Morgan Stanley
INVESTMENT MANAGEMENT

Global Multi-Asset Viewpoint

Inflation Outlook – One Year Later

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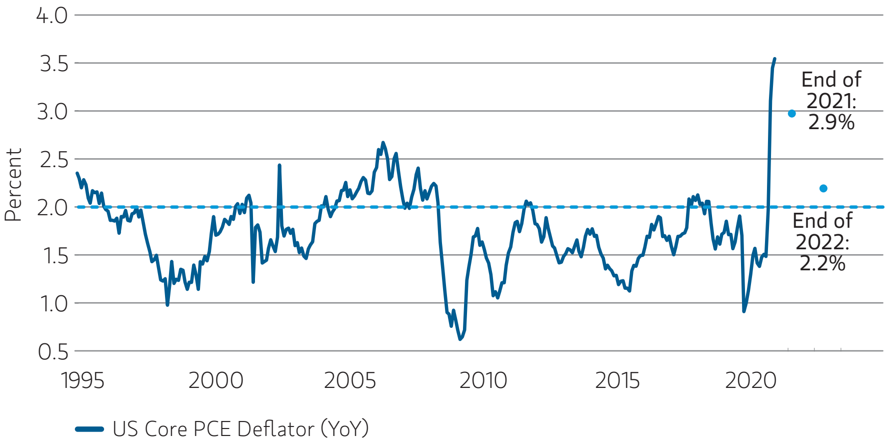
In May of 2020 we argued that the pandemic and the public health and economic policy responses to it would likely prove inflationary.[1] Among the reasons we highlighted then, the one that has been playing out most notably recently is the supply shortfall relative to a stimulus-boosted surge in demand. Eventually the "bottlenecks" that currently plague the global economy will be resolved as production catches up to consumption and inventories are rebuilt, and inflation will likely moderate from the currently-elevated pace. In this note we consider whether the underlying trend still points to elevated inflation. Our conclusion is that the unusually tight labor market, housing boom, and a surge in commodity prices have the potential to maintain inflation at a higher rate (See *Display 1*). Many longer-term factors also remain supportive, especially the recently adopted more aggressive decarbonization targets in the U.S. and many economies. We also consider the main risks such as a slowing China and the peak in U.S. policy stimulus this year.

DISPLAY 1
US Inflation Expected to Remain Above Target
US Core PCE Deflator



Source: MSIM Global Multi-Asset Team Analysis and Estimates. Data as of Aug 20, 2021. This is provided for illustrative purposes only.

[1] MSIM Global Multi-Asset Team, "Stars Aligned for Higher Inflation," *Global Multi Asset Viewpoint*, May 2020.

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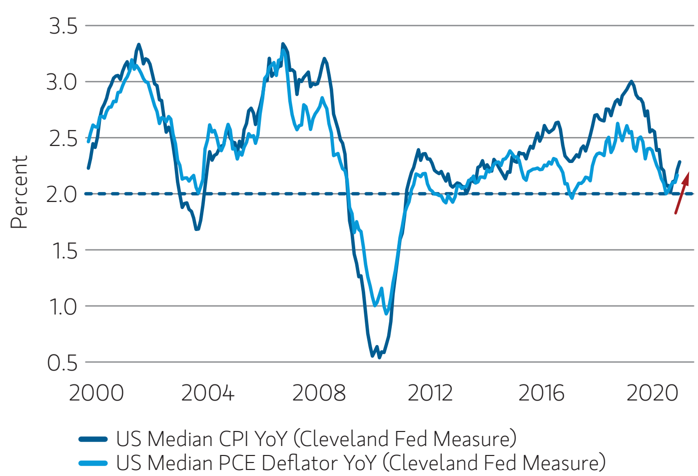
By July of this year, U.S. core consumer price index (CPI) was reported at 4.2% year-over-year and 8.1% monthly annualized pace over the prior three months. Although at present inflation is arguably the most hotly debated topic and an apparent cause for concern for many commentators, expectations of substantially higher inflation on a sustainable basis are not reflected in markets or in professional forecasters' views as the recent pick-up in inflation is expected to prove "transient". Professional forecasters' surveys indicate that personal consumption expenditures (PCE) inflation of 2.4% is expected over five years and 2.2% over the next 10 years. Our own conventionally constructed inflation models suggest that inflation will moderate back to just above 2% (for core PCE) by the end of next year. Following the Fed's June 16 meeting, the rates market has begun to reflect concerns about a hawkish mistake, as the yield curve flattened and inflation breakevens narrowed. At this point, near-term inflation breakevens at 2.46% for the 2-year maturity imply only short-term, "transitory'" inflation is priced in, followed by disinflation in outer years such that long-term inflation breakevens (adjusting for the impact of quantitative easing (QE) and CPI/PCE gap) suggest core PCE at 1.67%. Likewise, the U.S. equity market appears to be discounting continued goldilocks, trading at 20.9x forward price-to-earnings (P/E), as compared to approximately 12.5x observed historically when inflation exceeded 2.5%. Despite the wide-spread worries about inflation, there remains substantial room for market participants and forecasters alike to embrace the higher long-term inflation view once it becomes more apparent.

