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Supply shocks, stalling growth and inflationary surprises

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Introduction

Stephen Dover, CFA
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Inflation is currently a more pressing concern than most other macroeconomic factors due largely to labor shortages and supply-chain disruptions. Our economists are questioning whether inflation could prove longer lasting than initially thought—with some taking a contrarian view versus the prevailing market "transitory" sentiment.

In this edition of Macro Perspectives, we explore potential policy shifts in 2022, labor dynamics, oil and gas shocks, and the implications of slower growth in China.

Below are a few highlights of our conversation:

I feel a little bit like a Cassandra[1] but, for quite a long time, we have felt that inflation will have more legs than others originally anticipated. We don't think that inflation will come down sharply in the first half of 2022. We believe we're seeing the beginnings of what really does look and feel and smell like second-round effects, and those tend to have more staying power.
Sonal Desai, Ph.D., Chief Investment Officer, Franklin Templeton Fixed Income

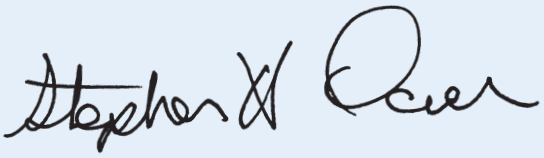
Longer-term disinflationary headwinds could re-emerge once we get past the pandemic—like globalization and technology. There's been a significant amount invested in technology over the last year. The potential of that productivity boost allows for a little cooling in price pressures.
John Bellows, Ph.D., Portfolio Manager, Western Asset

The labor market is probably the most important dynamic to watch, and it has been a bit of a surprise. It's a supply shock that could affect longer-term inflation dynamics—but it's probably still a bit early to know.
Michael Hasenstab, Ph.D., Chief Investment Officer, Templeton Global Macro

As an investor and market observer, I need to ask myself what inflation is telling us. Like the difference between good and bad cholesterol—there's also good inflation, led by unexpected demand, and bad inflation, caused by supply constraints.
Gene Podkaminer, CFA, Head of Research, Franklin Templeton Investment Solutions

We have a very serious energy price shock taking place right now, and it's starting to reverberate—the inflation effects are beginning to be felt in a real way. I don't think alternative energy is equipped to respond to this shortage.
Francis Scotland, Director of Global Macro Research, Brandywine Global

I hope you find the discussions in Macro Perspectives better inform your decision-making.



Executive summary

Cooling growth meets rising inflation

Since publishing Macro Perspectives in August, global economic growth has cooled from extremely high levels, while inflation has surprised on the upside. Each day, new inflation-related data are debated and added to the giant jigsaw puzzle that's macroeconomic forecasting. All five of the Franklin Templeton economists I recently spoke with agree inflation appears less transitory; they're looking for clues on how persistent inflation may become.

So, what's changed since our last roundtable discussion this past summer? A triple supply-side whammy comprised of supply chain disruptions stretching from Shanghai to Los Angeles, frustrating labor shortages, and surging energy prices. Throw in significant policy shifts in China, slowing Chinese economic growth and the evolving Evergrande meltdown, and you'll understand we had a lot to discuss. Below, I've highlighted parts of our conversation about supply shocks and subdued growth momentum.
Let's start with the demand side of inflation: Will a back-to-normal economy unleash US consumer demand and force an earlier-than-anticipated US interest-rate hike?

Demand-driven inflation

If there was a clear area of agreement between John and Sonal, it's that we are experiencing demand-driven inflation that is likely to persist into 2022. They differ in the path forward for US consumer spending. John thinks fiscal stimulus-driven demand is mostly behind us, while Sonal points to the recent savings firepower of US consumers and believes they could begin spending more into next year. As Sonal rightly reminded us, no country matched the shock-and-awe combo of US fiscal stimulus (unprecedented in its size) and robust monetary policy.

