MICHAEL POND, CFA, provides an analysis of inflation-linked markets and key signals to watch in the United States, United Kingdom, Europe, and more. Pond also discusses which monetary policies aim to boost inflation rates globally, as well as drivers of valuation, and the effects of supply/demand factors.

MICHAEL POND, CFA: Why I enjoy looking at this asset class so much is because, to me, it’s the ultimate macro product. When you think about a nominal Treasury, a corporate bond, the base of that, if you build it up, is always the real risk-free rate.

And then you build on a real term premium and inflation, and maybe a credit spread, and maybe prepay spreads. But the base of that is always a risk-free real rate. And when you’re trading inflation-linked products, you’re looking at the real rate.

And so it’s really the only instrument where you can lock in a real rate to maturity — “to maturity” is sort of a key there. You may not experience a positive P&L [profit and loss] the whole time, but it is really the only thing where you can lock in that real rate, that real risk-free rate.

It’s also a very interesting product from a micro perspective, the little nuances that make them different — and to some extent, difficult to trade — and keeps me in business, because they’re not exactly easy to understand. Things like the floor value or seasonality, the beta between tips and nominals, and how they trade — so there’s a lot of nuances that, to me, keep the product interesting, even away from talking about the Fed and inflation and things like that.
So, what I thought I’d do today is give you a bit of an overview of the market, how I look at the market, and then how to value the market. I’m not going to give you a top-10 trades of the day. What I’m going to try to give you is a sense of how we value the market, to essentially teach you how to fish, teach you how to look at the market over time.

I’m also not allowed, from a compliance standpoint, to talk about our trade recommendations. So, I also don’t want to get fired. But I think it’s more useful if you learn how to value the market, at least from my perspective, and how we look at it. And hopefully, that will help you going forward.

So first of all, what are we talking about here? Well, the global inflation in the market is now over $3 trillion market value. So, the US makes up a good majority of that, or is the biggest chunk of that, at around $1.2 trillion.

The UK market, at around $800 billion in dollar terms, is the second biggest. But it’s actually the largest in duration terms. We were just talking — the UK liquor market goes out to a 50-year. And that 50-year has a real yield of minus 180 right now, or right around there. So the duration on that is quite significant.

So, if you invest in a global index, a lot of the volatility is going to come from the UK — and particularly, from the UK long-end. Many investors don’t realize that, but should.

There’s also a lot of opportunities in the EM [emerging market] space. There’s about a half a trillion market value in EM. A lot of that’s Brazil.

So, the biggest growth that we’ve seen has come from the US. The Treasury ramped up the issuance program in 2004. You can see that 2004 — issuance then was about equal to that in 2001, 2002, and 2003 combined. And that was largely in response to new entrants coming into the market, mostly pension funds and others — long-term investors that started to allocate to the asset class around then.

The Treasury again responded to demand in 2010 when foreign central banks, largely because of what the Fed was doing with this QE [quantitative easing] — printing money and all the inflation that it was going to create — really started coming into the asset class around then. And they continued to buy over the subsequent years, and the Treasury provided them with that supply. We’ll talk a little bit about where that might be now from a supply and demand perspective.

But the Treasury is responsive to changing demand factors when they think those demand factor changes are structural — not because, gee, oil went down and people might not buy next week. But when there are structural changes, the Treasury does respond. And you can see that pretty clearly from this chart.
The Treasury reduced supply earlier this year, in part because foreign central banks are buying less. And they may be buying less from a structural perspective.

So, liquidity in the market continues to increase, sort of. So I’m told that on-the-run liquidity is as good as it has been. Off-the-run, because of regulations on balance sheets — dealer balance sheets’ ability to hold off their own securities, that they may have to warehouse for awhile — makes trading the off-the-runs more difficult.

But liquidity relative to nominal Treasuries, while both may be not as good as they once were, we think has actually improved. And one way we look at this — we look at it different ways, but one way — is through trading volumes. Trading volumes year-to-date are the highest ever, and the highest ever relative to nominal Treasuries. So, it’s not just that investors are more active in the Treasury market overall. They may be in Treasuries, but they’re even more so in the TIPS [Treasury Inflation-Protected Securities] market.

So, just a quick look at how TIPS work — so I look at this as a pretty good graphical representation — the blue bars. You can think of exactly how a normal Treasury works: So, they pay a constant coupon along the life of the security, and then at maturity, you get par back.

Well, with TIPS… this graph assumes that there’s positive inflation accretion over the life of the security. The inflation accretion attaches to the principal. So, assuming positive inflation, the principal amount grows over time. The coupons are paid as a fixed rate. And we call that the real rate, the real coupon.

