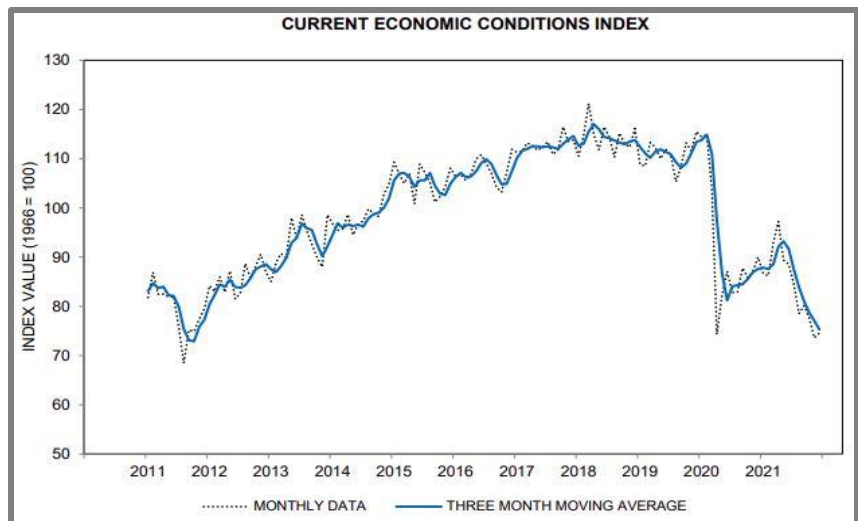


The University of Michigan Department of Economics is known for releasing a monthly survey of consumer sentiment. It's widely tracked and followed by the investment community as a gauge of American consumerism. But this fall, they declared it brokenⁱ: *"Just the [political] partisan differences in sentiment nearly equated to the entire span between cyclical peaks and troughs of prior cycles."* You can see their index in the chart below; consumers' "view" on the economy is worse now than in the depths of the pandemic. I emphasize "view" because *well*, money talks and consumer spending is at record levels and acceleratingⁱⁱ. This doesn't exactly make sense, does it?

In fact, an evidence-based view of the economy right now would show you a plethora of records: record high job quit rates, near record low jobless claims, record home prices, record market prices, record consumption data, fastest income growth since the late 90s, and high business spending levels – all happening under the fastest economic recovery in history.

Fundamentally, the economy is incredibly sound and its foundation is solid. We'd agree with the U. of Michigan about their survey being broken. The real point here is to underline that when people think about risks and expectations, they don't think about statistics. They think about images and stories.



2022 Outlook, Quick Take

Last year we outlined why we believed we were beginning a new cycle. This idea became widely accepted, and now we believe the middle stages of the post-Covid economic cycle has arrived. Think of the middle of a cycle as a 'normalization period' of sorts. Government policies will normalize and market returns + inflation should retract from their high levels. Our focus changes from "where are we in the cycle?" to "**How long does it last? Why is it different? And how durable is it to changes?**"

Historically, this would bring solid earnings growth but with a pullback on valuations. Multiple changes (*i.e. valuations*) are notoriously difficult to forecast, so we favor a more balanced portfolio with a focus on quality businesses. Our next decade themes of housing/electric transition/data/content are still very strong. We're also positive on markets outside of the US as their valuations are materially better but with similar mid-cycle growth prospects.

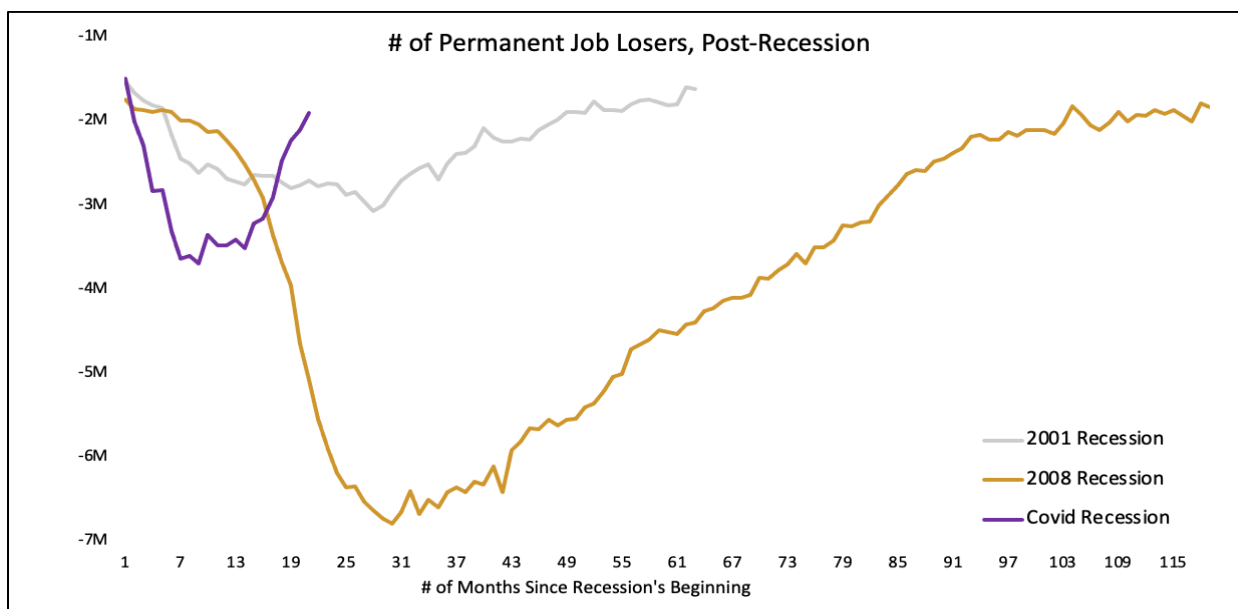
Pictures from the 6 o'clock news or anecdotal stories from your cousin's aunt's friend's Facebook page can create powerful narratives that influence people. **Good stories are too strong to ignore and just too realistic to disregard.** Sometimes they are prescient, sometimes they are misleading – that's the tricky part. Cutting through the noise to find a signal is exhaustive, but we take the view that every story has a number behind it, and every number tells a story.

