TPG INSIGHTS

2023: Managing Through Uncertainty

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- Todd Sisitsky

"[There are] wildcards that make it incredibly challenging to say that so long as the Fed brings GDP down to "X" and the unemployment rate up to "Y" they can be satisfied with a job well done. It's probably not going to be as mechanical as that."

- Randall Kroszner

Amid a backdrop of market volatility and challenging macroeconomic conditions, 2023 is set to be a year of significant uncertainty for investors. To get a better sense of what's in store, we sit down with **TPG President Todd Sisitsky** and **former Fed Governor Randall Kroszner** to discuss the outlook for private capital markets, TPG's strategy for the year ahead, and the likely evolution of rates, inflation, and growth, which will be critical to assessing both the investing opportunities and risks in 2023. So where's the world heading? Sisitsky acknowledges a tougher market environment, but he emphasizes that TPG feels well positioned given its playbook of investing in companies exposed to strong secular growth trends and the firm's record-high dry powder. While Kroszner, for his part, expects a modest downturn this year, he sees inflation falling steadily and rates peaking in 1Q23, as the Fed stays focused on cooling a red-hot labor market. With all this in mind, despite the uncertainty, we believe 2023 presents a unique opportunity for disciplined private market investors with differentiated platforms to shine.

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TPG INSIGHTS

Interview with Todd Sisitsky

Todd Sisitsky is the **President of TPG, Co-Managing Partner of TPG Capital**, and a **co-leader of TPG Capital's healthcare group.** Below, he provides his perspective on the outlook for private capital markets in 2023, which he argues will offer a lot of opportunity despite a more challenging macro backdrop.

Q: How have you positioned the TPG platform to remain resilient in the challenging year ahead?

Todd Sisitsky: It's the nature of the market that trees don't grow to the sky, and there are going to be ups and downs. For several years, we've actually been anticipating and preparing for a tougher economic environment and even a downturn, which was factored into how we thought about and priced the past fund cycle. This expectation led us to be incredibly focused on sticking to our playbook of investing in businesses that are exposed to strong secular growth trends. In fact, every new deal has been underwritten with the assumption of multiple compression, which raises the bar for us to only invest in companies that we truly believe can grow through the cycle. That's not to say they won't be affected by the cycle, but that they will remain resilient despite a downturn because the drivers of their growth are persistent across different economic environments.

We've also been aggressive across the platform in seeking liquidity for our companies and returning capital at a high multiple relative to our initial investment. TPG Capital's three active funds, for example, have far exceeded their respective top quartile DPI benchmarks relative to the rest of the market. So, as I think about the year ahead, it's certainly a more challenging macroeconomic backdrop given the combination of very high inflation and rising interest rates. But I believe the strategy we've developed of investing in companies that are experiencing secular growth and that have management teams we believe in leaves us in a strong position heading into 2023, which is borne out by the fact that our portfolio has continued to perform well in the last few quarters even as the economic and market environment has become more challenging.

Q: What do you see as the core tenets of this strategy?

Todd Sisitsky: Our job as investors is to make sure that we're in the right neighborhoods. Great investing isn't just about doing thoughtful analysis in every neighborhood, but spending a lot of time focused on the sectors and industries where you have a strong chance of being in the way of volume. We've put a lot of resources and capital into sectors like technology, climate and impact, healthcare, and business services because we have strong conviction in their long-term growth trajectory. Within these sectors, we're then very aggressive in engaging and creating unique opportunities to invest behind companies we believe in, which is where we thrive. The other benefit of our sectoral approach is that we're distinctly positioned to create win-win structures with a range of counterparties, including strategics, academic centers, families, and other partners who might not have worked with private equity in the past. In these cases, you have two like-minded partners that are trying to maximize value together, and we've had a lot of these opportunities throughout our history, whether it's working with organizations like Intel, Tata Motors, Arizona State University, or United Healthcare, because of our strong reputation as growth-minded investors who back companies that perform well not only during our ownership period but beyond that as well.