Now, the coupon payments — again, assuming positive inflation — rise over time, because they’re being paid off of a higher and higher principal amount as inflation raises the inflation-adjusted principal amount. And then at maturity, investors get back the greater of par, 100, or the inflation-adjusted principal amount.

So, if you buy it at auction and then hold it to maturity, you can never get less than par. So, you can think of it as a deflation option. So, even if there is deflation, you still get your par back at maturity. So, valuing that option, at times, is an important part of the market.

Pre-crisis, most people didn’t even think about the par floor embedded in the TIPS. So, it was basically given away for free from the Treasury’s perspective. People weren’t willing to pay much, because we’re never going to have deflation in the US.

And then the crisis came along and oil went from 140 down to 30, and that impacted headline inflation. And there were concerns that we were about to hit a depression, or maybe something that might cause massive deflation around the world. And so, people paid a higher premium.
Just to give you an example, in the fall of 2008, under the heat of the financial crisis, there were securities in a five-year sector that were only three months apart. And yet, they were trading at a spread of 200 basis points. One was the on-the-run five-year, the April 13s — it had just been issued.

And so the inflation-adjusted principal amount was almost equal to the par amount. There wasn’t much inflation accretion built in. And again, remember, the floor kicks in right at the par amount. So, it was essentially at the money from that perspective.

And then three-months around then — the January 2013s, the July 2013s — well, those had been issued as a tenure and rolled down into the five-year bucket. So, they had a significant amount of inflation accretion, particularly given the oil run that had happened from when they were issued.

And so the inflation accretion built into them was 15%, 20%. So, you needed massive deflation for the floors on those to ever be valuable. Those were trading at a 200 basis point spread, the on-the-run 5-year and these seasoned 10-year, mostly because of the floor value. About 180 basis points, in our view, were because of the floor value. So, most of the time, the floor value doesn’t matter — until it does.

So, it’s a very important part of how these things work. Most people ignore them, but every once in a while, they come into play.

So, it’s important to remember that when we’re talking about the inflation accretion, we’re specifically talking about the not-seasonally-adjusted CPI [Consumer Price Index]. You can tell me all you want that real inflation is 10%, or well, look at PCE, it’s low, and that the Fed targets PC [personal consumption]. Or PPI [Producer Price Index] might be doing this. Or you find other measures of inflation out there.

For an inflation-linked investor, it doesn’t matter. And then, if you look at the UK market, it’s off of RPI [Retail Prices Index]. Europe, it’s off of HICP [Harmonised Index of Consumer Prices] ex Tobacco. In Japan, it’s the headline ex Fresh Food. So, they all have their nuances, but those are the only indices that matter for those instruments.

You can see that a good majority, or a good plurality, I guess, of the index is made up of the housing component. The housing component of CPI is calculated in two sectors, if you will, in two ways.

First, there’s a rental component, which captures people renting their housing structure. But also, it combines that with a much more significant weight on owners’ equivalent rent [OER]. So, some people call it a made-up number.

What that is, is it takes the rental sample, which you think of rents — 80% of rents are apartment type and then 20% are single-family homes that are being rented out. OER takes that sample and
almost flips it around. So, the owner-occupied stock of housing — about 80% of that is single-family homes and then another 20% is apartment-like, maybe condos.

And so, that’s where the idea that it’s made-up data comes from: It’s actual data on rents, but it doesn’t necessarily capture… it’s not a good sampling set, because you’re taking 20% of the sample and imposing it on 80% of the stock of owner-occupied housing. So, that can matter a lot. If you miss that component — and we think we have a pretty good handle on it — then you’re probably going to miss on your core forecast.

It’s also important to remember that the weights fluctuate. The weights fluctuate with relative prices. So, you can see the weight in gasoline here. Gasoline at the beginning of the decline in oil over the past two years had a weight of 5.5%.

Well, with the decline in gasoline prices, as other prices stayed steady or went up, the relative price of gasoline went down, so the relative weight of gasoline went down. So, right now, while it’s certainly volatile and important, it’s actually less important than it was when oil started to decline. So, it’s always important that the weights do change from time to time — or over time, that is.

When we’re looking at inflation and trying to assess what the market is pricing in for inflation, we typically look at the breakeven rate. So, that’s the inflation rate such that to maturity, the return on the TIP and the nominal breaks even. So, what inflation rate do you need to have the TIP and the nominal be equal in returns over that period?