The acceleration in inflation over the past year has been relatively narrow and concentrated in the core goods segment. While median measures of inflation (for CPI) remain subdued at 2.3% year-over-year in July,[2] prices for core goods rose 8.5% year-over-year (contributing 222 basis points to the total core CPI reading of 4.2% year-over-year) and are now 7.9% above the May 2019 level, in contrast to their average annual inflation rate of -0.33% over the past seven and a half years (from mid-2012 to the end of 2019). The COVID-affected service sector CPI also accelerated to 1.4% month-over-month growth in July (16.2% on a three-month annualized basis), recovering from a depressed level as post-COVID reopening progressed. A year ago, we expected this development due to what we saw as a mismatch between supply and demand caused by generous income support and substantial falls in employment and production. The impact of this supply shortfall turned out to be larger and more global than we had expected. In the U.S., consumer incomes stand 7.4% above February 2020 (i.e. pre-COVID) levels, while industrial production is 0.2% lower. As a result, "bottlenecks" and outright shortages have emerged in many industries and inventory levels more generally are plumbing lows unseen for decades. For example, U.S. autos inventory stands at approximately 24 days of supply, a level unseen in the past 20 years and substantially below the 20-year average of about 75. More broadly the global manufacturing PMI delivery times indicator is at an unprecedented 36, a level also unseen in the past 20 years. Although it may take some time for supply to catch up with rampant demand, ultimately this supply shortfall problem will likely be resolved. We expect core goods price levels to start reverting to their pre-crisis trend, and ultimately core goods inflation to moderate to -1.5% YoY by end of 2022.

DISPLAY 2

Median Inflation Bottomed and Now Rebounding

U.S. Median CPI YoY vs. PCE Deflator YoY



Source: MSIM Global Multi-Asset Team Analysis and Estimates, Haver. Data as of Aug 20, 2021.

Core goods price normalization aside, the important question today is whether inflation will broaden to other categories. Recent data suggests that this process has likely begun. Excluding COVID-impacted goods and services categories, prices rose 2.5% year-over-year in July, up from 1.9% at the trough in January 2021. Moreover, over the past three months the sequential month-over-month annualized pace of increase in this category has run at 3.3%, on average. We see three main reasons to expect price pressures to broaden: a tight labor market in an economy with a positive output gap, continued housing market boom, and elevated commodity prices—most notably, oil.

[2] Median CPI Inflation computed by the Federal Reserve Bank of Cleveland.