For Gene, demand-driven inflation is a welcome problem to have. Like good cholesterol, this type of inflation typically occurs when a healthy economy heats up and runs a little too hot. Central banks can tackle this by raising interest rates. Supply-driven inflation, however, poses more difficult challenges. Like bad cholesterol, supply driven inflation often takes longer to resolve and risks becoming chronic if left unchecked. If there's something that keeps economists up at night, it's supply shocks, especially if caused by disruptions in the labor supply.

Not-in-time delivery

The first supply-side shock boosting inflation—global supply-chain bottlenecks—is easy to spot with the naked eye. Francis pointed to the enormous backlog of container ships clogging ports in the United States, Europe, and Asia. Having spent years perfecting just-in-time deliveries to amplify capital efficiencies, abrupt shortages of key components—like semiconductor chips—means factories cannot match consumer demand. (Good luck ordering the newest iPhone!)

These global kinks are stalling the economic recovery. Whereas John and Gene offer optimism that the supply hiccups are plain to see and will work themselves out, Sonal worries about a difficult holiday shopping season. If companies cannot meet demand, we could see higher inflation and lower growth.

Labor shortages

When it comes to supply shocks, Michael thinks labor supply and productivity are key to understanding inflation's trajectory. During our conversation, all five economists expressed bafflement and fascination (their words) at the unfolding labor dynamic. Case in point: with the recently super-sized US unemployment benefits behind us, the anticipated surge of labor reentering the workface hasn't materialized, despite millions of US job openings.
Is rising labor productivity from digitization and automation fundamentally altering the skills and contours of labor participation?

In Gene's view, answering this question will take economists years to unpack. Ultimately, government policymakers, not just central bankers, should help promote workforce skills that complement a high-tech driven economy.
In the near term, Michael's team is closely watching market data to see if rising wages transition into a permanent labor shock. We all agreed that this belongs on our pile of economic worries.

Oil and gas shocks

The global surge in energy prices is the third supply-driven shock scrambling inflation forecasts. Francis traces the supply imbalance back to climate activists and policies, like carbon taxes, that starve the energy sector of capital needed to expand supply. Greener sources like wind and solar energy lack the scale to meet global demand. In the United States, John notes shale-oil production remains tepid despite the recent price surge.

Compared with pre-pandemic capacity, roughly half of US oil rigs remain offline,

due partly to company downgrades and higher costs of capital. In terms of strange climate-related impacts, Germany is shutting down its zero-carbon nuclear power (29.5% of its 2020 energy mix), which forces it to largely replace it with coal-fired sources.[2] As Michael reminds us, energy prices have thus far played a relatively small role in terms of US inflation. Not so in Europe, where energy has an outsized impact on inflation. Higher diesel prices could spark visceral reactions at the fuel pump, embed wage increases and trigger more inflation, creating yet another worry.

A welcome cooling

China's leveraged property sector, including the slow-motion implosion of its largest real estate developer (Evergrande), has been top of mind for global investors. And yet, our economists think the bigger story is China's new "common prosperity" regulatory framework and economic slowdown.

Representing 20% of the world economy, China is rotating the foundations of its economy away from debt-driven growth. This has naturally translated into a cooler Chinese economy, which John believes can take some heat out of the global economy.

WORRY WILDCARDS

Here are the topics our economists are watching closely or, in some cases, keeping them awake at night:

Inflation surprise
The US dollar may telegraph in advance if the US Federal Reserve (Fed) is misjudging the persistence of inflation, according to Francis.

Confrontational geopolitics
Michael thinks the adversarial dynamic between China and its largest trading partners warrants close watching.

Consumer demand
The firepower of US shoppers, in Sonal's view, could very well heat up demand-driven inflation in 2022.

Labor markets
John finds the labor market baffling and worries the US may still be a long way from full employment by early 2023.

Stocks vs. bonds
Although stocks are fairly priced, in Gene's view, they still merit a larger portfolio allocation relative to bonds.