Q: Do you have to revise your investing approach at all given the seismic shifts in the macro landscape?

Todd Sisitsky: Yes and no. Our playbook is our playbook. But the reason it's worked so well over many decades is because it necessarily entails constant evolution. You don't just decide on the themes you're dedicated to and pursue them blindly. We're always reassessing our priorities and exposures.

> **I believe the strategy we've developed of investing in companies that are experiencing secular growth and that have management teams we believe in leaves us in a strong position heading into 2023, which is borne out by the fact that our portfolio has continued to perform well in the last few quarters even as the broader economic and market environment has become more challenging.**

The nature of any adjustment will be driven by the sector and context. In software, for example, the secular demand for cyber security software is totally overwhelming any possible impact from a cyclical downturn. Similarly, better healthcare models are always going to attract larger volumes. There's going to be an evolution in our go-to-market strategy as the cycle progresses. Early on, there are far more opportunities to take companies private because there's value, it's available at the right rate, and we can build a platform in areas where we've developed deep conviction over many years. Later in the cycle, there's greater emphasis on strategic partnerships and carve-outs given higher valuations. So, you've got to adapt, and your strategy is always evolving. But irrespective of where we're in the cycle, our core playbook will remain the same: delivering on ideas that are "interesting" and not just "actionable." That's core to our DNA, and it doesn't change from one cycle to the next.

Q: Given the reset in valuations, is now a good time to buy?

Todd Sisitsky: We're still being very patient. That said, we feel well positioned to take advantage of new opportunities as they arise. The firm as a whole is at an all-time high in terms of dry powder, and these are the moments when the most interesting opportunities emerge for private capital. As we enter this uncertain period in the economy, I'm confident that we'll feel very well positioned by virtue of the amount of capital that we have available at this very interesting time in the market. These are the moments when the "interesting" and the "actionable" tend to overlap, and what may not have been doable in a frothy environment suddenly becomes achievable. Given our record-high dry powder, we're ready to be aggressive for the right opportunities. So, I'm both cautious on the macro challenges today but also genuinely enthusiastic about what lies ahead because I believe this environment will create opportunities that we're uniquely positioned to execute against.

> "I'm both cautious on the macro challenges today but also genuinely enthusiastic about what lies ahead because I believe this environment will create opportunities that we're uniquely positioned to execute against."

Q: But amid the sharp rise in interest rates, will it simply be harder to get new deals done in 2023?

Todd Sisitsky: Financing markets are certainly challenging, but as a general matter, environments in which capital is scarce create more compelling opportunities for private equity, rather than less. Furthermore, our strategy and capabilities position us well in a market like today's where there isn't a ready supply of cheap debt. First, we employ less leverage as growth-oriented investors than others in the private capital space. We're consistently offered more debt than we're willing to take—we're generally cautious in overleveraging because too much debt can constrain companies' growth, and growth is our primary avenue of value generation. Second, our strong capital markets team enables us to execute deals with far less reliance on traditional intermediaries. In connection with several deals that we closed in October 2022, for example, the internal TPG team co-led or sourced $4-5bn of debt relative to the $8-9bn in enterprise value of the companies acquired. Very few alternative asset managers have this capability, which is a tactical advantage when interest rates are rising and there's a scarcity of intermediaries that are willing to extend credit.

Q: How does the ongoing volatility in public markets affect your strategy for exits this year?

Todd Sisitsky: Exits certainly slow in an environment like the current one, but a key advantage of private markets is that you get to pick the timing and method of sales. On the latter point, TPG's style of growth-minded investing and history of selling companies to strategic acquirers who've seen them perform well following their acquisition leaves us far less exposed than our competitors to exits via financial buyers or IPOs. That's incredibly beneficial during these more volatile periods when the IPO market is effectively shut given strategics tend to be interested in acquisitions in a variety of environments and are often less reliant on external financing. Just recently, we announced the sale of two platform companies to two very different strategic buyers. That's not to say that exit valuations aren't going to be impacted by competition or the broader macro environment. It's still critical to pick companies that can generate the scarcity needed for strong returns. But our strategy and exposure to strategic sales enables ongoing liquidity even through more challenging macro environments.