For the year ahead, government policies will change but the economy is starting on solid footing. To us, the prime narrative will be **“how long will the economy stay hot and how durable is it to changes?”** Let's dive in and marry the story to the numbers.

Cycle differences = how long does it last?

Unfortunately, cycle duration can't be nailed down easily using an average number of years. Our last cycle lasted 12 years. The one before that was 6, and before that was 9. Instead, we want to look at the cycle composition and ask *“what's different this time, and will it make a difference?”*

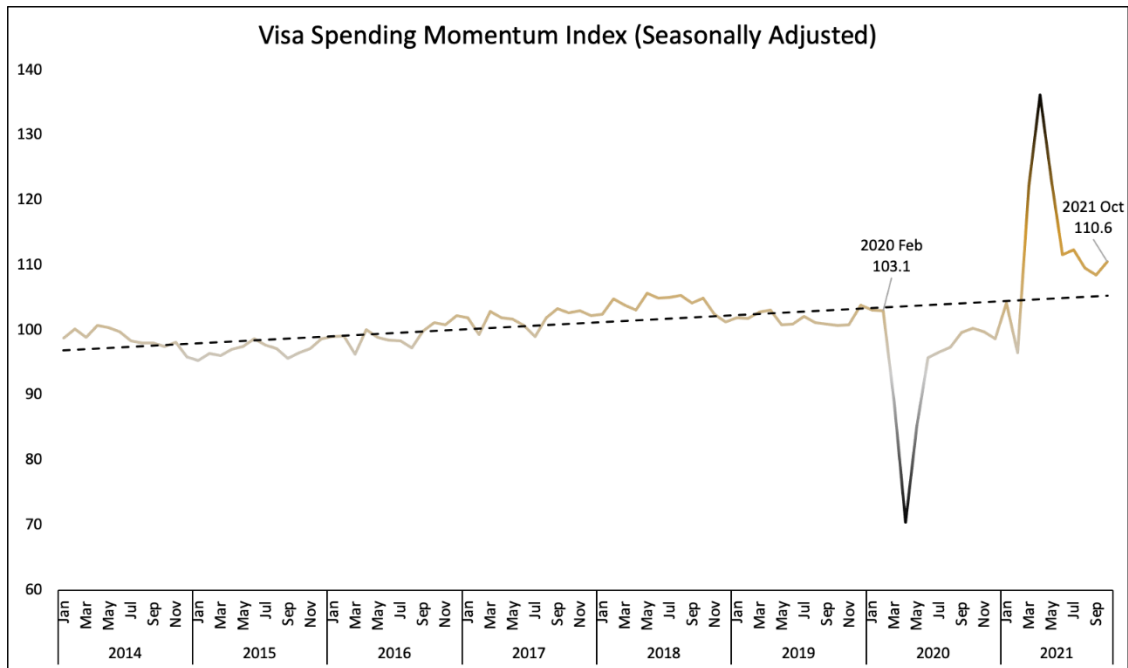
The first big difference: we're moving at turbo speed. Just because the recovery has been super-fast doesn't mean the entire cycle will be short, but it's worth watching. We can see this speed by looking at the number of job losers since the recession started. Using the '08 recovery as a baseline, we're roughly at the same place we were in 2016 (8 years after the recession) in just 18 months. Which leads to difference #2 – why?