Tight labor market and overheating economy

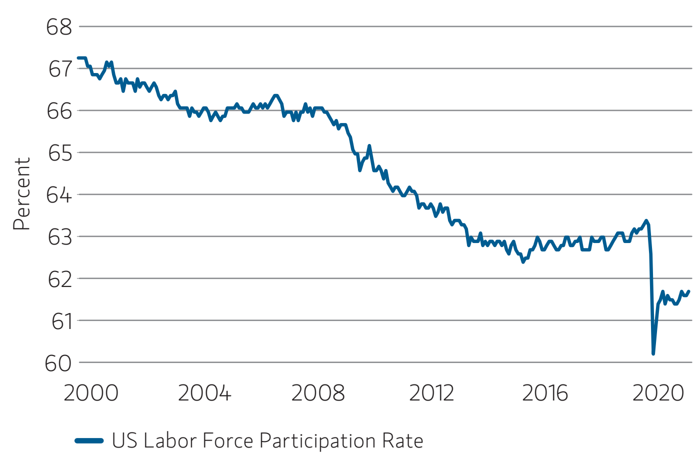
We expect a tight U.S. economy even as transfer payments ebb and production continues its recovery from a depressed level in the throes of the downturn last year. The labor market continues to recover, with the labor income proxy running at 10.0% year-over-year in July.3 Even while the employment recovery has been incomplete (employment remains 3.7% below pre-COVID levels), labor income stands 4.8% above its pre-pandemic level and 8.1% above its 15-year pre-COVID trend. In addition, income is likely to be boosted as a portion of the thus-far accumulated $2.3 trillion of excess savings is gradually spent. Although there is a risk that only a small fraction of it will get spent (as has happened on occasion in the past in similar circumstances in the U.S. and other countries), in the context of healthy consumer balance sheets and positive wealth effects due to high asset prices, we believe it is likely that a substantial, 15-20% share of accumulated excess savings will get spent. The infrastructure stimulus package that is currently under negotiation is likely to contribute approximately 10% to U.S. GDP growth over 10 years starting in the fourth quarter of this year. As the economy continues to reopen, with a boost from excess savings and additional fiscal stimulus, we expect the output gap to rise to positive 1% by mid-2022.

The labor market fairly clearly reflects the tightness of the overall economy. Despite the low employment/population ratio of 58%, wages are already growing at a 3.9% quarterly annualized pace, compared with the 2.4% pace that would be more typical at this point in a recovery. Unit labor costs rose at nearly 4.7% year-over-year on average over the past four quarters, the fastest pace since 1983, despite the still elevated unemployment rate. Labor shortages have been widely reported, with the NFIB Small Business Economic Trends Survey showing the most elevated levels in decades. The labor supply side remains constrained, as the labor force participation rate at 61.7% has made only a partial recovery and remains 1.7% below its pre-COVID peak. Consensus opinion in large part sees labor shortages concentrated in the low wage segments of the labor market and also sees shortages being caused by the expanded unemployment benefits as well as hesitancy to return to work due to virus concerns. The argument for viewing labor shortages as temporary rests on the expectation that when enhanced federal unemployment benefits expire in September, the lower-wage labor force participation rate will rise. However, we believe labor market pressures to be much broader, extending beyond the low wage segment. For example, median wage growth is running at 3.6% year-over-year, higher than the approximately 3% average for the five years preceding COVID-19. In our opinion, this is explained not only by excess demand, but also by what appears to be lasting damage to the supply side. We estimate that the pandemic contributed to 1.6 million excess retirements beyond the normal demographically driven pace. This represents about 1% of the labor force and could account for 0.6% of the labor force participation rate decline from the pre-COVID level. It is unlikely that this part of the labor force will return. Furthermore, as time goes by, returning to the labor force becomes more difficult for other workers who dropped out. We see negative hysteresis in the U.S. labor market unfolding and believe it will contribute to a more subdued labor supply outlook. Lastly, although empirically, consumer inflation expectations have not been helpful for predicting wages or inflation itself in the recent past, during the last prolonged period of higher inflation in the late 1960-1970s, inflation expectations unanchored and continued to increase structurally during that period of time. We note that inflation expectations have spiked up on some measures (e.g. University of Michigan 1-year forward inflation expectations at 4.6% vs. 2.9% average for the past 10 years from 2010 to 2019). Should inflation expectations continue to rise, we believe the risk of sustained acceleration of inflation will rise.