Q: How does the current moment of market and economic uncertainty compare to past periods in your career?

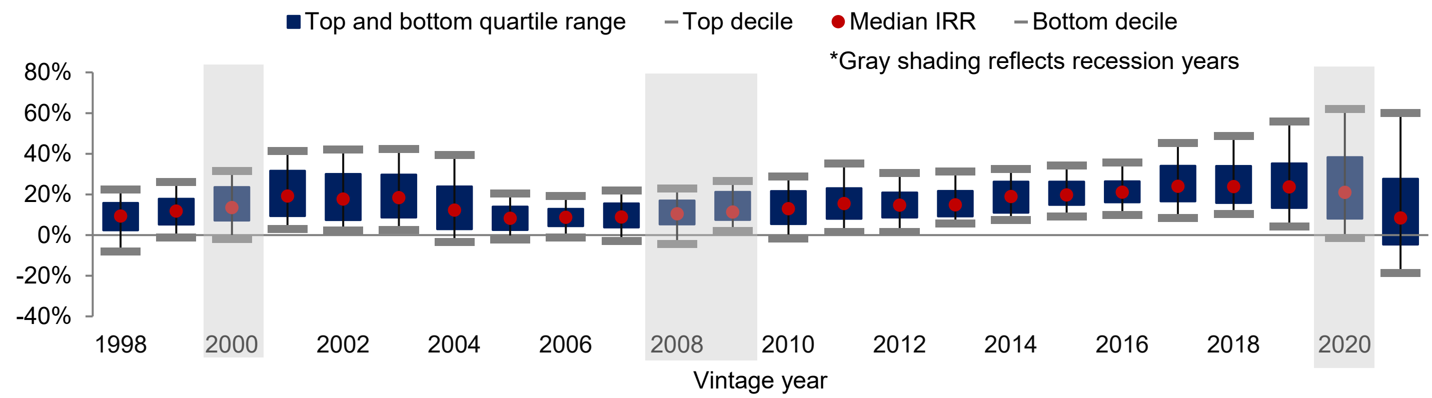
Todd Sisitsky: Each market environment has its own eccentricities, and so your approach has to be tailored to the moment. The risk backdrop over the past year has been quite different relative to recent downturns given the combination or rising rates and inflation. But being in the right neighborhood in terms of themes and sectors has always paid off in the more challenging moments in my career. I'm also a big believer in discipline and avoiding the temptation of "FOMO," or the fear of missing out, especially during these big periods of change. Despite a more competitive private capital landscape, we feel that staying true to our own strategy and approach makes sense. That's worked for us in the past, and I have strong conviction that will continue to be the case in 2023 and beyond.

TPG INSIGHTS

2023: The Private Equity Outlook

Private Equity Has Remained Resilient During Past Downturns

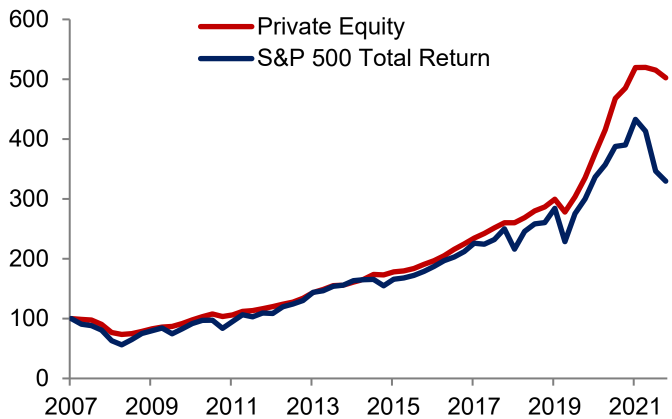
Global PE IRRs By Vintage Year, %



Note: Gray shading reflects recession years based on NBER business cycle dates, growth bottomed in June in 2009, data as of December 2022.
Source: NBER, Pitchbook.

