BIANCO RESEARCH

AN ARBOR RESEARCH & TRADING, LLC AFFILIATE

AI, Stressed Funding Markets & the Government Restart

November 13, 2025

Welcome to the conference call. Typical housekeeping with a little bit of a twist. On Monday, we rolled out a new website, new fonts, new formatting, and everything else. So far, we're trying to resolve that. You know, some of the little punch points. If you've got any questions or if you see anything that does not work right, please let us know.

Hopefully, you'll find it cleaner, easier to use. The search engine on the website is much better and the like. So, and if you've got any other questions, you can either hit email or put it into the question window. It is right here in front of me. All right, let's move on. Al stressed funding markets, government restart, a whole ball of wax here.

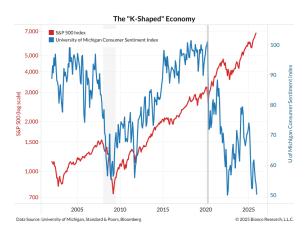
So here is the discussion topics that I've got for today. I want to talk about the K-shaped economy because I think that this is becoming a real, real issue right now. And it is driving policy, and it might even, you know, affect the Fed at some point. And in a negative way, because of affordability, which is the new way that we say inflation, I got a chart to show you. We're down to 50-50 now, whether or not the Fed's going to cut in December. It is unusual, not unprecedented, to see the market less than a month from the meeting to be literally 50-50.

Usually, we're on our way to resolve what the Fed is going to do, not being a complete coin toss. Talking about interest rates, volatility is picking up. I think we're getting to the point where we're finally going to have a move in interest rates. My guess is higher, but the bigger point is that we're going to have a move. Talk about the status of the labor

markets. Kevin Hassett talked about that they might put out the payroll report in October, an October payroll report after all, but not a payroll, but not an unemployment rate for October.

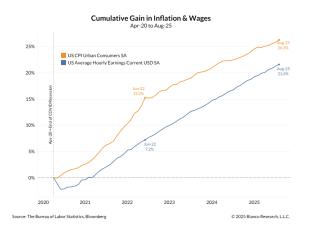
I'll try and explain the difference and why that matters. And then I want to talk about AI's impact on the markets and the economy. I got an interesting chart to show you there where I could argue to you about the concentration of AI in the market. You have to go back to the 19th century railroads to find the last time that we've seen a market this concentrated under one particular theme. Talk about stock market valuation and then an update on funding stress. Funding stress is still with us.

It is still an issue. Monday is going to be the big day that we're going to have to follow because it is going to be the settlement of the twos, the tens, and the 30, which gets auctioned off later today. And I'll try and explain some of that when I get there. All right, let's talk about the K-shaped economy. here is my favorite chart to try and illustrate the K-shaped economy. The red line is the S&P 500.



It has been going straight up. And the blue line is the University of Michigan's Consumer Sentiment Survey. Not only is that back to the 2022 low that you see here, but what is not shown is that the University of Michigan has been doing this survey since 1952. This is the second lowest reading in its 73-year history. Only that June 2022 reading was worse. This is worse than it was even at the worst point of the financial crisis.

It is worse now than even at its worst point of the COVID shutdowns. The public thinks that this economy is a disaster, but the stock market is saying exactly the opposite. Now, why does the public think that this economy is a disaster? Because it comes down to the thing I've been talking about for years, inflation. Inflation matters more than anything else. So, look at this line here, these lines here.



The orange line is the cumulative increase in the inflation rate since the COVID shutdowns ended in April of 2020. Prices are up 26.3%. The blue line is the average hourly earnings. What is the average wage? What has been the average cumulative rise since April of 2020? iritis 21%.

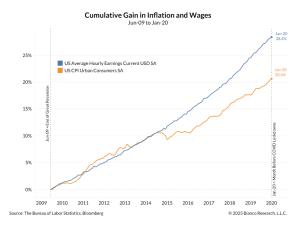
So, wages in balance have not been keeping up with inflation. Now, I know that there is a lot of people that are going to say, but the inflation rate's down. But if you measure this from the last three years, it is not as bad as this is. I'll go back to this chart. We're at a 73-year

low in the public's perception of the economy. They think it is a train wreck.

Why do they think it is a train wreck? Because of this. And we could stand on our head, and we could say, well, the inflation rate was nine and now it is three. But if you measure the same chart from, say, the June of 2022 high, wages and inflation have been about the same. True, true, true. But I'm trying to explain why this is at a 73-year low when the stock market is going straight up.