DISPLAY 3

Tight Labor Market on the Back of Slow Labor Force Participation Recovery

U.S. Labor Force Participation Rate



Source: MSIM Global Multi-Asset Team Analysis and Estimates, Haver. Data as of Aug 20, 2021.

[3] MSIM Global Multi-Asset team analysis; based on the July 2021 Employment Situation report. The labor income proxy is calculated as wages x hours worked, and excludes any government transfers.

Other Prices: Housing Boom and Commodities

For most of last year, housing provided a disinflationary impulse and the owners' equivalent rent category of CPI inflation slowed to 2.0% year-over-year at the lowest point in January 2021. However, as vacancies have begun to fall, owners' equivalent rent has accelerated recently to 2.4% year-over-year in July 2021 and has been running at 3.8% sequentially (annualized) over the past three months on average. This is one of the categories outside of the COVID-affected areas (i.e. core goods, select services) that is also experiencing an elevated rate of inflation. Additionally, a lack of foreclosures over the last 18 months has led to lower than expected vacancy rates and is likely to contribute to faster rent growth going forward. U.S. house prices have been accelerating since May 2020 and at present the median price is rising at a 24.4% year-over-year pace. This is substantially above the peak rate of 17% in this measure during the previous housing boom. With mortgage rates remaining 45 basis points below the prevailing average rate on the outstanding stock of mortgages, we believe strong housing activity and rising prices are likely to continue. Over the past 20 years, house prices have tended to lead the housing component of the CPI by about a year and a half, and we believe they are pointing to substantial upcoming upward housing inflation pressure.

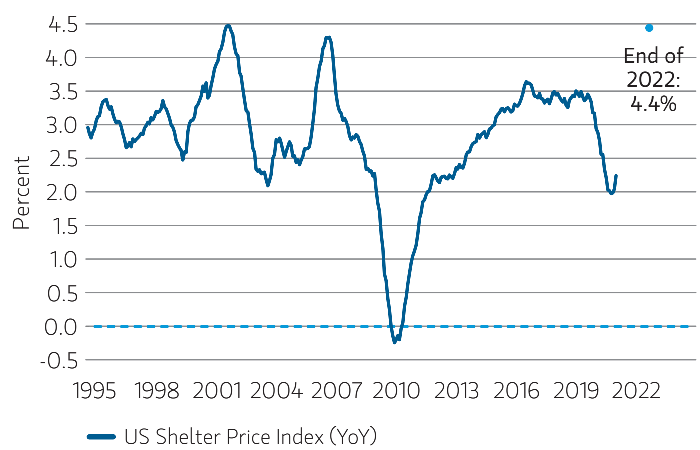
Although core inflation measures exclude commodity prices, we find that commodity prices affect prices more broadly, perhaps because of their role as inputs to most categories. This is especially visible during periods of large price changes. The oil price tripling from the lows last year should raise overall core inflation by approximately 40 basis points over the next 12 to 18 months, based on our estimates. Beyond the near term, we expect faster than previously expected decarbonization will likely to contribute to higher overall commodity prices, as well as broader economy-wide prices. This is because decarbonization goals create disincentives to invest in traditional energy sources and raise the cost of production of other commodities and goods more broadly while simultaneously raising demand for traditional commodities during the clean energy buildout stage.[4] Admittedly, the precise impact of decarbonization on prices in the short term is difficult to estimate.

In summary, U.S. inflation will remain elevated beyond the passing core goods price spike as a result of a closed and rising output gap by 2022, a tight labor market, and buoyant housing and commodity prices. As mentioned, the models we have used over the past decade to forecast inflation suggest inflation will reach 2.9% at the end of this year then come back to 2.2% by the end of 2022, which is modestly above consensus estimates. However, these models are calibrated over the relatively recent history and have never faced an economy with a 5% budget deficit, a +1% output gap, house prices booming at approximately 25%, and the biggest oil price increase in decades all occurring simultaneously. If the owners' equivalent rent component accelerates to follow house prices, it could rise to over 5% year-over-year (it peaked at 4.3% in 2006) versus our conventional model forecast of 4.4%. This alone would raise our forecast for core CPI by the end of 2022. Similarly incorporating other inputs with current extreme readings, we can envision core CPI ending at 2.8% by the end of 2022. However, it must be noted that statistically this estimate is much less rigorous than our conventional model yields, though potentially more intuitive at this point.