Private Equity Has Outperformed the S&P 500 Since 2007-08

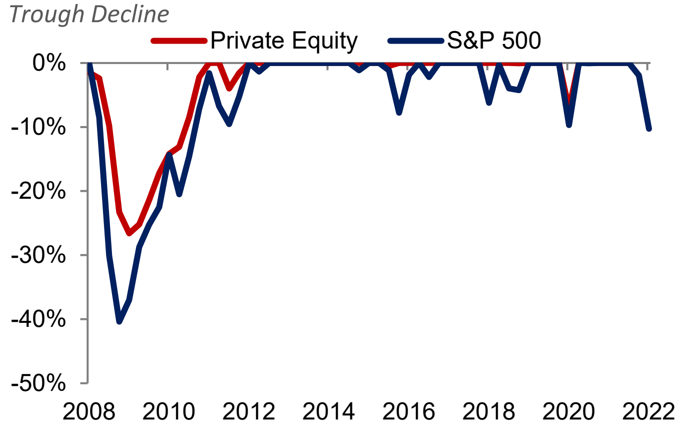
Preqin Quarterly Index/SPX Total Return, Index (Dec-07 = 100)



Note: For more detail on Preqin's Private Capital Quarterly Index see here, data as of September 2022.
Source: Preqin.

And PE Drawdowns Have Been More Modest

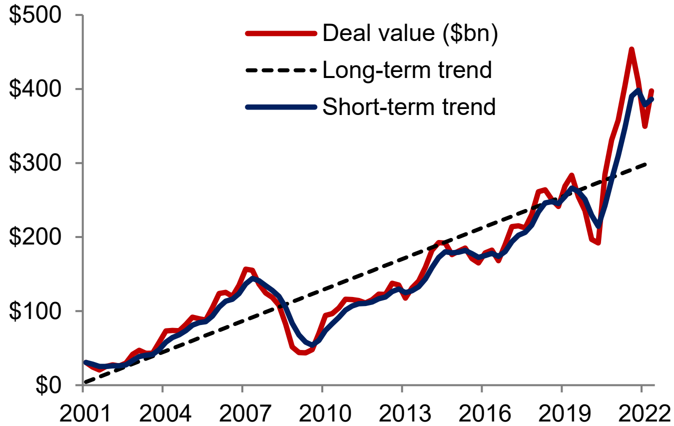
Private Equity Drawdown vs. S&P 500 (2008 – 2022), % Peak-Trough Decline



Note: PE only covers US-based deals, data as of September 2022.
Source: Preqin.

PE Dealmaking Has Remained Resilient Despite Market Volatility

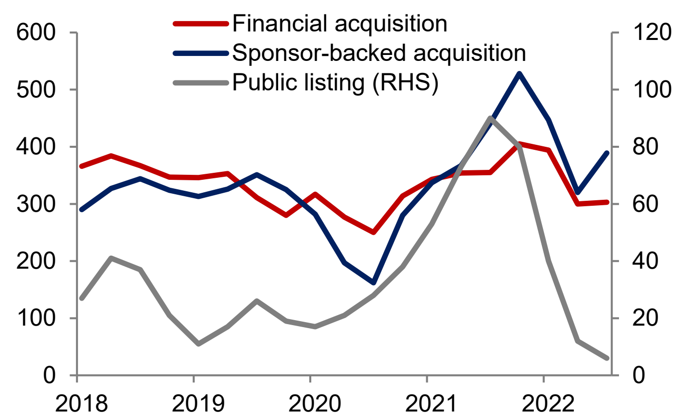
Rolling Six-month Deal Value Trends, $bn



Note: Only covers US-based deals, data as of September 2022.
Source: Pitchbook.