So, the breakeven inflation rate is simply the nominal rate at any given maturity less the real rate at any given maturity. So we subtract those, get a breakeven rate. And we can construct a breakeven curve that I’m showing on the right-hand side of this chart.

Now, breakevens, quite importantly, are not equal to inflation expectations. That’s often a misnomer and also often causes quite a bit of confusion. In my view, the Fed is quite confused right now when looking at the inflation market.

So historically, various Fed speakers used to consistently reference the inflation market as, OK, well, breakevens went up or down, and that means that inflation expectations went up or down. They had usually referred to the five-year, five year. So, the bootstrapped rate between the 10-year and the 5-year to get medium-term inflation expectations.

Well, more recently, Chairman Yellen has been very careful to call this spread inflation compensation, not inflation expectation. And she’s right, because you really need to break down breakevens to fully understand them, or at least attempt to break down the three components of a breakeven — which are the pure inflation expectations, that should be pretty simple, pretty self-explanatory; the inflation risk premium; and then, what I call the liquidity premium differential.
Now, the inflation risk premium... so, most long-term investors, what they should care about is the purchasing power of their investment. So, if they invest in something and over 20 years they get back triple their investment; or over 20 years, they should do a lot better than that. So, they get back this large sum, but then they go to spend it and there has been massive inflation and it can actually buy less than the amount of their initial investment 20 years ago.

Well, then they're not actually too happy, even though they had some really good nominal returns over that period. So, what long-term investors care about is their purchasing power, the real value of their investment.

As I said at the start, the only instrument that gives you a real return to maturity, a guaranteed real return to maturity, is TIPS. If you invest in nominal, you’re taking on inflation risk. So, you want to be compensated above and beyond your baseline inflation expectation to be compensated for the risk that inflation might actually come in higher than that and the real return that you thought you were going to get on a nominal actually comes in much lower, because inflation came in higher. So, you should be compensated for that risk.

So breakevens, all else equal — assuming that you fear higher inflation versus lower inflation, and we'll talk about that in a moment — should normally be higher than inflation expectations.

Working against that, though, is that nominals are more liquid than TIPS. Now, TIPS are relatively liquid versus many other instruments. But relative to nominals, they're not all that liquid. And so investors — which they always prefer the most liquid instrument, all else equal — and so they should be willing to pay a little bit of a premium to buy a nominal for its liquidity properties versus buying a TIPS. So, that tends to depress the breakeven rate.

And then, of course, the floor value... where again, most of the time that’s zero, but occasionally it matters a lot.

Now recently, in talking about inflation expectations, most Fed officials have dismissed the signal coming from the 100+ basis-point drop in breakevens, saying that, well, it’s not inflation expectations that have dropped. It’s this other stuff. Inflation risk premiums have declined. Liquidity and other factors have pushed down on breakevens. So, we’re not going to trust them. To some extent, I think they just don’t want to hear it.

Instead, they say they rely on survey measures, which have been much more stable. So first, it’s not clear to me that they’ve been all that stable. Now, I’ve played with the axes here, so you’ve got to take this with a little grain of salt.

But you look at one of the more frequently cited inflation expectation surveys from the Fed, and they usually cite this Survey of Professional Forecasters. And why is that? Well, first of all, you
look at the left-hand chart — and I didn’t have to play with the axes much. You see, the inflation component of the University of Michigan Consumer Sentiment Survey that’s declined pretty significantly.

The New York Fed, back in the middle of 2013, started its own consumer survey. That median three-year head inflation expectation has dropped from 5% down to about 3.4%, although it is off its bottom. So, those have dropped pretty significantly.

Now, if you look at the Survey of Professional Forecasters, again, it’s dropped by less. It has dropped, but it’s dropped by less.

But the point I have on this survey is twofold. One, you look at how constant it was from 99 all the way to 2008. It was like a rock. So, when this thing moves, given that it didn’t move for so long, you should pay attention to it, even if it’s not moving much.

Also, think about who fills out the Survey of Professional Forecasters. You look down the list and almost to a person, they’re former Fed economists. So, if you lose credibility with people who cut their teeth at the Fed, well, you’ve lost credibility with the market and consumers probably long ago. So, we think that’s the wrong survey to look at, but it is important that even that’s declined.

Looking at inflation risk premium and liquidity premium — so these are sort of the holy grails of measuring the components of a breakeven. We don’t claim to be 100% confident that you can use these measures and that’s exactly to the basis point where these things are, but we think these are good indicators.

And what you can see here is that the left-hand chart, what we use is the difference between two short rates but in long forward space. So we take the difference between a 5-year, 1-year CPI swap and a 10-year, 1-year CPI swap. Again, CPI swaps are similar to breakevens.