If you look at this chart prior to 2020, the red line and the blue line sort of move together. In fact, I wrote an op-ed for Bloomberg in 2019 calling consumer confidence the world's most useless indicator because it only told us what the stock market did last month. I do not need an indicator to tell me that. I can look it up. That is absolutely not the case anymore. And so, this is why I'm using this chart to try and explain why the public's so down on the economy.

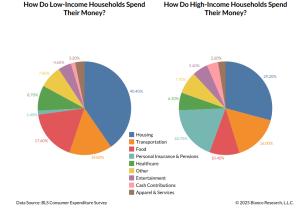
It is about affordability. It is about inflation. And to highlight this, here is the chart, same chart from 2009 to 2020. It was the opposite. The blue line, which is wages, grew at 28% during that 11-year period. Prices during that 11-year period grew at 20%.



By the way, they grew 26% in the previous five years. The previous 11 years before that, they only drew 20%. In other words, wages outpaced prices. Half the country, the bottom 50% of the country, owns no assets, probably

rents, bottom 30%, definitely rents, has no savings. They live paycheck to paycheck. They cannot come up with \$1,000 in an emergency.

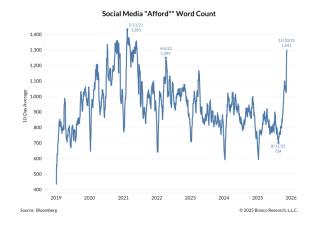
So, when this happens, that their dollar that they have buys less and less, yes, you bet you're going to get a 73-year low in the outlook for the economy. Even though the top 10% of income is 90% of the stock market, they're doing good. The top 10% also account for 50% of retail sales, the most concentrated it has ever been. This is why you're getting this kind of measure. This is why you're getting this. And I'll go, well, before I go one step further, let me just show you this other chart.



And then if you also look at the way that money is being spent, this is a breakdown from the Consumer Expenditure Survey. How do the lower-income households spend their money? On the left, blue is housing, orange is transportation, and red is food. That is approaching 70% of their budget, housing, transportation, food, 70% of what they spend it on. But if you look at the high-income budgets, housing, transportation, and food is slightly more than half. And, of course, within those categories, food for the lower half of the income is grocery stores.

Food for the higher half of the income is at restaurants. Transportation for the lower half of the income is maintaining your 10-year-old car. For higher-end income, transportation also includes airline tickets. It includes rental cars. It includes Ubers and the like. Housing would also maybe include a second home or a

rental property where it will just include a primary home for the poor.



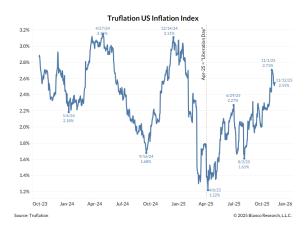
So, these are the metrics that are going up, and this is what is getting the public so upset about what they've been seeing. Now, we have had an election in the last week or so. Bloomberg does have an interesting - they traffic hundreds, if not thousands, of financial Twitter, social media accounts, and you can do word counts. And I did the word count on afford and asterisk, meaning afford, affordability, just anything that starts with the word afford. And you can see how it spiked up to almost a four-year high. So, the public is all in on this idea that affordability and inflation is the number one problem.

Two things about that. There has been surveys done, and the public has been asked the question, if the unemployment rate goes up 1%, but that holds the inflation rate down, do you favor that? And 70% or 80% of the public says yes. In other words, going up 1% on the unemployment rate affects 1% of the economy. Affordability or inflation affects 100% of the economy. yes, it affects Elon Musk, the richest man in the world, because he's trying to maintain profitability at SpaceX and at Tesla, and his input costs go up, and he worries about inflation too.

Maybe he does not worry about putting food on his table, but inflation impacts him as much, well, in his way, as much as everybody does. So, message to the Fed. Vote the 1% off the island. Get the inflation rate down. But the Fed is doing exactly the opposite. They're fretting about a couple of tense rises in the unemployment rate and cutting interest rates and stimulating the economy when the public is saying, I do not care about that.

I want prices down. The Fed also tries to say that prices are well anchored. The public is trying to tell you they are absolutely not well anchored. They are mostly unanchored at this point. So, this is the dichotomy that we've been seeing. This is the economy that we live in.

