. While airlines, hotels, and restaurants make headlines, nearly half of the gap in services demand is for medical services. Some of this is likely to be from postponed elective procedures which could rebound sharply when people feel more comfortable resuming daily life. But what if people take longer to reach that point…or if the deficit stems from people prioritizing medical services less in their spending?

How to Proceed

Overall, the inflationary path is likely to improve from here. That said, we expect the highest year-over-year inflation prints in Q1, leading to peak fear.

As we've noted here and in our recent white paper and blogs, for inflation-sensitive investors, protection is a core element of risk management. This inflationary episode is likely to be more pronounced and prolonged than we initially thought. And though it's not our base case, it could persist. Ongoing production or shipping disruptions, sharp increases in wage demands, or a dislodging of inflation expectations could occur. Even if our base case plays out in 2022, inflation will remain a risk to sensitive investors in 2023 and beyond. As a result, we recommend speaking to your financial advisor to assess your inflation sensitivity and consider how to hedge against it.

DISPLAY 6: WHILE THE NUMBER OF SHIPS OFFSHORE HAS FALLEN, THE BACKLOG WILL TAKE TIME TO CLEAR



Source: Marine Exchange of Southern California and Bernstein Global Transportation team analysis

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