Financial And Sponsor-backed Exits Have Risen As Share Of Total

Rolling Six-month PE Exit Count By Type, Count



Note: Only covers US-based deals, data as of September 2022.
Source: Pitchbook.

TPG INSIGHTS

Interview with Randall Kroszner

Randall Kroszner is the **Norman R. Bobins Professor of Economics at Chicago Booth** and an **external member of the UK's Financial Policy Committee**. He previously served as a **member of the President's Council of Economic Advisers** from 2001-03 and a **Governor of the US Federal Reserve System** from 2006-09. Below, he provides his perspective on the outlook for Fed policy and the economy in 2023, which he argues will likely see a modest downturn in order to bring a red-hot labor market back into balance.

The views stated herein are those of the interviewee and do not necessarily reflect those of TPG.

Q: Our LP and portfolio company partners are broadly resigned to somewhat slower growth in 2023. But will the Fed be able to deliver a soft landing that avoids a downturn this year?

Randall Kroszner: A lot of people are still holding out hope for an "immaculate disinflation" where the Fed is able to calibrate policy just perfectly to bring down inflation without causing a slowdown or much pain in the labor market. That's certainly possible, but I don't see it as the most likely outcome. And it's made more challenging by the fact that the labor market still remains far too strong despite the Fed's having already taken significant steps to tighten policy over the course of the last year. The impact of higher interest rates is evident in housing, asset prices, and even the consumption data. But there are few concrete signs of meaningful progress in terms of rebalancing the labor market and bringing down wage growth on a more sustained basis, which is critical to the Fed's goal of achieving their 2% inflation target. While the pace of recent wage increases may be moderating, I expect the Fed will keep at it until they see the labor market crack. That will probably require an increase in unemployment and a modest recession in 2023.

Q: What would such a slowdown actually look like?

Randall Kroszner: Mild most likely. But there's considerable uncertainty around the outlook. The problem is that monetary policy operates with long and variable lags. So, the policy actions that the Fed takes today will be felt over the course of the next 9-18 months. While our models suggest that everything will move smoothly and gradually, and so the Fed could simply ease off the breaks if need be, that's rarely the case in the real world. There are also geopolitical factors, including the hot war in Ukraine and growing tensions in Asia, which could have enormous influence on energy prices, consumer confidence, and demand, that are entirely out of the Fed's control. These are the wildcards that make it incredibly challenging to say that so long as the Fed brings GDP down to "X" and the unemployment rate up to "Y" they can be satisfied with a job well done. It's probably not going to be as mechanical as that.

Q: At TPG, we invest globally and think about the global factors that could impact the growth outlook. Does China's ongoing reopening make you any more optimistic about global growth momentum in the year ahead?

Randall Kroszner: People have become a bit too optimistic about the prospect for a major snapback in the Chinese economy, in my view. You can't directly map the experience of Western economies and the strong recovery in consumption after their lockdowns to the Chinese case. China has always had a much higher savings rate than places like the US and Europe, and the pandemic experience has likely only reinforced the motivation of the Chinese people to save at a high rate given government support has been fairly limited. I do expect a recovery in consumption, investment, and trade. But it's not going to be as rapid as elsewhere, and we're not going to see a bounceback to the sky-high growth rates in China of recent decades that was driven by the entry of almost 10 million new workers per year into the formal labor force. China's reopening is certainly a positive for global growth, and it could boost commodities demand and therefore headline inflation, but it will perhaps be somewhat less central to the outlook than what happens with the US labor market and the Fed.

Q: So what do these broad dynamics in terms of the labor market, the Fed, and China mean for wage growth and inflation in 2023, which are critical factors for our portfolio companies?

Randall Kroszner: The Fed's [latest forecasts] suggest they believe they will be able to bring down wage growth with the unemployment rate only rising by roughly 1pp to 4.6% by the end of 2023.

"

A lot of people are still holding out hope for an "immaculate disinflation" where the Fed is able to calibrate policy just perfectly to bring down inflation without causing a slowdown or much pain in the labor market. That's certainly possible, but I don't see it as the most likely outcome.