DISPLAY 4

Housing Inflation to drive Upward Inflation Pressure

U.S. Shelter Price YoY



Source: MSIM Global Multi-Asset Team Analysis and Estimates, Haver. Data as of Aug 20, 2021.

There are multiple risks to this view, including most notably a longer lasting Delta variant outbreak, a more hawkish than expected monetary policy, and a weak global inflation outlook, mainly driven by slowing growth in China, which we discuss below.

[4] Please refer to the April edition of the Global Multi-Asset Team's Global Multi-Asset Opportunities Fund monthly letter for more details.

Risks: less dovish Fed, peak fiscal stimulus, global disinflation

A year ago, we saw the dovish shift at the Fed as a significant inflationary factor. We took the Fed's new flexible average inflation targeting (FAIT) framework to mean continued policy support even as inflation reached and exceeded its 2.0% target so as to make up for undershooting this target by over 3.6% over the preceding 10 years. TIPS yield remain lower than this time a year ago, with 10-year TIPS yielding -1.06% vs. -0.99% back then. However, this dovish, reactionary rather than anticipatory view of the Fed has come to be questioned since its June 16 meeting. At the moment, we lean towards continuing to expect the Fed to err on the dovish side. First, the Fed appears to view inflation as transient and concentrated in only a few categories and expects inflation to normalize very quickly according to its forecasts. Inflation expectations, according to some surveys and market pricing, as discussed above, have not rebased materially above target, and thus do not suggest un-anchoring. Second, the Fed remains substantially behind on its employment goal. With 5.7 million people still out of work (as compared to pre-COVID employment levels) and a depressed labor force participation rate, it appears the room to get back to this target is substantial. Over the past year, the Fed repeatedly signaled a change in the employment part of its mandate, focusing on a "broad-based and inclusive" goal of maximum employment. This goal remains unmet as, for example, African American unemployment remains at 8.2%, substantially above the 5.4% overall unemployment rate. The deceleration in employment growth this year (averaging approximately +567,000 per month preceding the robust July payrolls report), argues for additional patience from the Fed, not preemption. If the current pace of payrolls growth remains subdued at approximately 500,000 per month, it would take about another year to get back to the pre-COVID level of employment and 27 months to get to a level of employment consistent with pre-COVID trend growth. As economic growth slows over the coming months from the currently torrid pace, it is likely that payrolls growth will slow accordingly (though both will likely remain above trend). Thus, the incentive for the Fed to remain on the sidelines will remain substantial. It is likely that while the employment mandate remains unfulfilled and the Fed remains patient, inflation will continue to accelerate due to the labor market in effect remaining tight. In other words, we believe that the chance of a policy error is high as policy remains loose to fulfill the Fed's employment goal despite achieving and overachieving the inflation goal.

On the other hand, booming housing prices and overvaluation in many segments of financial markets are a potential cause for concern, or at least they perhaps should be. However, financial stability remains excluded from the Fed's mandate and as such we expect its traditional goals of inflation and employment to dominate. We suspect that the combination of factors discussed here is likely to lead the Fed to make a dovish mistake by perceiving inflation as temporary and keeping policy accommodative to achieve its labor market goal, despite the already tight labor market.

We assume continued fiscal policy support in the form of the infrastructure package worth $1.5 trillion of net spending. Gridlock following the mid-term elections is also fairly likely, which, everything else equal, may work to remove fiscal policy as a major driving force of excess demand growth in 2023-2024. In the past 50 years when one party controlled both presidency and the Congress, it lost control of the latter 75% of the time, on average ceding 47 combined seats. With the Democratic majority being slim in both chambers (only a four-seat majority in the House, and a split Senate), a divided government appears likely in 2023-2024. Our assessment a year ago that continued fiscal support, assisted by a subordinate monetary policy, would remain a feature of the new environment may thus be premature and face a hiatus in 2023-2024. It may be back on the agenda following the next downturn, but this is beyond the relevant time horizon.