Given the three supply-side shocks, that cooling could be a welcome sedative. For Francis, China's slowdown helps explain the strength of the US dollar. Despite a big deterioration in the US current account and trade deficits, the US dollar remains buoyed (for now) against a backdrop of decelerating external growth, most notably in China.

To close our discussion on a note of optimism, we end with Francis and Michael comparing recent technology-driven productivity gains in the US economy with peers like Japan. Despite mounting geopolitical tensions between China and the United States, all of us agree the digitization of the US economy (especially fintech) is an incredible development that we will explore more in the future.

Viewpoints from the roundtable

Demand-driven inflation

Considering the pandemic, inflation is higher today than some anticipated—what factors are you considering when you look at current inflation levels?

Gene: If I could take a step back, a year and a half ago, everybody was wringing their hands about the trajectory of growth. And that transitioned to concerns about inflation and what is driving it. We look at inflation from both the supply and demand perspective—are there constraints on supply chains and logistics, or is it being driven by the demand side as the mix of goods and services change? There's a lot of latent demand in the system. As we try to understand the interplay between the supply side and demand side, and what that means for inflation in general, our view is there will be elevated inflation going forward, but it's likely to be largely temporary.

It seems likely a lot of the supply and demand kinks will get worked out. As an investor and market observer, I need to ask myself, "what is inflation telling us?" Do we have inflation heating up because of rising growth—which may need to be tamped down via policy response—or is inflation materializing because of supply-side issues? These are very different types of environments. Like the difference between good and bad cholesterol—there's also good inflation and bad inflation. A healthy economy running well can cause good inflation. If it runs too hot, central banks have the tools to cool things off. But bad inflation coming from the supply side has much different implications.

There are other factors which concern us more than inflation in the longer-term. In the short term, however, it's something to watch. I don't think we're going to see continued month-over-month growth in certain components of inflation; used and new car prices can only increase so much before they start to normalize.

The risk of inflation may not be quite as transitory as once thought, are there concerns of runaway inflation?

Sonal: For quite a long time, we have felt that inflation will have more legs than others had originally anticipated. I think a lot of authorities across the world, including the Fed, were caught a bit off guard by the quantity of inflation that we have been seeing. In addition to the supply-side transitory factors which were anticipated, in the case of the United States, we also had additional stimulus-driven, demand-driven inflation.

We don't think that inflation will come down sharply in the first half of 2022. We continue to anticipate elevated inflation, although perhaps not at the rates we have been seeing recently (the September consumer price index came in at 5.4% year-over-year). We think the inflation rate should moderate a bit in the first two quarters of next year, maybe in the 4% range and closer to 3% toward year end—and then maybe even dip below that. I think we still have a contrarian view as to how long inflationary pressures will last though.

We believe we're seeing the beginnings of what looks and feels and smells like second-round effects—those tend to have more staying power. That's something we are looking at very carefully.

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>
> **Sonal Desai**

Not-in-time delivery

Supply-chain bottlenecks are contributing to inflation. What factors are triggering the bottlenecks, and will they be resolved to meet the high demand we are seeing?

Francis: The first supply issue I see affecting the economic story is distribution. There are ships sitting on the US West Coast ports waiting to be unloaded. That's a supply block. Another supply issue at least in the United States is labor. The supply of labor is not bouncing back. It remains to be seen whether this situation will change much now that the federal enhanced employment benefits have come to an end.

I agree much of what we're seeing in terms of US inflation relates to supply effects. Looking at the crisis from the perspective of a natural disaster, we had an historic bust followed by an historic boom. We've never seen anything like this in recorded economic history. The world economy has reopened, and demand has come with it. However, the supply side of the economy—just-in-time delivery—was developed over a period where we had incremental, predictable expansion in the global economy every year. In the four quarters ending in June 2021, US real GDP increased over 12%—that is extraordinary.[3]

John: I want to make three distinct points here. First, supply constraints are a big part of the current inflation story. In South Asia, the COVID-19 Delta wave shut down factories, and that has had ripple effects that then feed into the ability to produce goods, which subsequently shows up in terms of bottlenecks and higher prices in other countries. However, those shutdowns won't last forever and should eventually resolve the supply constraints.