The public thinks it is a disaster. It is a disaster because of prices. Prices are up 26% more than wages. Wall Street and the top 10% say it is gone from nine to three. Buy more stocks. Stock market's going up.



Ooh, the unemployment rate went up a tenth. We need to start aggressively cutting rates. The public's saying, well, if that is going to lead to higher prices or even sticky prices at these levels, do not do it as well. So where are we with prices? Here is the Trueflation U.S. Inflation Index. So again, Trueflation, like PriceStats and some of the other ones, what they do is scrape the Internet for millions of prices.

Trueflation says up to 15 million prices. And they kind of calculate a daily inflation rate. Now, they use different weightings. They have 23% of their index at shelter, whereas the CPI is closer to 40 and the like. And they're more weighed towards goods, less

services. As I like to say, it is hard to find a haircut on Amazon or get your lawn mowed, but it is easy to find products, goods on Amazon.

But what they're showing is that their year-over-year inflation rate has been trending higher since Liberation Day, Liberation Day, April 2nd, 2025. But their index bottomed out at a little over 1% at that point, and it is now trending towards 2.5%. So, inflation is creeping higher. This is the problem. J-PAL, I do not do this often, but I'll say it. J-PAL spend 90% of your time talking about inflation because 90% of what the public gives a shit about is inflation.

You spend 90% of your time talking about unemployment. And so, this is really where we've got to go with looking at this. A couple of questions have come in here. What could be done to fix the K-shape? Did the government get us into this situation, or should we be looking to the government to fix it? To fix the K, I think we've got to fix inflation.

I think, you know, why did we not have a K going back to 2009 to 2020? Why were we not K-ed like this during this period? I'm going too fast. Why did we not see the K like this during this 2009 to 2020? Because at least the bottom end of the population, living paycheck to paycheck without any assets, they would go to the store every month. And at a minimum, they could put the same things in their grocery basket that they did a year ago or two years ago because they got a raise that was commensurate with the inflation rate.

They were able to use a tennis term. They were able to hold serve. And maybe you could even argue, get a little bit ahead because wages did outpace in the second half from 2015 forward. Wages did outpace inflation a little bit in the second half. They were able to hold serve, and they were happy. I cannot emphasize, in my opinion, this gap between prices and wages is the thing that is

motivating to go back to this, the K going this way.

And this is the thing where the Fed just says, well, prices are well anchored. The inflation rate's coming down. There, we're done. Let's spend 90% of our time talking about whether we have a 4.3% or 4.4% unemployment rate, or payrolls are \$40,000 versus \$30,000. I'm not diminishing that. Those are important.

But what the public cares about is prices, and that is what we're not seeing. What we're not seeing right now is them really addressing prices other than to say there is nothing to see here. Not only has Trump been trying to argue that, but you also know, he's been making the same Biden argument. Inflation is not a problem. So has the Fed been trying to make that case that you're wrong. Inflation is not a problem.

I'll tease it again. I think that is why we're at 50-50 on a rate cut, because I think we're starting to come along with the idea that inflation is becoming a problem. Let me move on a little bit here more. Let's talk about Treasury yields. here is a chart of Treasury yields, and I drew some trend lines on it. And what you can see is that Treasury yields went from 50 basis points to about 5% from 2020 to 2023.

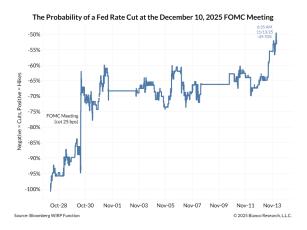
For those that have been on these calls before, I've shown total return statistics. This rise in rates produced the worst three-year return in the bond market since 1840. Yes, 1840, when we had \$38,000 worth of Treasury debt, and the market sold off, so the cumulative loss was like \$4,000. It was basically nothing. It paid off all the Treasury debt by 1840. So, this was a dramatic, life-defining move, which is what I'm trying to argue.



What you've seen with those two trend lines, that wedge pattern, is a consolidation, digesting the biggest move in 180 years. It has been two-plus years since we've been doing it, that we've been in this pattern. We are continuing in this pattern as well. We're going to eventually break out of this pattern one way or the other. My guess is, well, standard technical analysis. This is just standard technical analysis.

It does not mean it always has to be that way. You went up into this wedge pattern. You went sideways into this wedge pattern. Wedges are considered continuation patterns, a pause in the larger trend. The larger trend is up because you went up into it. They're usually not what is referred to as reversal patterns.