And the reason why we do this is because if you ask most people, unless they’re extremely arrogant, they probably won’t have a big view on what a short inflation rate is going to be 10 years from now versus 15 years from now. So they might have a view on 1-year inflation 5 years from now or 7 years from now or 10 years. But beyond that, it’s hard to imagine you have so much information that you have a nuanced view on short-term inflation 10 years from now versus 15 years from now.

And so, we think that the expectation component of those two measures should be pretty similar. And so, if you look at the difference between the two, you should be left with inflation risk premium.

And you can see that pre-crisis, that inflation risk premium was positive, and particularly as oil was going up, people just thought that oil would go up and up and up forever. And core inflation
was relatively high at that point as well, so investors were more fearful of 4% or 5%, 6% inflation, even though their baseline forecast might have been 2%.

We also saw a lot of investors come in and buy inflation instruments purely as inflation insurance. Beyond their pure baseline expectation, I don’t really need to know where breakevens or CPI swaps are right now, because I know they’re nowhere near my fear number.

And so I’m buying purely as insurance, not because breakevens are at 200 and I think they might go to 220. Breakevens might be 180 or 220, but I think there’s a risk that inflation might come at 4%, 5%, 6%, and my equity portfolio gets hurt if that happens. So, I want to buy some insurance.

Right now, we’re not seeing investors coming in and buying inflation insurance. And we think it’s because investors are actually more worried about the downside risks to that 2% PC target that the Fed has than the upside risk, even if their baseline really hasn’t changed.

I would say that the answer to your question is an answer that I’m seeing more broadly. I do think that sentiment is changing and that inflation risk premium might be set to rise in the coming year after being low for quite some time.

On liquidity premium… again, we showed trading volumes have picked up. So it’s not clear to us that liquidity has gotten worse, particularly on a relative basis. And this is another measure that we try to judge liquidity in the TIPS market relative to nominals.

So, an asset swap is just a pure funding trade. So, it’s a funding of a Treasury versus a funding of a TIPS. And so oftentimes, that asset swap spread is driven by liquidity in each of those markets. And so, if you take the difference, you can get a measure of relative liquidity or the premium that investors are willing to pay for the liquidity of nominal treasuries.

And you can see that that’s been relatively stable. It’s picked up over the past year, but not by much. And it’s actually down quite a bit from where it was at year-end.

So, it’s not clear to us at all that the 100-plus basis point drop in 10-year breakevens over the past year-plus can be explained — certainly not explained fully — by inflation risk premium or that liquidity premium differential between TIPS and nominals. We think that the Fed has it wrong — either wrong, or perhaps they’re trying to play a little bit of a confidence game.

To the extent that they go out and say, “gee, we think we’ve lost credibility,” I think that spurs a fear factor. And they want to maintain stability and just keep saying, we have credibility, we have credibility, because more people may lose credibility if they admit that they lost it.
So again, I mentioned zero-coupon swaps. So, it’s a very simple instrument. I don’t want to dwell on this, but I just wanted to have a slide in here for you to reference. It’s essentially the equivalent of a breakeven, except that the funding costs in a levered breakeven trade are embedded in a CPI swap. A zero-coupon CPI swap, the building block of inflation derivatives, is very, very simple. It’s a zero-coupon instrument.

You put on a five-year zero-coupon swap. At the end, one side pays a fixed rate agreed upon at the beginning of the trade, which essentially is the implied inflation rate or expected inflation rate, and then the other side pays the inflation accreted on an annualized basis over that period.

So, it’s about as simple as you can get, and it’s very similar to breakevens. It’s a useful way to access the market on a levered basis, without using cash. Also, for those who can’t short nominals, that’s quite useful.

I mentioned earlier that seasonality can play pretty significantly in the market. And that’s because TIPS accrue inflation off the not-seasonally-adjusted [NSA] index, and that index has a pretty well-defined seasonal pattern. You see on the left-hand chart that inflation, this index, inflation tends to be higher in the first half of the year than the second half of the year.

What I’m showing on this chart is the average month-over-month differential between the NSA month over month and the SA [seasonally adjusted] month over month in each one of those months. So for example, in March, the month-over-month print on the not-seasonally-adjusted series tends to be about 30 basis points higher than the seasonally adjusted print. So, if we get an average print on the seasonally adjusted month over month of about 0.2, that means the NSA is coming up 0.5.

And so, if you think about how that impacts TIPS on an accretion basis over that following month, well, you take that 0.5 and basically multiply it times 12. So, the inflation accretion rate over that next month is 6% thereabouts, if I did my math right.