My second point kind of dovetails with something Sonal said—there has been a big demand component of this inflationary environment as well. Demand has been stronger than expected this year, partly due to the large US fiscal stimulus in March. However, I think a lot of that fiscal stimulus fuel is now behind us, and growth is now slowing in the United States from the very high levels previously seen when we started to emerge from lockdowns. I think we may be past that flurry of pent-up demand that had boosted inflation early in the year.

Third, the type of inflation we've seen is not obviously problematic because longer-term disinflationary headwinds could re-emerge post-pandemic—headwinds like globalization and technology. There has been a significant amount invested in technology over the last year. The potential of that productivity boost allows for a little bit of cooling in price pressures. So, I see some longer-term disinflationary forces that are still with us, but perhaps in the background currently.

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>
> **Michael Hasenstab**

Labor shortages

How are labor markets playing into your inflation and growth outlook?

Michael: I would say the labor market is probably the most important dynamic to watch, and it has been a bit of a surprise. I think that's a supply shock that could really affect longer-term inflation dynamics, but it is probably still too early to know. Government programs ended and we didn't see a surge of labor reentering the workforce in the United States. I think some of it has to do with older people deciding to take early retirement. And some of it has to do with labor leaving the country. Maybe there's a lag in terms of people coming back who were on those programs before they reenter the labor force. That will be very important to watch over the next few months.

Throughout global history, we've seen that if supply shocks last long enough, if it changes inflation expectations more permanently, and they become embedded in real wage adjustments, then the probability is they become more permanent shocks. If they are temporary and you don't get permanent real wage adjustments, then inflation expectations would come back down. If that is the case today, I think the argument of them being temporary can also make sense.

Sonal: I feel the jury is still out in terms of the labor market, simply because we are in completely uncharted waters. We have large numbers of unemployed—close to 8 million in the United States as of the end of September[4]—but a substantially greater number of unfilled job openings. So, unless we think something dramatic happened over the course of the last year, which widened the existing skills mismatch, we probably need to admit we're seeing some baffling trends in the labor market. Have people's desires to work changed? Could it be pent up savings? We are starting to see the sunsetting of a lot of the extraordinary pandemic-led labor market measures that governments put into place—will that have an impact?

The labor market certainly impacts our growth outlook, but there are two more factors. On the one hand, US COVID-19 cases have more than halved from their September peak;[5] this suggests that the growth reduction in the third quarter—when services slowed down quite considerably—should prove transitory. On the other hand, supply constraints are limiting factory production levels and could hold back growth.

The fourth-quarter holiday shopping season will be very telling in terms of our outlook on growth and inflation.

Gene: It's hard to ignore the labor market when we think about growth and interest rates. Maybe now is the time to reflect on what full employment means today, compared to what it meant two years ago, or 10 years ago, or 20 years ago. We must consider the mismatch Sonal referred to in terms of people out of work versus open positions. And what is driving that mismatch—is it skills, geography, or something else? Has the labor market changed somehow—has technology and productivity enabled a different type of labor-force participation than what we've seen before?

Ultimately, when you boil everything down in terms of growth, what really matters is the size of the population and how productive it is. Let's assume the population is a given for now. But how productive is it? What's the mix of labor versus capital? Those are some of the fundamental questions that underlie all economies. There's a different mix in the United States and other developed markets, versus emerging markets. But specifically in the United States, perhaps we are at an introspective moment in understanding what it means for workers to be gainfully employed. Which sectors see greater demand for labor and which sectors or industries have higher productivity catalyzed by technology and automation, and thus need less human capital?