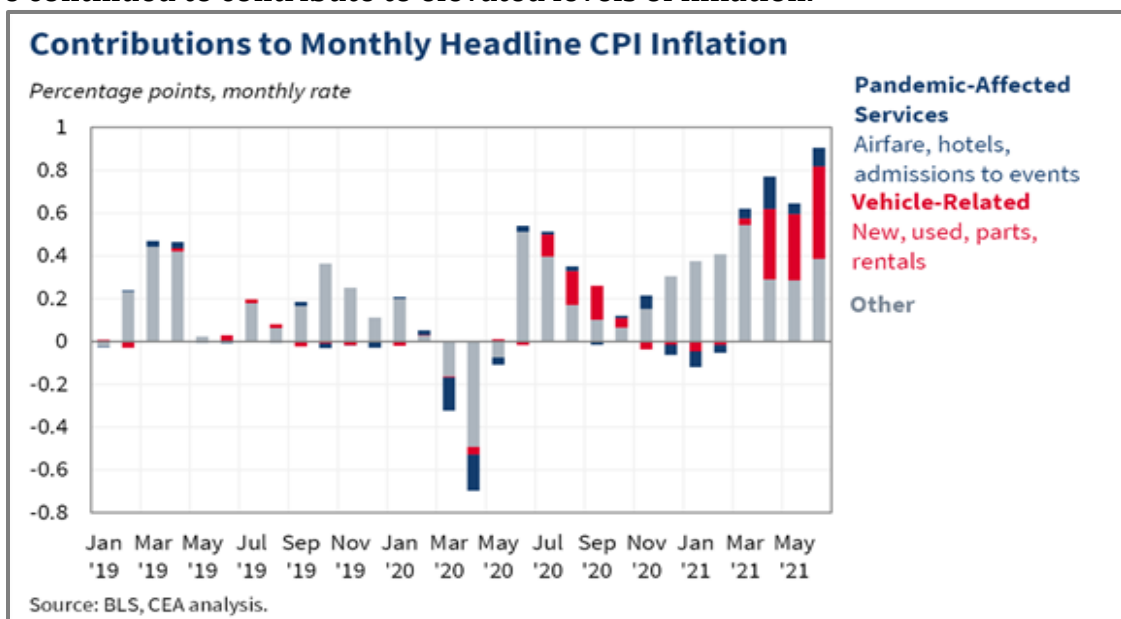
The second big difference: we had a lot of policy support. We've said it many times, the Covid-19 recession was a human crisis, not a financial one. This unleashed a mountain of government support across the globe. To paraphrase Jerome Powell:

We threw everything at this because we thought [Covid] might cause a depression. It didn't, and now growth is really strong. People will judge in 25 years whether we overdid it or not. But now we are where we are.
Jerome Powell, Chairman of the Federal Reserve

These pandemic era policies focused on creating demand (*giving people money*) instead of increasing supply (*cutting business expenses*). Spending **higher↑** means sales **higher↑** means profits **higher↑** means employment and investment **higher↑**. The quick rebound in spending can be seen in the Visa Momentum Index below. In short, **we created a lot of demand post-pandemic** through both Trump and Biden administration policies (loan forgiveness, extended UI, stimulus checks, etc.) **and this demand underpinned the fastest recovery we've seen in many decades.**



The third big difference: we have inflation. To us, inflation is the result of huge demand that supply just couldn't keep up with. To quote the Federal Reserve on Dec. 15ⁱⁱⁱ, **"Supply and demand imbalances related to the pandemic and the reopening of the economy have continued to contribute to elevated levels of inflation."**



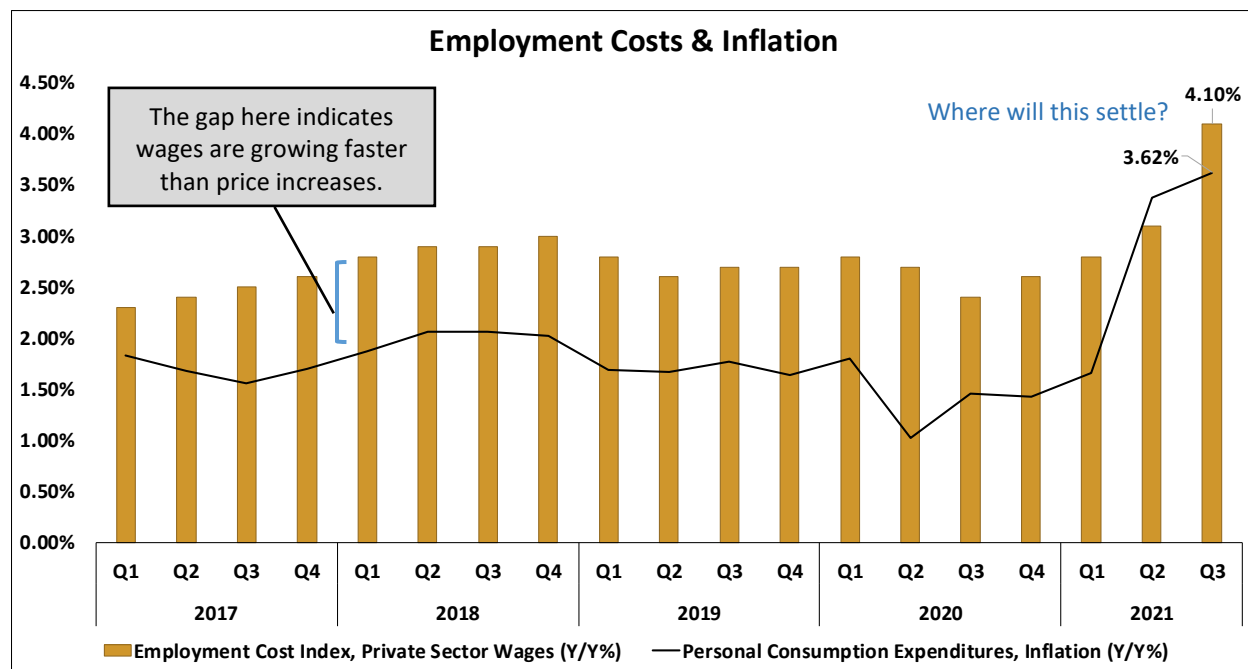
In the chart above from the Council of Economic Advisors (CEA), it's pretty easy to see the Covid-related issues materially boosting inflation over the past year. As these issues work themselves out, **headline inflation will fall. We think this is a fair expectation for 2022.**