This gets at the question of the nature of the trade-off between inflation and unemployment. There's considerable disagreement among economists about whether historical data surrounding this trade-off is still applicable today given the unique nature of the recovery from the pandemic and the fact that it's been decades since we've had inflation substantially above 2%. Some people point to the record-high number of job openings relative to the number of people seeking jobs and suggest that wage growth should ease as job openings continue to come down. In this view, the unemployment rate won't have to rise as much as we'd expect in a traditional economic cycle because the main driver of recent wage growth is this sizable gap between the total number of available jobs in the economy and the total number of workers. Is that possible? Sure. But I'm somewhat skeptical because we've never seen this sort of immaculate disinflation before. And even if the Fed is able to tame inflation with unemployment only rising to 4.6%, I'm not so sure they will be able to engineer things so perfectly as to not overshoot this target, especially given it takes some time for the impact of monetary policy to be felt in the economy.

Q: What do you expect then for the path of Fed policy in 2023?

Randall Kroszner: I expect 25bp hikes this week and in March before the Fed moves to pause with rates around 5-5.5%. But where exactly they stop will ultimately depend on labor market dynamics and the path of inflation. While the market gets very excited by any indication that inflation is coming down, the Fed is ultimately going to have to see evidence that prices are on a sustainable downward path before it will be comfortable hitting pause. In particular, they're going to want to see lower wage growth and a lower Employment Cost Index (ECI), which takes into account not just wages but the overall cost of employment for businesses.

> "I expect 25bp hikes this week and in March before the Fed moves to pause with rates around 5-5.5%. But where exactly they stop will ultimately depend on labor market dynamics and the path of inflation."

Labor is by far the most important cost for businesses in a services economy like the US, and so they're going to want to be confident that the ECI is moderating alongside a steady decline in core PCE, which is their preferred gauge of inflation. I do think getting to that point will require more labor market weakness than we're seeing today. That said, given the Fed expects a roughly 1pp increase in unemployment over the course of this year and there are some signs that consumption is already declining, it does seem quite feasible that inflation will fall to somewhere between 3-4% by year-end 2023. So, I see some additional hikes in the near term but then a Fed that's mostly on hold this year as the effects of its policy actually start to ripple across the labor market.

Q: But could we actually see interest rate cuts if growth begins to slow considerably?

Randall Kroszner: Highly unlikely. The market is currently pricing in cuts in late 2023. But I think it's being far too sanguine about the prospect for easing this year. The Fed is committed to keeping at it until inflation comes down, and barring a significant geopolitical shock or a very deep slowdown, that's what it's going to do. It's worth keeping in mind that the Fed's own forecasts only expect core PCE inflation to fall to about 3.5% by the end of t forhe year, which is still materially above their 2% target. Of course, it's hard to hit these targets perfectly, but I think they would really need to see inflation getting close to 2-2.25% within a reasonable timeframe before they would seriously consider easing up.

Q: Given its investing implications and impact on our portfolio companies, we're very focused on whether we're witnessing a paradigm shift toward a period of structurally higher inflation and interest rates in coming years. Do you think that's the case?

Randall Kroszner: It's always hard to call a paradigm shift because you don't know whether a major change is temporary or permanent until it's been there for quite some time. Many people thought the era of low inflation and growth following the Global Financial Crisis (GFC) would prove permanent. But we're clearly not in that era anymore, and inflation is surging even in places like Japan where we never thought it was possible.