These are profound and fundamental questions operating on long horizons—a five or 10 or 20-year question that ultimately will underpin economic growth in the United States and some of the other major economies. We need to look at the composition of the labor market in terms of the demand for workers, the types of skill sets that are involved, and the mix of goods and services consumers in the United States and elsewhere are demanding in order to understand how those come together and what it means for policy, and society, going forward.

Oil and gas shocks

Energy prices have climbed significantly in recent months—how are prices and the potential for energy shocks factoring into your outlook?

John: I think higher energy prices are a clear example of the supply constraints we've been discussing. And one of the big supply issues going on in the oil market is the tepid rebound in US shale oil supply. Rig counts are roughly half of what they were pre-pandemic, even though world prices are higher.[6] One of the likely reasons is the higher cost of capital. But whatever the reasons are, supply is more constrained than what we had pre-pandemic and that pushed up prices.

Francis: This is a big issue. Energy price increases always have consequences. In my view, this is also a by-product of concerns about global climate change—generally viewed as the existential threat to the planet. The policies that have been brought to bear on this threat have been mainly repressive, such as carbon taxes and/or pollution quotas. We also have financial and activist pressure. The cumulative effect of these developments is to starve the traditional oil and gas sector of capital, which compromises the ability of companies within the sector to respond to rising prices with increased supply.

I don't think alternative energy is equipped to respond to the developing shortages—a risk many have highlighted. And I can't see alternative energy meeting that demand within the next 10 years. So, we have a potentially serious energy price shock unfolding. The inflation risks are apparent: rising energy prices are visceral; people can see it at the gas pump and on their heating bills. They can be expected to go back to their employer and demand higher wages especially if there is a labor shortage.

Historically, if a supply shock reduces the ability of the economy to grow at a non-inflationary pace, then the central bank needs to react. And historically, that's what the Fed did. Over the last 25 or 30 years, the Fed reacted to energy supply shocks and rising energy prices/inflation by tightening monetary policy. This time they are not. So, it will be interesting to see how policymakers react to this energy shock if the supply side can't respond. I think it's quite serious from the point of view of where

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> **Gene Podkaminer**

we end up a year or two from now—both in terms of the real economy as well as the level of inflation.

Michael: Francis raises an interesting point on the energy side. If it's a permanent sort of climate-change effect, then that's not as much of a temporary shock. If it's just a supply disruption that is more temporary and eases, then there is less of a concern. But if it is the former, that could be more structural in nature.

If you look at inflation decomposition between Europe and the United States, European inflation is being driven by a lot of energy price effects, but less so in the United States. In the United States, we see more of a hit from things like automobile price increases and other narrow components. That provides comparison case studies to evaluate whether these price increases lead to demands for higher wages. How long do people tolerate higher energy prices without demanding higher wages to keep their personal consumption in line? I think Europe will be an interesting part of the world to watch because Europeans are being hit by energy prices at an even greater magnitude than the United States.

Continuing with that idea, Michael, what's your outlook on Europe?

Michael: The issue in Europe has a few factors. One is how the energy shock flows through their economies, whether this is permanent or temporary. We probably won't know the answer to that for a couple of months. It also feeds into the big supply disruptions underway. Huge supply disruptions, particularly in places like Germany, are stalling some of the economic recovery that would have otherwise been occurring because the demand was there, but companies simply cannot get the goods to the end consumers.

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>
> **John Bellows**

These are the same questions that we're asking in the United States; we need to understand the inflation dynamics vis-a-vis whether certain shocks are permanent or temporary—do they feed through into wages and how quickly can the supply respond to allow growth to normalize?

A welcome cooling

Global growth looked strong this summer but slowed due to the resurgence of the COVID-19 Delta variant and regulatory shifts. What are the implications in the United States and China?

John: I think we need to be thoughtful in terms of the ramifications of slower-than-anticipated growth. In the United States, growth in the third quarter slowed significantly. A few months ago, most people thought US growth in the third quarter was going to be around 7%, and now it's looking more like 3%.