(And hopefully that will lay waste to the hyperinflation ghost of the 70s. We've undershot inflation targets for more than a decade, a few months of hotter prices is fine! This has been a prime example of where images and stories dominate over statistics.)

We're more interested in the core rate of inflation ex-Covid. When used cars, airfare, lumber, and shipping container prices all normalize – where will prices be then? To us, the important question going forward isn't "Will inflation come down?" – it will – but rather "What will core inflation look like without Covid waves and supply catch-up effects?"

Inflation Key Points	
Inflation for goods has been high, while inflation for services has been more mundane. We'd expect this to revert.	Inflation is a rate of change metric. For it to be consistently high, prices have to <u>continually</u> increase.
Gas & food prices are <u>excluded</u> from core inflation. Although these are the most noticed, they oscillate quickly and aren't at extremes.	The likely variables that can keep inflation high are rents (<i>home appreciation</i>) and healthcare.
Inflation is becoming broad-based, but gyrating quickly because of the pandemic.	Remember, if wages increase at the same rate (<i>or higher</i>) than prices, then the effect is offset!

Focusing on this question leads us to the dark grey box highlighted above. Demand-generated inflation, like we have today, is predicated on solid wage growth. Higher wages *do* mean higher prices. The chart below shows wage growth (**gold bars**) with inflation (black line). Keeping a healthy gap between the two means wage gains are higher than price increases.



This is our chart to watch for 2022. We don't see a quick return to the very low inflation era of the 2010s because wage gains are usually very sticky. Those wage gains translate into higher prices, but will be somewhat offset by easing covid pressures. It's a grand balancing act that we expect to play out over the next twelve months.

“The thing that resolves inflation is either a much-improved Covid situation or significant reductions in demand, basically another recession. Those two things would resolve the problem, I sure hope it’s the first and not the second”

Tom Linebarger, CEO Cummins, Inc. [industrial conglomerate]

How durable is this cycle to changes?

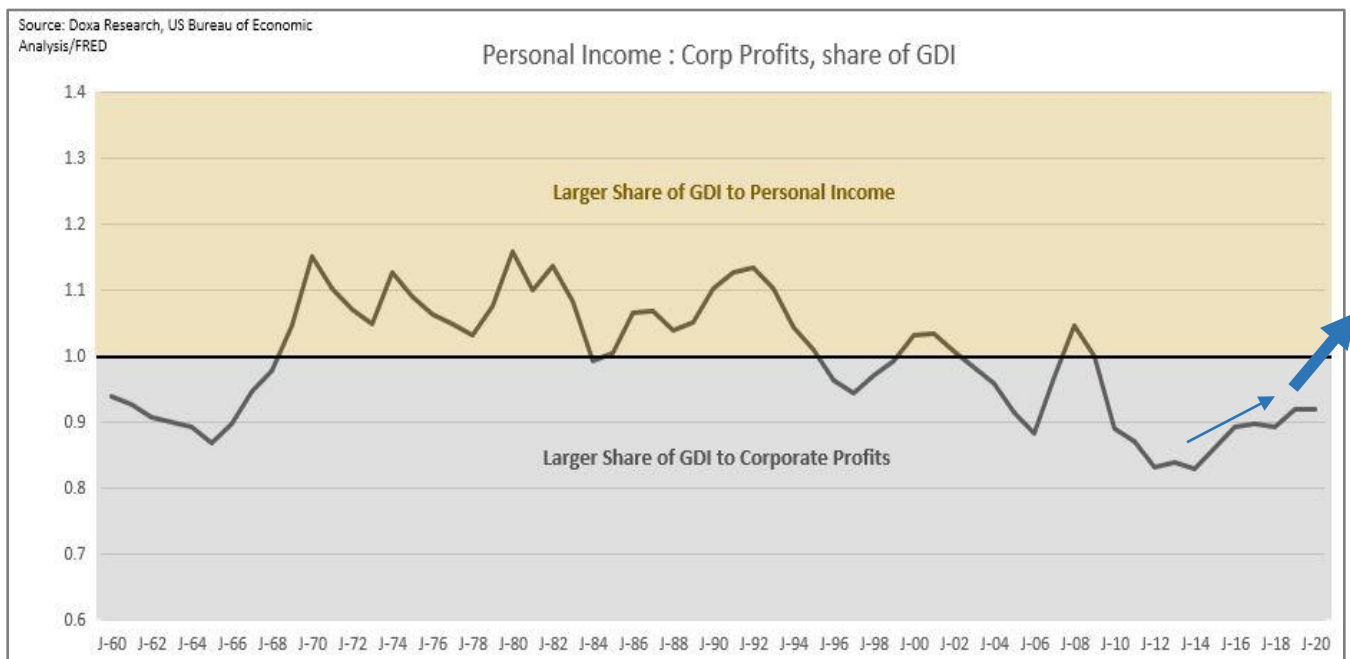
The longevity of a cycle can be mapped back to its durability. Said another way, the stronger the fundamentals of an economy, the more it can withstand changes. It’s not up for debate that there will be changes in 2022. We’ll see a couple of interest rate hikes and fiscal policy turn into a headwind instead of a tailwind. **Basically, the pandemic support from the government is going away – can the economy handle it?** We think so.