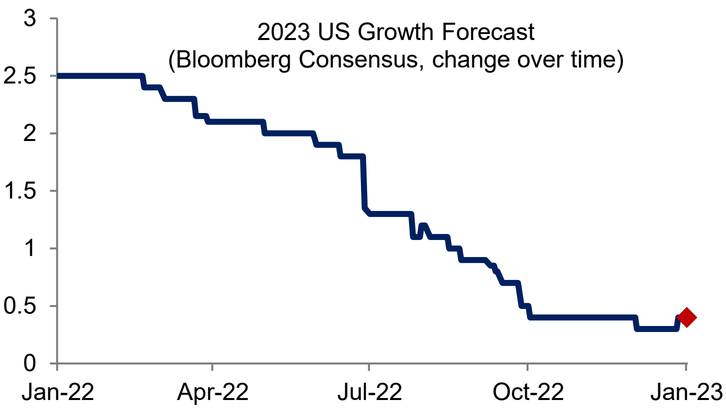
> "Many people thought the era of low inflation and growth following the Global Financial Crisis (GFC) would prove permanent. But we're clearly not in that era anymore."

There's a very good book by the economist Charles Goodhart and Manoj Pradhan that was written right before the pandemic that essentially argued that aging labor forces around the world would lead to a structural shift towards higher wage demands and make it more difficult to achieve the low inflation outcomes of recent decades. Relatedly, I co-authored a study suggesting that the demographic consequences of an aging population in China and the West would lead to lower savings rates, since retirees draw down their savings, and that a lower supply of savings to fund investment demand would tend to push interest rates higher over time. The point here is that demographic forces are very hard to change in the short and medium run, and they have an outsized impact in economies like the US where labor is so important to the cost of production. This is something to certainly keep an eye on in coming years because it's going to have big implications for inflation and rate dynamics.

TPG INSIGHTS

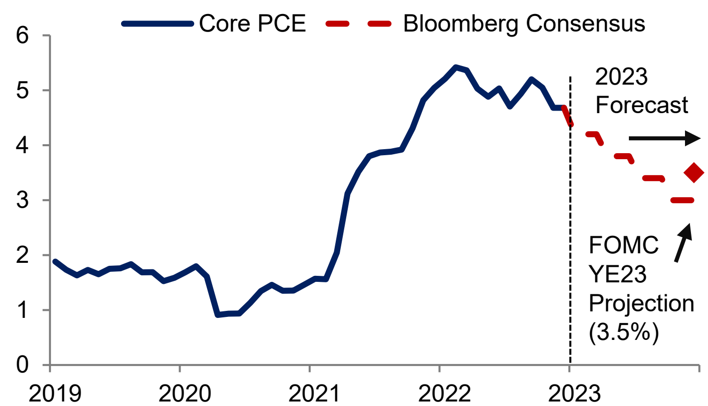
2023: The Economic Outlook

2023 Consensus US Growth Forecasts Have Fallen to ~0.5%
Median Bloomberg US 2023 Real GDP Forecast, % Change YoY



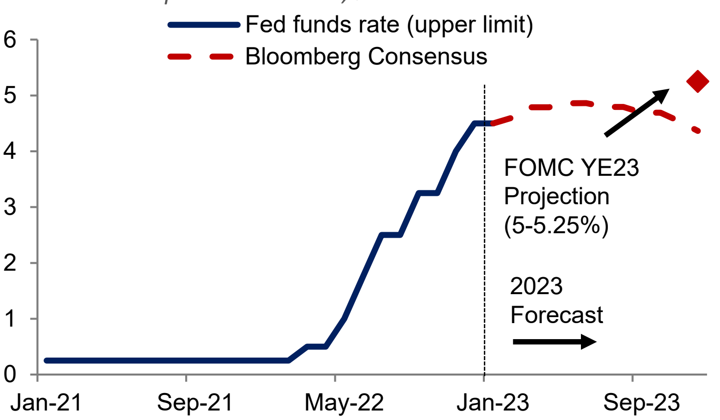
Note: Data as of 1/27/2023.
Source: Bloomberg, Federal Reserve.