In China, I think it's possible the country had zero growth in the third quarter. China represents about 20% of the world economy, so to have zero growth in the third quarter is a big deal. When you think about what's been going on in China, there was a large focus a few weeks ago on Evergrande and the potential for a "Lehman moment," but that may not be the most important story there. The bigger story in China may be slowing growth.

As the regulatory backdrop tightens a little bit, that weighs on the property market, and property markets have linkages to the rest of the economy—the US mortgage-backed security crisis that triggered a slowdown in US consumption being a clear example. Even if China successfully navigates its way through the Evergrande situation, which seems a likely outcome, the risks are still there, particularly the growth risks. Slower growth could be a good thing in terms of taking some of the heat out of the global economy and the risks of inflation we have been discussing.

Francis: The world economy is slowing and a large part of that is because of China. We can break it down into some secular themes, policy themes, but President Xi Jinping's pursuit of a policy called "common prosperity" has so far been a repressive campaign against private enterprises. We have seen crackdowns on internet platforms, fintech, tutoring, data privacy, crypto trading, and property speculation and leverage. As such, it's no wonder that growth targets have been tossed out. The headlines are full of new regulations with which the Chinese authorities have been saddling the economy.

In 2020, China was the first major economy to renormalize after the COVID-19 pandemic, cutting back on fiscal policy. The central bank raised interest rates, and the bond markets responded—the 10-year Chinese bond yield actually peaked in November of 2020,[7] and yields have been trending lower ever since. In fact, the yields are not far off from where they were at the beginning of the pandemic.

So, the economy is slowing; fiscal and monetary policy are behind the curve. The Chinese authorities have stepped back from a more conventional counter-cyclical approach based on Keynesian and monetary-type stimulus measures. Instead, they have adopted a policy called cross-cyclical, not counter-cyclical. The idea is to resist policy extremes at the peak and trough of each cycle in order to dampen down the subsequent boom/bust tendency encouraged by the policy extremes.

The authorities blame a lot of the excess leverage in their system on the previous counter-cyclical approach, so they are really trying to hold back. All of that is preventing a reflationary reaction to the current slowdown playing out in the economy. The last thing I would add about this is to factor in what's happening in the property sector. China is trying to rotate the foundations of its financial sector away from the property sector.

Evergrande may turn out to be a controlled implosion of the largest property company in the country. None of this is really a surprise, but there is also a demographic cloud hanging over the property sector in China as well; the labor force peaked in 2015. And, the authorities want to pivot away from the reallocation of savings toward other sectors of the economy.

To be clear, I'm not looking for an implosion in the system. Chinese household wealth is concentrated in property, and for that reason the authorities will not allow it to implode. And even though they are trying to deleverage to some degree, total credit growth is still expanding faster than nominal GDP. But, this is a deflationary shock to the system at a time when the economy was already slowing. In the global context, what's happening in China is a big reason why the global economy is slowing and could to some extent mitigate some of the inflation story we're seeing in other parts of the world. China is really on a different tack than a lot of the Western economies.

> "I find Japan a fascinating country to understand. Japan was the poster country to explain what's been going on for the 20–25 years preceding the pandemic. It's the excess savings story: a by-product of technology/productivity, demographics and competition. The supply side of Japan's economy has been expanding due to productivity, but Japan's population has been contracting."
>
> **John Bellows**

Ending on optimism

We spoke about the disinflationary aspects of technology innovation. Is the United States really that different technologically than peers like Japan?

Francis: I find Japan a fascinating country to understand. Japan was the poster country to explain what's been going on for the 20–25 years preceding the pandemic. It's the excess savings story: a by-product of technology/productivity, demographics and competition. The supply side of Japan's economy has been expanding due to productivity, but Japan's population has been contracting. As a result, internal demand has been weak, which creates a deflationary wedge. To counter these forces, the Japanese government has been running budget deficits of 5% to 7% for 20 years and since 2012, has been practicing Modern Monetary Theory[8] with the Bank of Japan expanding its balance sheet.