You go up, you wedge, and then you go back down. It does not mean it does not. It cannot, but the standard way that technicians would view this would be that it would be a continuation pattern and would break higher. The other chart here to take a look at, let me get there, here, is the probability of a rate cut. The probability of a rate cut right now is running at around 60%. That was last night.



If I were to update this for this morning, it was 49% this morning. I did not get a chance to update this chart from last night. It has moved from 60% to 49%. It is exactly a coin toss. Again, why is it a coin toss? I think it is because we're getting beat over the head and we're finally starting to get it.

Inflation is still the issue. Inflation is unacceptable at 3%. It is not solved. It is a problem at 3% right now. And it is not 2. It has not been 2 years.

And that is why I think we're starting to see with this that we're at 49% right now this morning, 60% yesterday afternoon when I last updated this chart. Let me make another quick comment about what is happening at the Fed. I dropped my stylus. Sorry about that. And that is, in 1986, there was a FOMC meeting, and they were discussing whether or not to cut rates. The Federal Reserve chairman at the time, Paul Volcker, was against it.

The board overruled him and voted to cut rates. Volcker got up in the middle of that meeting and walked out of the boardroom where they were having the FOMC meeting, walked into his office, called Jim Baker, the Treasury Secretary, and immediately resigned as Federal Reserve chairman. Two minutes later, Wayne Angel, who was an FOMC governor, convinced him to come back into the room, and he did. They had a second vote two minutes later, and they voted to not cut rates as Volcker wanted. From that moment in

1986 through now, we have been operating under the chairman of the Federal Reserve gets what the chairman wants. I've jokingly said what is your job as a Fed governor.

You get to have a private meeting with the Federal Reserve chairman. You get to tell him how you view things. He'll put his serious face on. He'll take your views seriously, and maybe he does, but at the end of the day, he will decide what policy is going to be. I have been hypercritical that this has been a terrible way to run the Fed. It creates groupthink, insular type of thinking.

It creates all kinds of policy mistakes. We would not tolerate it for one second if the Supreme Court were like that that they hold their oral arguments against tariffs or whatever they are hearing. They all walk into the cloakroom, and they look at Chief Justice Roberts and go, so how are we going to vote on this? We would not tolerate that for one second, but that is exactly the way the Fed works. What is happening with the Fed? We highlighted this yesterday in our news clips.

At the top of our news clips, what we're reading section yesterday. Now, Nick Timoros of the Wall Street Journal said that the Fed is now fractured. There is a contingency of maybe three or four members of the Fed, some of them are going to be voting members in January, that are dead set against any more rate cuts. there is three or four members that want more rate cuts, with Stephen Marin wanting 50 basis points, Chris Waller, who is on the short list to be Fed chairman, also wants rate cuts, Michelle Bowman wants rate cuts as well too. On the other side, those that do not want any more rate cuts are Schmidt from Kansas City, Goolsby from Chicago, and a couple of others, oh, Beth Hammack of Cleveland, and Lori Logan of Dallas. They're dead set against any more rate cuts.

And then you have some unknowns, like Powell is unknown, Jefferson is unknown, Lisa Cook is unknown. This is the way it should be. We should, in August, the Bank of England

had a 4-4-1, they have nine members, 4-4-1 vote. The one was for 50 basis point cut, the four was for 25, the other four was for no cut, they cut 25, because 50 is just two 25 cuts. I would not be surprised if we wind up with a 6-3-3 vote somewhere down the line, or something like a 5-4-3 vote, or something like that. It should be that way.

It should, a 5-4-3 vote, you'd have to say, well, what do the five want? If they want a rate cut, and you've got a dissent for 50, then you will still get your 25-basis point cut. That is healthy. That is good. They should be having competing interests, and they should be laying it out. I've been very complimentary of Stephen Morin.

Not because I agree with his policy, I actually do not agree with his policy, but he is writing blog posts, he is giving speeches to explain his rationale for what he wants to do. Maybe you do not like it, maybe you do not agree with it, but it is better than what Lisa Cook's doing. She's given one speech in four months, and that one speech was basically warmed over Fed talking points that did not enlighten anything. They should all be listing out blog posts. Lay out what you think the state of the economy is. Tell me exactly why you think we should do what we're doing.