The recent outbreak of the Delta variant as well as doubts about vaccine efficacy and longevity may lead to slower than expected activity normalization. This poses additional risks to growth. Sustained inflation outbreaks in the past have also been globally synchronous. Today, we see the higher inflation risk concentrated mainly in the U.S., while most other major economies begin from a lower starting point for inflation and are expected to recover more gradually. Moreover, the recent policy tightening and a growth slowdown in China pose the risk of disinflation pressures there. Many emerging economies that have seen inflation spikes recently (e.g. Brazil, Mexico, Russia) have been tightening monetary policy. We expect inflation to peak imminently in most of these economies and see them contributing to disinflation globally.

In conclusion, and in spite of the risks outlined here, we believe inflation will likely moderate from the current torrid pace as bottlenecks lessen over the coming months but inflationary pressures from a tight labor market and a housing boom will continue to lift underlying trend inflation. Peaking fiscal and monetary support notwithstanding, we expect inflation to remain elevated this and next year.

Risk Considerations

There is no assurance that a portfolio will achieve its investment objective. Portfolios are subject to market risk, which is the possibility that the market values of securities owned by the portfolio will decline and that the value of portfolio shares may therefore be less than what you paid for them. Market values can change daily due to economic and other events (e.g. natural disasters, health crises, terrorism, conflicts and social unrest) that affect markets, countries, companies or governments. It is difficult to predict the timing, duration, and potential adverse effects (e.g. portfolio liquidity) of events. Accordingly, you can lose money investing in this portfolio. Please be aware that this portfolio may be subject to certain additional risks. In general, **equity securities'** values also fluctuate in response to activities specific to a company. Investments in **foreign markets** entail special risks such as currency, political, economic, and market risks. 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It is possible that these issuers will not have the funds to meet their payment obligations in the future. **Real estate investment trusts** are subject to risks similar to those associated with the direct ownership of real estate and they are sensitive to such factors as management skills and changes in tax laws. **Derivative instruments** can be illiquid, may disproportionately increase losses and may have a potentially large negative impact on the Portfolio's performance. **Illiquid securities** may be more difficult to sell and value than publicly traded securities (liquidity risk). By investing in **investment company securities**, the portfolio is subject to the underlying risks of that investment company's portfolio securities. In addition to the Portfolio's fees and expenses, the Portfolio generally would bear its share of the investment company's fees and expenses. **Subsidiary and tax risk**. The Portfolio may seek to gain exposure to the commodity markets through investments in the Subsidiary or commodity index-linked structured notes. The Subsidiary is not registered under the 1940 Act and is not subject to all the investor protections of the 1940 Act. Historically, the Internal Revenue Service ("IRS") has issued private letter rulings in which the IRS specifically notes or a wholly-owned foreign subsidiary that invests in commodity-linked instruments are "qualifying income" for purposes of compliance with Subchapter M of the Internal Revenue Code of 1986, as amended (the "Code"). The Portfolio has not received such a private letter ruling, and is not able to rely on private letter rulings issued to other taxpayers. If the Portfolio failed to qualify as a regulated investment company, it would be subject to federal and state income tax on all of its taxable income at regular corporate tax rates with no deduction for any distributions paid to shareholders, which would significantly adversely affect the returns to, and could cause substantial losses for, Portfolio shareholders. **LIBOR Discontinuance or Unavailability Risk**. The regulatory authority that oversees financial services firms and financial markets in the U.K. has announced that, after the end of 2021, it would no longer persuade or compel contributing banks to make rate submissions for purposes of determining the LIBOR rate. As a result, it is possible that commencing in 2022 , LIBOR may no longer be available or no longer deemed an appropriate reference rate upon which to determine the interest rate on or impacting certain derivatives and other instruments or investments comprising some of the Fund's portfolio. **Portfolio Turnover**. 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