So, you get a sense of the volatility that you can have in the inflation accretion. So, it’s pretty significant, given the seasonal pattern.

And this volatility drives investors’ behavior. Now, it shouldn’t. What investors should care about is inflation accretion to maturity. But psychologically, investors don’t like trades that have near-term negative carry. And psychologically, investors really like trades that have near-term positive carry.

Things need to move in order for them to lose money on positive carry trades. So, they feel more comfortable assuming that, all right, well, as long as things don’t move, I’m going to make money here. But the market sometimes moves against them.
But that does play into the seasonal pattern on returns. So, the dark bars on the right-hand-side chart are average monthly returns normalized in those months. And it lines up pretty well with the inflation accretion or the seasonal pattern in inflation. It shouldn’t. This means that the market is inefficient.

And the inflation pattern should be there. It is what it is. But the returns pattern should not. We’re now heading into an historically negative seasonal period. And that may be keeping some investors on the sideline.

You can see that carry can matter very significantly. So, this is an example I love to use. It was back in May 2008. Oil had gone up in the spring of 2008 pretty significantly. Food inflation was running high. Core was relatively elevated. So, the inflation print that we had gotten was pretty sharp in that time period, so inflation accretion during the month of May was pretty high.

Now, oil continued to go up. So, I chatted with an investor about midway through that month and said, “I bought breakevens, the 09s, at the beginning of the month. And breakevens are higher, so I’m comfortable, I like my position. But my systems are telling me my P&L is actually a lot higher than what I think it should be, just looking at the spot breakeven move,” which is the lighter blue line there. And this was a very sophisticated hedge fund who had basically done yards of the trade. So, this wasn’t just a smaller investor biting off a little chunk as a test trade. This was a big position. And they hadn’t understood the carry component of TIPS.

Now, it happened to work out in the right direction. So, they got the breakeven move, and they got the carry of about 100 basis points over that month. So, it was a pretty good month, but sometimes it’s better lucky than smart, I suppose.

And again, a lot of numbers on this chart…. So, it is very important to look at performance not by looking at breakeven moves alone or real yield moves alone. An example is at the very top of the page, the GN 17s, the shortest TIPS that’s out there.

So, the breakeven move year-to-date is up about 75 basis points. Even I can’t read that chart from here. However, it has that carry, because inflation has been above the breakeven from where it was at the end of the year by a significant amount. It has positive inflation accretion, or positive carry, of 238 basis points. So, that’s 79 basis points. I can see it better now.

That 79 basis points is sort of nothing compared to the carry. So, it was really a carry trade. And adjusted for that carry, the performance has been up 317 basis points.

So, if you ignore the carry component, you would have missed most of the performance. Obviously, you would have actually realized it, but you wouldn’t have known where it was coming from.
So, when investors trade the market, oftentimes they think about the beta. And what we mean by beta is the relationship between TIPS and nominals, the move in real yields versus the move in nominals. If you have a 10 basis point move in nominals, how much should you expect real yields to move in that environment?

Well, it depends on why nominals moved, is the right answer. Did they move because of growth expectations? Did they move because of inflation expectations? Both? Now, on average, that relationship has been about 70%. So, if we’re given a move in nominals, about 70% of the move in yield space comes from the move in real rates.

But you take an announcement by the Fed — recently, for example, when they came out as dovish versus market expectations in September. And what we saw is that real yields led the way. So, real yields rallied. The market saw the statement as a bit dovish, real yields rallied, and breakevens went up during a nominal rally.

So, you can have times when the beta is much greater than one, much less than one, and it’s a good thing. Many get frustrated with this, but this is what makes TIPS a separate asset class than nominals. If that beta was constant and we always knew that real yields would move exactly 70% of whatever nominals moved, the nominals would essentially just be levered TIPS.

So, it’s a good thing that they move. It makes them a separate asset class from nominals. There are various ways to calculate that beta, and I have a couple of here — looking at changes, doing regressions on changes, on levels, total returns. So, there’s certainly not one right answer.

It’s also important to think about beta versus duration. So, even if you have TIPS moving less than the nominals in a sell-off or rallying by less in yield space, the performance of TIPS can still be worse or better in those exact scenarios, because TIPS, for the exact same maturity, have a higher duration.

This really comes in at the index level, where the Treasury has, on average, issued more short-end notes. So, the average duration of the TIPS index is about a 10 year — so a little bit less than 10 on the duration — versus the average of a nominal Treasury index, which is closer to five. And so, if we’re given moving yields, the TIPS index might actually move a lot more than Treasuries, because it’s longer duration.