Reason 1: The backbone of our economy – *the American consumer* – is very healthy.

Above we mentioned this cycle is different because we’re moving fast and have had big policy support. Together these combined to create a long runway of spending potential. [Interest payments](#) are at an all-time low. [Home equity](#) is looking great. [Checking accounts](#) are flush. [Credit card delinquencies](#) are at a low. [Loans & leases](#) are on the rise. *When the consumer is good, it’s very hard for the economy to be bad.*

Reason 2: The “Now Hiring: \$18/hr!” signs at McDonalds? Those aren’t going away. If you haven’t picked up on it, our economy is basically one big spending cycle. *If spending is good ► sales are good ► profits are good ► businesses expand and pay more people ► those people spend more ► sales are good and so on.* Different cogs and levers change along the way, but that’s a decent framework.

Long story short, by shifting money in our economy to people (*workers over corporations*) most likely to spend it creates a higher aggregate demand (*more sales!*). This shift began a few years back, but is now getting supercharged post-Covid as the labor market changes.^{iv}



The chart above, explained:

This chart shows how the share of national income is split between income (*like a W2, 1099, K1, LLC's*) and corporate profits (*C-Corps*). It oscillates back and forth over long periods of time, and we are in the middle of a shift. Basically, more income is going to household wallets instead of corporate ones.

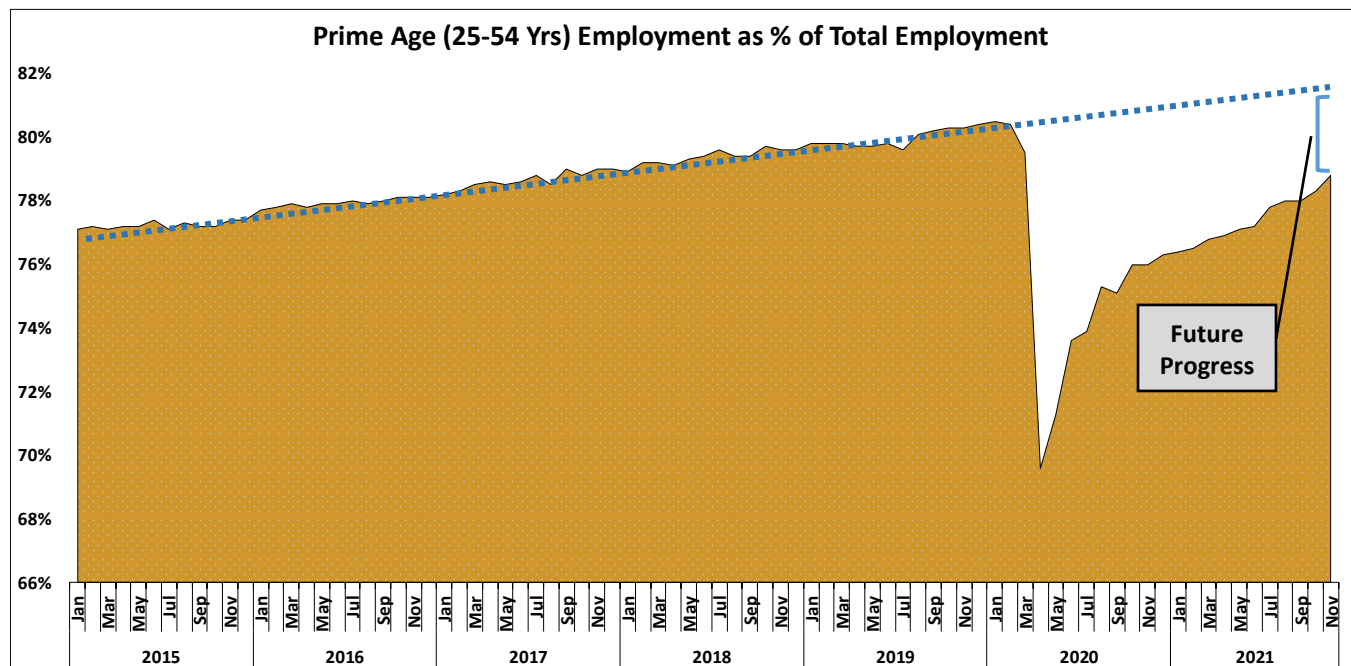
What does it mean?