Forecasters Expect Inflation to Ease To Less Than 3% by YE23
Core PCE Inflation; Median Bloomberg Core PCE, % Change YoY



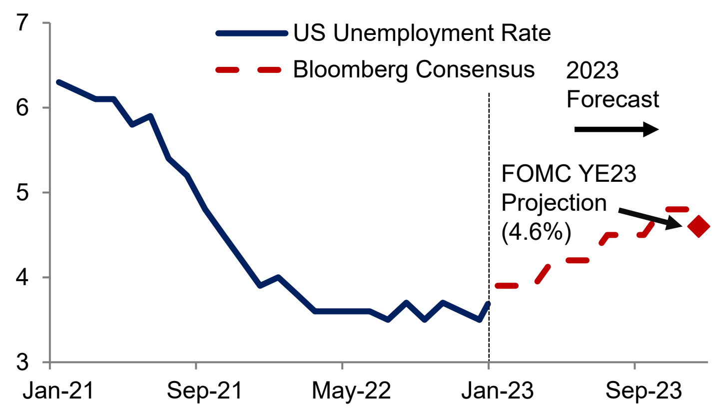
Note: Data as of 1/27/2023.
Source: Bloomberg, Federal Reserve.

The Market Expects Rates to Peak Mid-Year
Fed Futures Implied Funds Path, %



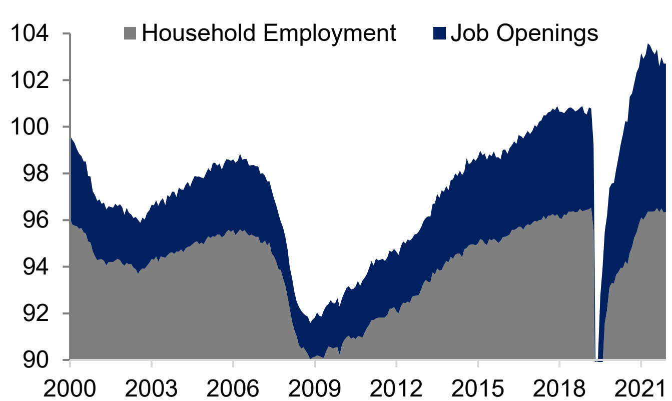
Note: 2023 quarterly data based on median Bloomberg forecast; FOMC projection based on Dec 22 SEP.
Source: Bloomberg, Federal Reserve.

The Fed Forecasts Only A Modest Increase in Unemployment
US Unemployment Rate, %



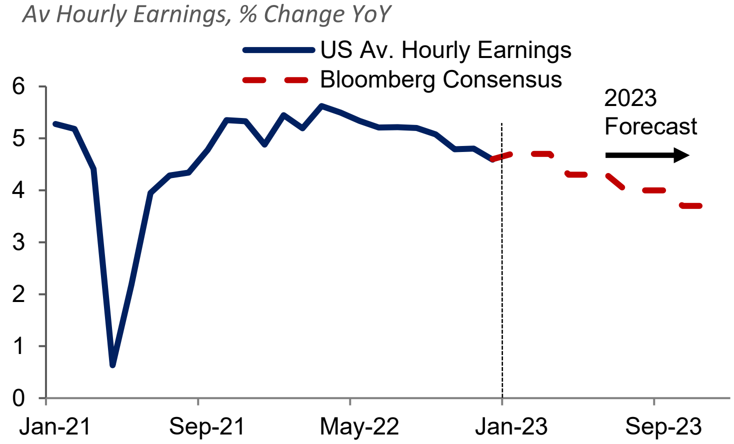
Note: 2023 quarterly data based on median Bloomberg forecast; FOMC projection based on Dec 22 SEP.
Source: Bloomberg, Federal Reserve.

A Surge in Job Openings Has Contributed To A Hot Labor Market
Job Openings and Employment as % of Labor Force



Source: Federal Reserve.

But Wage Growth is Showing Some Early Signs of Easing
Av Hourly Earnings, % Change YoY



Note: 2023 quarterly data based on median Bloomberg forecast.
Source: Federal Reserve.

*Forecasts are inherently uncertain and subject to change. Actual results may vary.

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