And you can see that in realized returns. Most of the driver of near-term returns is through the real yield. Over time, you get the inflation component. But in the near term, on any given day, because inflation accretion comes in day after day after day in little increments, in drips, so over time, you get that inflation, but on a day-to-day, it’s almost all about the returns, or almost all about the real yield move. And you can see that on a short-term basis, most of the returns here,
in this example, came from real returns. As you look out longer horizons, the inflation accretion component matters a lot more.

So a couple of notes on how we look at value in the market. How do we assess whether they’re rich or cheap? So first, we say we have to start with an inflation forecast. We have some view on inflation. And at Barclays, we take a couple of different approaches to come up with a final inflation forecast.

The first is a top-down approach. And this is generally what the Fed does, some sort of augmented Phillips curve approach. Where is the state of the economy? How much slack is there in their economy? And if there’s a lot of slack, well, that should put downward pressure on inflation.

And if we’ve eaten up all the slack and labor markets are tight, if the unemployment rate is below NAIRU [non-accelerating inflation rate of unemployment], then that should put upward pressure on inflation. And we do that as well. We certainly think about that, but it’s more thinking about that in terms of our medium-term forecasts.

We also do a lot about bottoms-up analysis, looking at individual components — the energy component, the food component, owner’s equivalent rent, which we’ve done a lot of work on. Used cars — what sort of index correlates well with the used car price index in CPI?

So, you may have the economy booming or busting, but there might be lots of little micro-stories that keep inflation high or low regardless of what the economy is doing. Another big one now is the medical care component, and what’s happening in the medical care industry because of the ACA [Affordable Care Act], and where might it head in the coming years. It might have nothing to do with the overall economy.

We like to disaggregate headline CPI into its varied components. So, the easiest one you can think of is food, energy, and core. And then within core, you can separate it into core services and core goods. Another way you can have that same exact separation is tradable or non-tradable.

Now, I take the lazy man’s approach, because the BLS [Bureau of Labor Statistics] actually gives us core services and core goods. You actually have to do a lot of work to get that tradable versus non-tradable, and the lines end up being about the same.

So, what you can see here is that core goods inflation has been relatively flat for a long period of time. If I take this chart all the way back to the 90s, core goods inflation within CPI has basically been zero. So recently, it’s weakened a little bit more than that. But core goods inflation has not added much to CPI over the past 20 years.

And then if we look at core services, core services looks about normal. So inflation is a little bit lower at the core level than it was pre-crisis. But at 2.2% on a year-over-year basis, it’s actually
about average of where it’s been. So inflation right now is particularly low, and you can see that there are signs that it’s picking up.

Again, we also look at that shelter component pretty closely, given how big a component of CPI it is. We also do a lot of work on food and not so much on energy when it comes to our inflation forecast. We do have a commodity group that comes up with an oil forecast. But when it comes to modeling inflation, putting out an inflation forecast, we just take the market.

So, we look at the oil futures curves, and we take what the market is telling us about what the path of energy inflation is likely to be over the coming years. And then we maybe haircut that because of the pass-through from energy futures into retail prices.

So, as far as what matters for breakevens along the curve, at the short end, again, a lot of it has to do with energy. So, from one month-to-month perspective, energy causes about 50% of the volatility in any given month over month NSA print.

So, energy swings can matter a lot, despite its relatively small weight — and specifically, as energy commodities. So, the oil components — gasoline and home heating oil — that can matter a lot.

But even recent trends in headline and core, even though those are backward-looking… So, I had a lot of investors tell me earlier this year that they weren’t interested in buying 10-year breakevens at 1.5%, because headline inflation was at zero. So, why pay such a high premium above where inflation is? Of course, that zero came from the oil drop that happened last year. So, it was a naive view to some extent. But that sentiment, often looking at headline inflation — which is now at 1.5%, and we think it at 2% by the end of this year — can drive investor sentiment.

At the longer end — and again, I discussed carry earlier — the shorter end can be impacted by carry more than the longer end. At the longer end, a lot of it’s monetary policy. Again, go back to Milton Friedman’s quote that inflation is always a monetary phenomenon.

Well, if the Fed is credible — exactly credible, 100% — then markets should just price in whatever the Fed says their target is. And there may be a little bit of difference between the CPI, PC basis, or something. So, the more the Fed loses credibility with the markets in either direction, that can push forward breakevens higher or lower. So again, we think the Fed has lost some credibility, and that’s impacting where breakevens are now.