Worker bargaining power is back. Things like Uber/home delivery/landscaping/etc. – most services, really – are seeing price hikes. Entire business models built on top of cheap labor from the 2010's are forced to reassess how they operate. It's bad news if you wanted cheap contractors or nannies, but good news for the economy as a whole. More money going into the hands of people most likely to spend it is a long growth tailwind.

Reason 3: There's still progress to be made. Durability in a cycle can be pretty fragile when everything is maxed out. One change can tip the scales and throw everything out of balance. Having a few core areas that are steadily growing gives an economy something to fall back on when changes come its way. Right now we see two key areas where progress can be made powering on the cycle: employment and housing.

Employment: the [unemployment rate](#) is already pretty low, [job openings](#) are at highs, [quit rates](#) are at highs, and [unemployment filings](#) are low. **The labor market is robust**, there's no question there – *so where does the continued improvement come from?*

The chart below shows the labor force participation rate for people in the 25-54 age demographic. This 'prime age' adjustment accounts for demographic issues (*retirements*) and the gap between now and its pre-pandemic trend shows a good potential to narrow. In short, future progress in the labor market will be from this cohort: the folks that are coming back into the labor force post-Covid. This will provide good support for further job growth – a strong and required pillar of economic expansion.



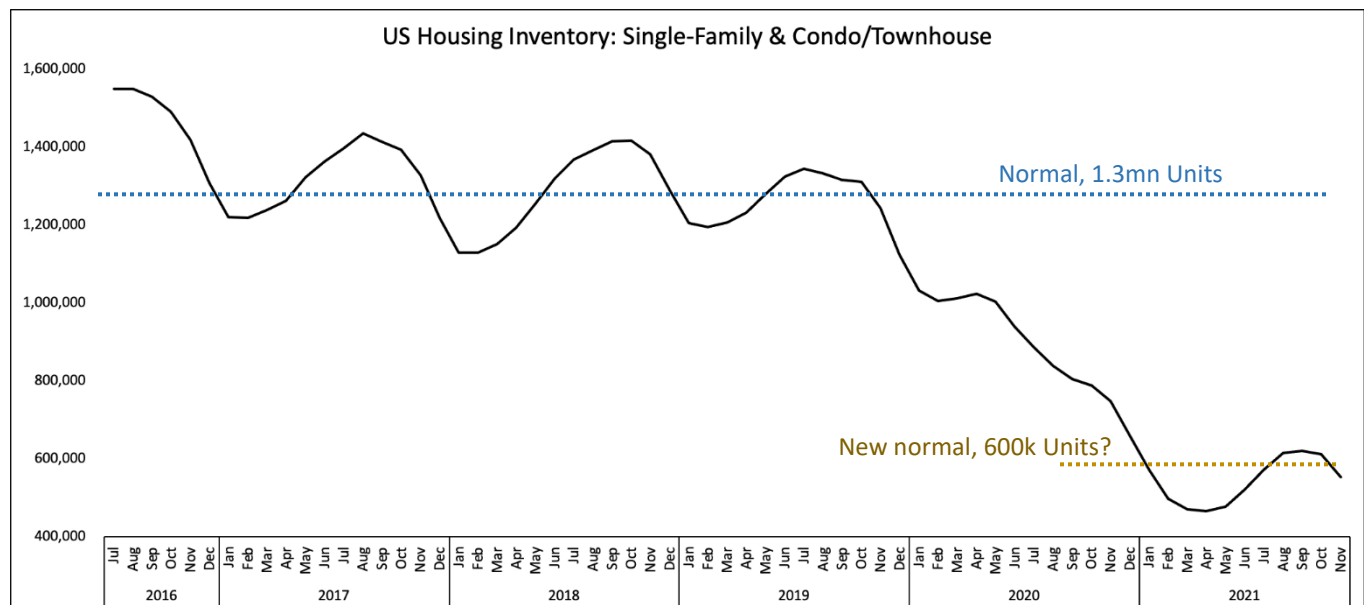
Housing: Everyone is interested in housing. It comes up in nearly every conversation we have with clients. For good reason too – housing as a whole is nearly 18% of our economy!^v The industry is important to say the least and if housing fundamentals are strong then an important economic pillar is strong too. One of the large national home builders summed up the current environment nicely a few weeks back:

“Demand remains very strong. The housing market continues its solid fundamentals: favorable demographics, pent up demand from over a decade of underproduction of new homes, low mortgage rates...and permanent changes to the way Americans view life, work and home.”