Hammock is doing it in Cleveland; Logan is doing it at Dallas. We need more of this, not less of this, and it will insulate the chairman from his independence. Why does Trump attack Paul, and why does Trump want to get rid of Paul all the time? Because he's the whole Fed. He's the only guy that matters. Why does not he ever, or any president ever say, John Roberts is terrible, we have to get rid of John Roberts, because they understand he's only one of nine votes.

You get rid of him, if you could, I'm just saying in theory, if you could, if you could get rid of him, you've only changed one of nine votes. Now, maybe that changes the balance of the court, maybe it does not, but if you have the Fed going in this room, fine, fire all the Fed

chairmen you want, do not reappoint them all you want. You've only changed one of 12 votes. It is not going to change things on the margin. I think we're finally coming to that period. We saw this with the last meeting, it was 10, 1, and 1.

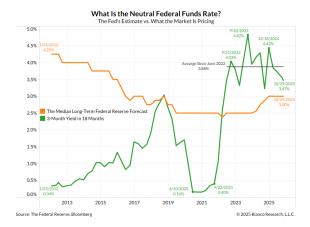
There was 10 votes for 25, 1 for 50, and there was a vote by Schmidt at Kansas City to refrain from any more rate cuts. Good, do more of this. This is exactly what we need. This is why the Fed gets stuck with talking about transitory or gets stuck with what I believe was a mistake, was the cuts last year, because long-term rates went up. The Fed, there are people at the Fed, I do not pretend that I'm a Fed insider, I talk to people at the Fed. I know there were people at the Fed that thought transitory was a mistake.

They should be allowed to raise their hand and say; I disagree with the chairman. This is why we're making a mistake in that inflation will not be transitory. We see this with the Supreme Court all the time. We see people write dissents, yes, the Chief Justice Roberts voted this way. He's wrong, and here is why I think he's wrong. We need more of that at the Fed.

That is my little soliloquy, expect more dissents at the Fed. Expect this to be a good thing, not a bad thing. This is how you find the right policy; it is a competition of ideas to figure out what we think is going on. Not that everybody just gets to get the serious face for a 30-minute call with the chairman, and then he personally decides, with consultation with the staff or whoever else is in his orbit, what the policy is going to be. That is how you make terrible mistakes by the Federal Reserve. I think that they could be potentially making terrible mistakes right now.

I wanted to bring that up, and I think that this is starting to really sink in right now with this 49% here that we really have to start to really focus on prices more than anything else. Why does it matter? Here is the market versus the Fed's view on where our star is. Let me explain

the chart, and then I'll give you the comment. The orange line on the chart is from the Fed's long-term dot chart, all spliced together. What is the median long-term dot?



Where does the Fed think the neutral funds, rate is? As of their last meeting on October 29, it was at 3%. It was as low as 2.5. It has been as high as 4.25 back in 2012 right here. What does the market think? There are several ways you can look at the market. The Fed has actually pointed out a way, which I think is very reasonable.

They look at the forward curve. They look at the three-month yield in 18 months. How do you get that? We issue Treasury bills and Treasury bonds every month. You look at the bonds that mature in 21 months. You look at the bonds that mature or notes that mature in 21 months.

Maybe some of them were issued initially as bonds. Then you look at the notes and bonds that are maturing in 18 months. You compute, okay, in 18 months, I know what the yield is for 18 months. I know what the yield for 21 months is. What is the three-month yield in 18 months that makes you go from the 18-month yield to the 21-month yield? You impute that.

That is what you see with the green line. It was 3.5 on October 29th, but since inflation peaked on June 22, it averaged 3.78. I've argued that the inflation rate is somewhere around 3%. That is the long-run inflation rate. The Fed insists it is still 2, even though we're

now five-plus years past COVID. We cannot even get it under 3.

I'm talking about core CPI at this point. We have not even gotten PCE, their favorite measure since August. Let's just go with CPI. We have not even gotten it under 3 and even headlined as the 3 with low gas prices right now, let alone get it anywhere near 2 at this point. If it is 3 and the Fed thinks our star is 1%, then that means that the fair value is somewhere around 4. I'm scribbling all over this thing.

That is very close to where the market bounces around, but that is very close to where the market has been for the last couple of years. Why is that important? Because if the inflation rate is 3 and we're at 3.75, then that is where we're at. The 3.75 to 4 is where we currently are on the funds rate. Then we're basically at fair value right now. Any more cuts is going to push us solidly into ease phase, is going to stimulate a phase, and it could very well put at risk stimulating inflation.