One of the notes I had on there is pricing-sensitive buyers. I mentioned earlier that foreign investors started coming to market on a structural basis back in 2009, 2010. And we see that dark blue line in the upper right-hand chart, which is foreign TIPS holdings as a percentage of total Treasury holdings by foreigners, has continued to go up to about a market weight.
So, it may not be clear where this is heading — or it’s not clear where this is heading. They’ve been buying a lot at a pricing-sensitive basis. So, we’ll see where things go.

The front-end, again, typically trades cheap. So, this is the front-end versus our forecast — so, say a one-year breakeven versus our one-year forecast. The one-year breakeven, or CPI swaps, tends to trade about 60 basis points lower than our forecast. And it’s not because our forecasts are consistently high.

I know what you’re thinking. It’s because the market demands a premium. If you’re in very short end nominals — bills or one-year coupon Treasuries — you’re there not to make a ton of money. You’re there because you want an instrument that’s very liquid and not very volatile at all — so, a very safe asset. You go into the short TIPS and you pick up a lot of volatility, most to do with the energy component, and you give up a lot of liquidity. You should be paid for taking on those risks. Now, right now, it’s particularly cheap.

This is my favorite chart, so I do want to take a minute to look at it. It looks at the market on a forward basis. So, it takes forward one-year breakevens — so bootstrap breakevens that are exactly one year apart — and looks at those at the 10-year.

To me, it gives a good snapshot of what that market is pricing in from a macro perspective, the path of inflation over time. You can see that path, while higher than where it had been, is pretty darn flat and fairly low, below 175 across that entire curve.

And it also gives me a sense of the micro dislocations in the market. You can have a lot of wiggles along this chart that have nothing to do with inflation expectations and more to do with buying or liquidity premiums in that specific issue versus those around it.

So, I’m going to stop here and take questions. I know they wanted to leave quite a bit for questions. So, I’ll stop here, and if we run out of questions I can come back to the slides.

SPEAKER 2: [CHUCKLES] Seems like a good deal. Thanks, Mike. Thanks for all of that. So, let’s start with sort of a targeting question. What do you think is a fair value target for 10- and 30-year US breakevens?

MICHAEL POND, CFA: So, it certainly depends on your on your view on when inflation is going to come in, over a couple of years. But also, again, if you’re looking that far out the curve, it comes back again to monetary policy.

So, if inflation across the world had 100% credibility on the Fed hitting its target of 2% on PCE — and maybe they can’t do that now, but over time they’re going to hit that spot-on — so, forwards should be spot-on to the target. You then just need to adjust for the CPI PCE basis. Again,
TIPS accrue inflation off of CPI. The Fed’s target is 2% off of PCE. So, on average, we think that’s about 40 basis points.

And so if the 100% Fed credibility is a 240 forward breakeven, now the Fed isn’t credible here. We think they’re gaining credibility. We think inflation risk premiums are coming back into the market. So, for awhile, the market has been priced for the Fed to miss on the downside if it misses. That’s starting to come back. So, while breakevens are structurally low here, we are looking for them to rise — probably not back to the average anytime soon. The average has been around 250 on that five-year, five-year rate. Now it’s at 170.

So, we do think we’re likely to see higher breakevens over the next year. I don’t want to put a target, just because of regulatory issues. But we do think the market offers significant value here on a structural basis.

SPEAKER 2: And just out of curiosity, from an interpretation perspective, you already sort of said that the Fed doesn’t really have any credibility through the lens of….

MICHAEL POND, CFA: On a relative basis. They’ve lost some credibility.

SPEAKER 2: They’ve lost some.

MICHAEL POND, CFA: The Bank of Japan, they have no credibility.

SPEAKER 2: Zero. Might have less than zero.

MICHAEL POND, CFA: It’s all relative.

SPEAKER 2: What do you think the Fed means when Janet Yellen talks about letting the economy run hot, how should that be interpreted by the inflation market or inflation-linked products?

MICHAEL POND, CFA: Sure. So, breakevens are up. First of all, I think breakevens have been held down for the past year and a half because of hawkish Fed rhetoric. Because the Fed, while acting easy — they only hiked once, and yet from 2012 they were constantly reminding the market that they were likely to hike soon. So, they acted easy, but talked tough.