Doug Yearly Jr., CEO Toll Brothers

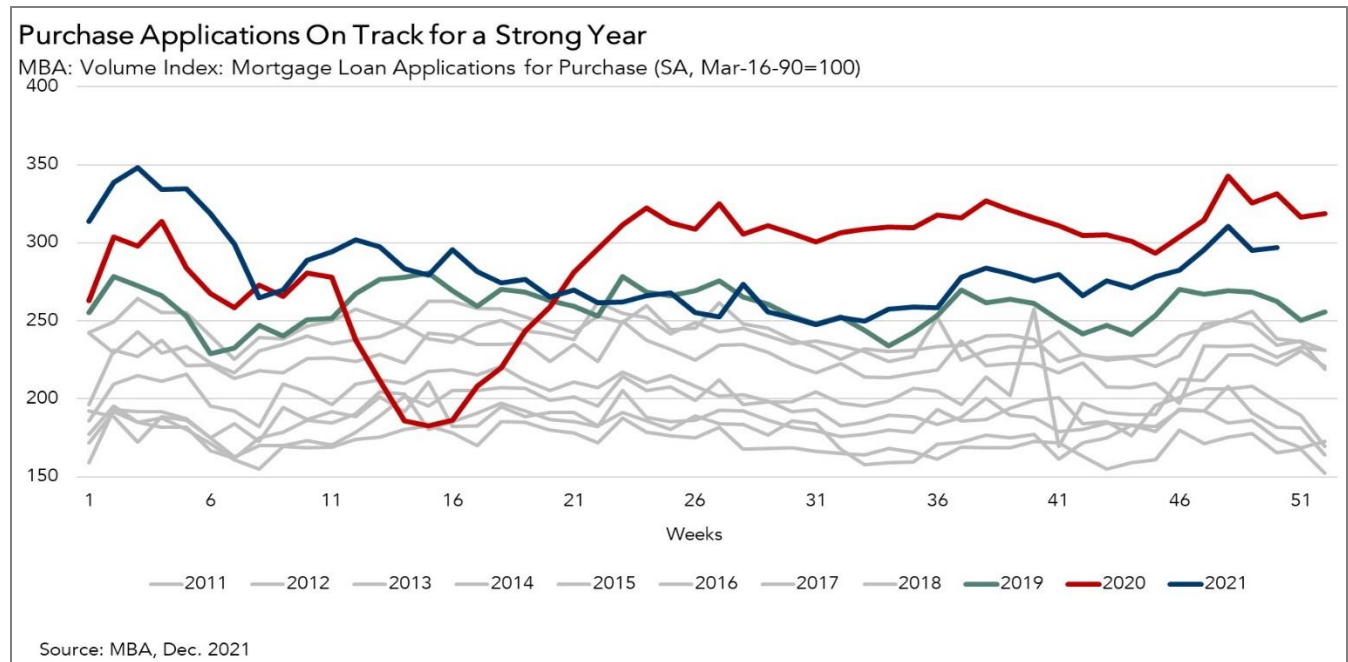
To be sure, Covid created a lot of crosscurrents in the housing market. People moved from apartments to single family homes, from center city Seattle to Bellevue. Baby boomers are retiring in place and millennials are searching for their first homes. [Prices are flying](#) and that leaves many of us asking, “what in the world is going on?!”

Of course housing is very local and different areas are dynamic – **but on an aggregate level we simply don’t have enough homes.** Simply, when more people want to buy a home than we have homes to sell, prices go up. We can see this in inventory data which was at a low this past spring and isn’t exactly normalizing to the pre-Covid trend quickly. We could double the current inventory (*600k homes*) and would still only be back to the low end of the historical range. This set-up is very supportive of prices going forward.