That is what I think happened last year. The Fed cut 50 basis points September of 24, then two more 25s in October and December, and the 10-year yield went straight up. It went straight up over 100 basis points by January. I'd even argue the same thing is happening now, the Fed cut in September and in October. When the Fed cut in September, the 10-year yield was 3.95. Today, the 10-year yield is at 4.10 or so.

It is only 15 basis points, and it has not gone down since the Fed has started to cut rates. It has been over two months right now, despite where everybody is thinking about this. I would argue that we would have to look for rates to potentially be at fair value and not cut any more, because if you cut any more, you're going to go into stimulative phase for rates. One last comment, and then I want to move on to housing and talk a little bit about what is going on with housing and how it ties in with rates and inflation. I like to joke that retail will explain the stock market as up as good in

stock prices and down as bad, and that is all you need to know. By the way, they're not wrong on that.

When it comes to interest rates, Trump has done a very good job of doing a version of that where up on interest rates is always bad all the time, no matter what, and down is always good, no matter what, and 1% is better, and that he wants to fire Powell and put somebody else in Powell's spot because he wants that next chairman to have a mandate to push rates to one and to forgive the salty language and not give a shit what the data says. Cut, cut, cut, because lower is always better full stop because he's a real estate guy and highly levered borrowers always think every downtick in interest rates is better. There is never a bad reason for it. Reality is interest rates should approximate a fair value. That is the optimal for the economy. You get to your fair value point on interest rates.

If they go too high, they're restrictive, they slow down growth. If they go too low, they're stimulative, they could create inflation. What are the inputs of fair value? The inputs of fair value are growth, inflation expectations, supply. What I've argued here with this chart is the fair value for the funds rate is probably around four, the yield curve normalizes, you should have a positive two's fund spread, so the two years should be above four, and usually the two's ten spread over long periods of time is averaged by 100 basis points, but the tenure should be around five. It is now around 410, so it is way too low.

Now a lot of people are in this up is bad and down is good, oh my God, the tenure goes to five. Yes, so that is where it should be. That is the optimal rate for the economy. If it is too low, it is too stimulating. If it is too stimulating, the bottom half of the K gets hit, because they just want to be able to buy the same things this month that they were able to buy six months ago. They want their pay to keep pace with prices.

We need prices to go down or to level our inflation rate to go down even more, 3% is unacceptable from that. So, there is another argument to be made, we need 50-year mortgages, and we need to bring down the mortgage interest rates because homes are unaffordable. So here is a chart of existing, median existing home sale prices. And on the chart, you can see the gray line is not seasonally adjusted and it is kind of sign wavy, you can see that in the chart. So, I, we, seasonally adjusted it. And so, the prices on a seasonally adjusted basis are \$418,000.



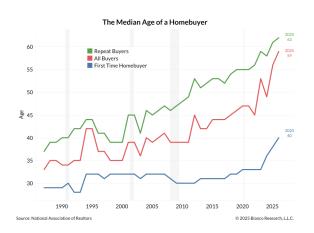
That is an all-time high. Now I've quipped that the thing about the housing market you have to keep in mind is I'll put two numbers here on there is 86, boy, my penmanship is bad, 86 million homeowners and there is 45 million renters. Those 86 million homeowners have 180 million people that live in them. And those 45 million renters have 102 million people that live in those, in those rental units as well. So, whenever we look at the housing market, it is perpetually in a crisis. When prices go up, it is an affordability crisis, and it hurts the 45 million renters because they'd like to buy and they're not able to buy.

When prices go down, it hurts the 80 million or 86 million homeowners because that is their retirement and the banks and the mortgage brokers that lend to them. So, we constantly complain about the housing market. We're never happy. It is either an affordability crisis, or it is a financial crisis. And right now, we're having a major

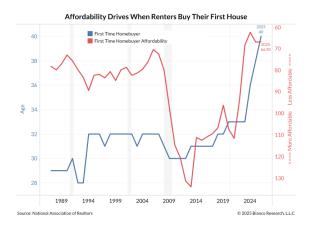
affordability crisis in the market. So much so that the median housing costs, now this is your mortgage, your upkeep, your insurance, your utilities, everything all balled into one estimated number by the Atlanta Federal Reserve, is now chewing up, the media is now chewing up 46.7 or roughly 47, let's call it half.