Recently, we’ve gotten some fairly dovish rhetoric out of the Fed, even starting before Jackson Hole, with the Williams paper coming out suggesting that under a low, long-term neutral policy rate, low R-star, perhaps the monetary framework should be changed to allow the inflation target to be higher. So, that was the first sort of sign. And then Chicago Fed President Evans talking about overshooting on inflation.
Now, to some extent, what she is recognizing is something that we talked about at Barclay’s for a bit, that maybe in order to achieve their inflation target, they need to run the overall economy a little bit hot. So, the way we describe it is maybe you need 4% unemployment to get to 2% structural inflation, running inflation. And to some extent, that’s because the Phillips curve might be a lot flatter than it used to be. So, you need more monetary policy stimulus to get the same result that you used to under a steeper Phillips curve.

Now, we think the Phillips curve is flatter because of more exposure to international prices. That core goods component is weighing down on inflation more than it used to and is not sensitive necessarily to monetary policy. So, you need to run the domestic economy hot to offset the global weakness coming through import prices.

So, we don’t think it’s that they’re overshooting on inflation necessarily. We think that they have a mindset that maybe they need to overshoot on the employment side of the mandate just to hit their inflation side.

SPEAKER 2: You talked about various impacts on breakevens at different parts of the curves. What’s the impact of foreign exchange — dollar strength, weakness, or volatility in currency markets?

MICHAEL POND, CFA: Sure. So, most of the foreign exposure, if you will, into CPI comes through import prices and the core goods component. So, that’s why, when I talk about separating core CPI into tradables versus non-tradables, it’s almost equal to services versus core goods.

So, an FX move, we think, impacts inflation over the subsequent four or five quarters — so, not right away. It takes some time. You have a lot of import–export contracts that are set, but then they reset as you have FX pass-through impact. And so, it can be significant.

But just as important is the overall global growth picture. So, if the currency isn’t moving but China’s economy is quite weak, and weakening, then that could put downward pressure on core goods prices, even without an FX move. So, the global economy is very important to the overall inflation picture.

And I think the Fed has only started to really recognize that, because they think they can focus on domestic inflation pressures, not domestic inflation — because it’s domestic inflation pressures that they can control. But maybe they need to get domestic inflation pressures up higher to offset the disinflationary pressures coming from weak global growth.

SPEAKER 2: You talked about betas, and betas to nominals. And you talked about liquidity versus nominals. There also is a beta to credit spreads in TIPS. So, should one think about it in terms
of bucketing not how securities are called, but thinking about how they behave? How should one think about TIPS sort of betwixt and between a government portfolio or a credit portfolio?

MICHAEL POND, CFA: Yeah. So, I started by saying that TIPS are the ultimate risk-free investment to maturity. They often trade like a risk product. And more specifically, breakevens trade like a risk product. And it’s because the underlying factor that might drive inflation expectations or inflation risk premiums might be growth and the Fed’s reaction to growth. And so often, when growth is strong, we’ll see a balance in equities, credit instruments do well, and breakevens go up. So, they often trade with risk assets in that manner, from a pure fundamental standpoint.

You mentioned liquidity. They also trade with risk assets from a liquidity standpoint. Oftentimes, you’ll hear, Treasuries are doing well today because of a flight to quality. It’s not quality that people actually mean. It’s a flight to liquidity. TIPS have the same exact quality from an issuer standpoint that nominals do. But when people are scared, and they just want to hold onto something safe, they go to gold and they go to nominal Treasuries, because they want that liquidity property of nominal Treasuries.

And oftentimes… I showed that relative asset swap chart. And that peak of that relative asset swap chart was in the fall of 2008, when breakevens went down about 100 basis points more than fundamentals justified, because investors wanted that liquidity of nominals rather than TIPS. They were willing to pay a 100-basis-point premium above and beyond fundamentals of inflation to hold that more liquid instrument.

SPEAKER 2: In terms of portfolio construction, there’s been a little bit of discussion on active versus passive so far this morning. What value is created or lost by participating in a TIPS ETF [exchange-traded fund], or owning a TIPS ETF versus purchasing individual securities?

MICHAEL POND, CFA: So, if we didn’t talk anything about inflation at all and we just had return numbers blindly and then ran some sort of Markowitz efficient frontier model or various different risk budgeting models, what you would find is that TIPS show up pretty well — not as well as they used to maybe before 2008 — but they show up pretty well in that model.

So, just from our pure diversification correlation perspective, despite the fact that they are correlated with risk assets, TIPS offer value within that asset allocation framework. And then over time, once you introduce the inflation component and look at the inflation-specific exposure within many other asset classes in a broad portfolio, TIPS offer that inflation insurance that, maybe not now, but over time, investors want. So TIPS definitely have a place in a broad portfolio construction approach.

SPEAKER 2: Great. Mike, thanks very much for your time.