Almost two years into this pandemic, the story in Japan has not changed much. Inflation and bond yields are near zero. The Japanese yen has been remarkably stable.

Taking a broader global perspective, demographics haven't changed since the pandemic, and globalism/competition isn't changing that fast either. Productivity has changed but in a very positive way. Many people managed to get through the pandemic working from home because of technology. The digitalization of the United States is accelerating. Going back to Japan, when I think in the context of this secular story that's been supporting the bond market all these decades, how much of that has gone out the window with all these changes that we've incurred during the pandemic? My sense is that

these underlying secular themes that we see so strongly in Japan will continue to persist. They haven't vaporized in any kind of material way just yet.

Michael, how has Japan's labor market and approach to digitalization evolved?

Michael: There's a lot of inertia regarding the challenges that Japan has faced for decades. There's no question new Prime Minister Fumio Kishida is likely to take a more centrist approach—not really changing a whole lot, but there have been a couple of things that are interesting at the margin.

One was a big move to increase female labor participation, which had really lagged, through effective efforts in terms of childcare and working hours. Half the population has not been participating as much as they should've been in the labor force, and that is starting to change. Japan is one of the few countries that has meaningfully increased female participation in the labor force.

We are also seeing change in terms of corporate governance. It had been very opaque for a long time and some positive steps were made there. Japan's labor shortage mandated a lot of automation, which will place it at the forefront of the technology trends going forward. I wouldn't say Japan will be able to shift longer-term inertia overnight, but there are positives that are beginning to unfold.

The global economy is working through supply shock implications stemming from the pandemic. Francis, when you step back and look at the world through a currency lens, what do you see?

Francis: I'm struck by what's not happening in the US dollar. I think more than any other single market price out there, the dollar may be the most significant, even in terms of the inflation story. The odds of a material deterioration in the outlook for inflation seems remote without a breakdown in the dollar.

We've had a huge expansion of the Fed's balance sheet since the start of the pandemic. We've incurred unprecedented budget deficits, a significant expansion in public debt, a bigger current account deficit, negative real rates—you name it. And now we have a tax-and-spend US administration, policies normally thought of as compromising long-term growth. Yet, the dollar against the major currencies is only a few percentage points below pre-pandemic levels. Something very constructive is supporting the dollar. Perhaps its productivity; the United States may be the strongest player on the field right now in terms of digitalization and its impact on underlying real economic trends.

Endnotes

1. The Cassandra complex is a psychological phenomenon in which an individual's accurate prediction of a crisis is ignored or dismissed.
2. Source: Appunn, K. "The history behind Germany's nuclear phase-out," Clean Energy Wire, March 8, 2021.
3. Source: Bureau of Economic Analysis.
4. Source: Bureau of Labor Statistics.
5. Source: Ourworldindata.org.
6. Source: Bloomberg, Baker-Hughes Oil Rig Count, January 1, 2020, and September 1, 2021.
7. Source: Bloomberg.
8. Modern Monetary Theory (MMT) says monetarily sovereign countries which spend, tax, and borrow in a fiat currency that they fully control, are not operationally constrained by revenues when it comes to federal government spending.

About Macro Perspectives

Macro Perspectives allows the Franklin Templeton Investment Institute to feature economists from across the firm dissecting key macroeconomic themes driving markets. The mission of the Investment Institute is to deliver research-driven insights, expert views, and industry-leading events for clients and investors globally through the diverse expertise of our autonomous investment groups, select academic partners and our unique global footprint.

Two related Franklin Templeton Thinks publications of note are Allocation Views, produced by Franklin Templeton Investment Solutions, which offers you our best thinking on multi-asset portfolio construction; and, Global Investment Outlook, from our Investment Institute's strategists, highlighting managers' views on markets across the firm.

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WHAT ARE THE RISKS?

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