Half your income is now going towards maintaining your home. That is higher than it was at the bubble peak in 2006 when it was only 45% of your income. I know it is only, you know, one or 2% higher, but it is right there at the bubble. It is right there at the bubble peak. So housing is extraordinarily unaffordable. How unaffordable is it?



The National Association of Realtors put out an estimate of what is the median price, or excuse me, what is the median age of a home buyer and the median age of a first-time home buyer is 40. The median age of a repeat home buyer is 62. 62 is somebody who is buying their second house or third or fourth or fifth or so, and the average is 59 right now. So, we're seeing these numbers move up quite a bit. Let me use the first home buyer. So, the National Association of Realtors also puts out an affordability index.



So that is in red and the scale is inverted. So, you could see that when it goes up, it is less affordable. When it goes down, it is more affordable, and it tracks with that. Why is it the first-time home buyer is 40? Because they need, you know, 18 years out of college to use an example of saving and getting raises and promotions to make enough money to afford the standard mortgage. So here, again, some more data from the National Association of Realtors.



And what they're showing you is that the qualifying income you need to make to afford a first-time home mortgage is about \$103,000 on average. But the average home buyer only makes \$70,000 a year. This is the gap. This is another reason why we have a K,

and everybody thinks the economy is terrible. You tell me it is great. The stock market has gone up.

People are making money in crypto and Bitcoin and AI and all this other stuff. I cannot even buy a house. I cannot fill my grocery basket. I think this economy is a disaster and it is where they are right now. Well, how do you fill that gap? How are we even getting homes being sold?

There are assistance programs, borrow the down payment from your family or friends or some other means. And it is not that naturally you are now capable like you were up until 2022. If you look at this chart going over time, most of the time you could naturally, you know, afford the mortgage, qualify for the mortgage for a first time home just because you were of a certain age and you were of the median income. But now you really, you really cannot. But what is different about this right now is what happened in the housing market. So, Robert Shiller has, you know, put together, you know, the Case-Shiller index for home prices, but he's also put together his data all the way back to 1890.



So, this is what you're seeing right now is the data back to 1890 and this is real. Real is after inflation. And what I'm pointing out here is the following. In the 50 years after World War II, on an adjusted basis, there was basically no appreciation in home prices. It waved around, but around, around. So, what a home did, what you bought a home, it kept pace with inflation,

maybe a little bit more to keep pace with property tax increases, insurance increases, you know, it is more expensive utilities.

But that is all it did. It used my favorite sporting term here. It helped serve. Your home, you know, basically helped serve. It kept going up in price to meet your existing costs. I would actually argue with you that it actually has been going on since 1890.

As I point out here, there was a big rise in home prices from 1942 to 1947. Because of the war, we sent the construction workers, I'm trying to keep the example simple. We sent the construction workers overseas to fight World War II, home starts collapsed. We still needed to have homes; home prices went up. So, you adjusted for that, and you were basically stable on home prices for 100 years. Then starting in the late 90s, all of a sudden, homes were not just shelter, affordable shelter that kept pace with inflation, so you can find a nice neighborhood with good schools and move and put down roots.

That is what a home was like. But in the late 90s, it became the piggy bank for America. It was going to fund our retirement, it was going to fund our municipalities, and it was going to fund our schools through property taxes. Because we can raise property taxes with higher property prices as well. And then we started to see boom busts in the home market. A boom in 2006, a giant bust in 2012, another boom in 2006.



So, this is new in the last 30 years, that what we've been seeing with home prices in the last 30 years is unlike what we've ever seen. And if

I go to the next chart, somebody sent me this chart. Amsterdam, the Dutch, have real home prices going back 400 years, and this is around 1998. And for 400 years, home prices were shelter. They were shelter, they would just keep pace and make them affordable. But then after that, they've become speculation.

So, this is what is changed with the home price market, which is that they've become speculation at this point. Now, why do I bring that up? Because in a speculative environment, if we were to cut rates, and mortgage rates were to come down, and or we were to go to a 50-year mortgage, 50-year mortgage lowers the average monthly payment, but you have more monthly payments to make an extra 20 years of monthly payments. We are not going to drive down the average price of a home. We're going to, we're not going to drive down, excuse me, I said that wrong. We're not going to drive down the average.