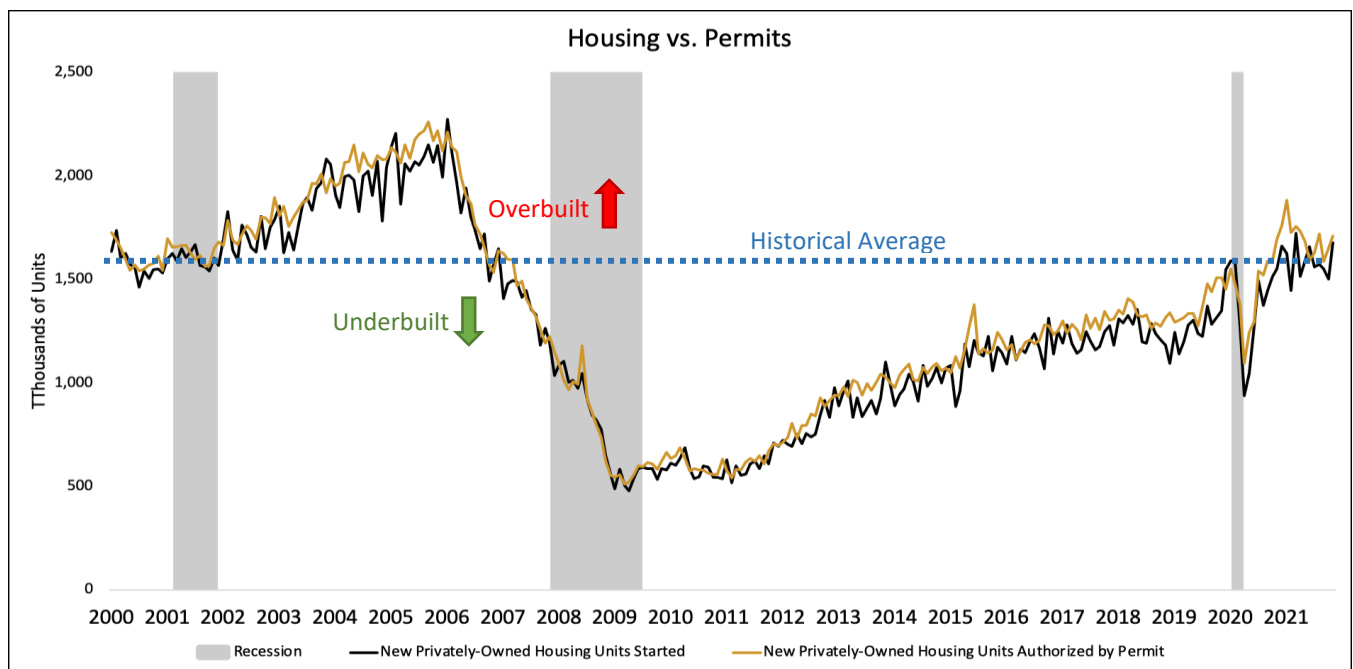


And what about demand? That too is still looking robust. Everything we noted about a healthy consumer in *Reason 1* comes into play here. Additionally, we look at mortgage delinquency rates ([low & trending down](#)) and mortgage purchase applications. The chart on the next page from the Mortgage Bankers Association is a really good one. It shows mortgage application volumes over the weeks of a year, with the last three years highlighted. Note it is seasonally adjusted so seasonal ups/downs are adjusted out. It’s clear to us that an already strong demand environment (2019) got super charged post-Covid (2020). This year we normalized somewhat mid-year, but now are seeing a new uptick in the past few weeks. These seasonally strong mortgage applications

in Nov/Dec set up for a very good demand backdrop in 2022 in our view. This strong demand is broad-based and consistent, so it isn't just about Covid – it's supported primarily by changing demographics and healthy finances.



As for the supply shortage, the consequences of the 2008 housing bust live on. Builders overbuilt for years until the crisis reset the entire sector. In turn, builders became very cautious, disciplined, and focused on cash returns instead of volumes. The result was a decade of underbuilding, way more than enough to absorb the excess capacity of the 2000s. Below you can see this play out in housing starts and permits data over the last 20 years.



We clearly have a long runway in front of us to make up for the years of shortfall, and today we are building about 1.55 million housing units a year, right on the historical average. Without getting too much further in the weeds, the housing market is on strong footing. Small price fluctuations can happen of course, but the underlying fundamentals are very supportive – and that gives the economy another pillar of resilience to stand on.

What happens if mortgage rates go up?

It's a great question and one we understandably hear a lot. The answer is nuanced, but important. Rates are very correlated to refinance activity, but not very correlated to housing **demand**. However, rates do matter for house **prices**. Think back to 2004 when rates were at 6% - was demand any weaker than it is now? *Not really*. People bought plenty of houses in 1988 and rates were at 10%!

Think of this issue as payment amount instead of rate level. A family wants to buy a house and budgets \$2000/mo. That's a \$450k house @ 3.5% or a \$300k house @ 7%. The desire to buy a house hasn't changed, but the home price they are shopping for has. All else equal, if rates go up home *prices* would see a headwind, not *demand*. But beware – all else is never equal! In fact, mortgage payments as a % of income is near all-time lows, so rate increases absent price declines could be absorbed in theory.

Short Answer: we'd expect demand to remain strong paired with slower price appreciation.

Images and stories influence all of us. Sometimes they might even prompt responses that statistics don't support; that's the true power of narrative. Constantly assessing the durability of a cycle is our guard against a rapidly changing landscape. The differences of today's economic picture versus that of the past are a strong consumer, solid housing fundamentals, and an improving labor market. **It's a really great set up for future economic growth**, despite whatever headwinds come our way.

At Doxa Capital, we also safeguard our clients by following a set of principles: 1) use compounding, 2) plan relentlessly 3) minimize selling. It's through this discipline that we have confidence in our portfolios and in turn, those high-quality portfolios make it easier to maintain discipline. **The power of narrative is strong, but we're always trying to see the forest for the trees in the fundamentals.** *Even when it's nine pages worth.*

Chase Lee, CFA
Director of Research

David Mucciario
Director of Financial Planning

Joey Del Guercio
Markets Intern

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ⁱ <https://data.sca.isr.umich.edu/fetchdoc.php?docid=68702>

ⁱⁱ <https://fred.stlouisfed.org/series/PCE>

ⁱⁱⁱ <https://www.federalreserve.gov/newsevents/pressreleases/monetary20211215a.htm>

^{iv} <https://www.epi.org/productivity-pay-gap/>

^v <https://www.nahb.org/news-and-economics/housing-economics/housings-economic-impact/housings-contribution-to-gross-domestic-product>