Now, I'm going to get away from not paying three grand because it is not a form of reasonable priced shelter. It is now a speculation. On social media, I've been kidding around calling it Bitcoin boomers because the average age of a repeat homebuyer is 62, they're speculating on homes, under 35 is speculating in crypto, and they're all wanting to get rich because they all want to retire comfortably. And so, we're not going to fix this problem by cutting interest rates. All we're going to do is incentivize even higher home prices, and that is not going to fix the problem in the long run. At the end of the day, the other complaint I had is the 50-year mortgage is an acknowledgement that home prices are unaffordable.

So, we're trying to use innovative mortgage finance in order to lower the average monthly cost so that the average person can buy an average home. The problem is, we did this in the 2000s. I remember Option Arm, Alt-A, negative amortization mortgages, adjustable-rate mortgages, loan the values of a lot greater than 100%. Why do not we do all

these crazy things with mortgages? Because the average person could not afford the average home. So instead of lowering the price, we tried to figure out how to lower the average monthly payment, and how'd that work out by the time we got to 2006 to 2009?

It created a spectacular bust. Now, the introduction of a 50-year mortgage, if it happens, does not mean that we're going to have another spectacular bust. But it is an acknowledgement that the average person cannot afford the average home. So instead of saying we need to lower the home price, we're trying to say, how can we stand on our head with the wizards on Wall Street to find innovative ways to lower the monthly cost? But it does not work that way. That is what we found in 2000 and 2006.

Oh, you found Alt-A and negative amortization mortgages so somebody could buy my home, and they only have to pay half the monthly cost that they used to have to pay, or 125% LTV. You get 125% of the cost of the mortgage. I'll raise the price then, that is what you do. And I get more on the price. So, you wind up never paying lower monthly costs.

You just wind up being more levered, is all you wind up being at the end of the day. And that is why I do not think this is going to work. By the way, Bill Pulte, who is the FHFA, the Federal Housing Finance Agency, which oversees Fannie and Freddie, who proposed a 50-year mortgage that got panned, is now talking about portable or assignable mortgages. Portable or assignable mortgages do exist in other countries. What is a portable or assignable mortgage? How is it working now?

You sell your home. And I'll keep the example simple. You sell your home; you have a \$200,000 mortgage. You get funds into your bank account the day you sell your home. You take \$200,000 of that, and you pay off your mortgage. You no longer have a mortgage.

You buy a new home. Maybe you will close the next day to your new home. Just keep the example simple. I know you have one day without a home there. And you have a \$250,000 mortgage on your new home. You then take some of the proceeds from your home sale, plus a new mortgage of \$250,000 to pay for your old home, or to pay for your new home.

Well, your new mortgage comes with new terms, and it comes with new rates. A portable or assignable mortgage would say, instead of paying off that mortgage, what we'll do is we'll take the \$200,000, we'll assign it to your new house. Maybe you borrow an extra \$50,000, and then use the proceeds for anything else you have, so that if you do have a 3% mortgage, and you took it out three years ago, you get to keep it for 27 years, and you could buy and sell homes, and just keep transferring that balance to your new home, as opposed to extinguishing that balance and taking out a new mortgage. The mortgage brokerage business and the banking business is going to hate this, because what that means is that they're not going to get the ability to refinance and get all of the fees and associate transactions with constantly creating new mortgages. The theory is, for these portable mortgages, the transfer fee will be negligible. They will not charge you \$15,000 to transfer your mortgage, like you want to end one mortgage and go to a signing or closing for another mortgage as well.

Basically, we're going to hang the mortgage industry out to dry in order to make housing more affordable. But again, is there anything wrong with an assignable mortgage? Other countries have them. It would be fine if we had them. It would just change the entire structure of how mortgage finance works in this country. But keep in mind, why are we talking about this?

Because the average person cannot afford the average home, and we're not talking about maybe homes should be sheltered, and maybe we should have home prices go down. There is

86 million people that will lose their mind, or 86 million households that will lose their mind if you talk about home prices going down. There is 45 million households or 100 million people that rent. We would love to see it. That is why we always have a crisis with housing. It is either an affordability crisis, or it is a financial crisis when it goes down.

Let me jump ahead here. Let's talk about the labor market. Couple of quick things about the labor market. Now, we're not getting labor data, and we're talking about potentially Kevin Hassett, I'm just looking at my Bloomberg here again, Kevin Hassett said, it is possible that we might get the October payroll report, but not the October unemployment rate. Why is that? How is that work?

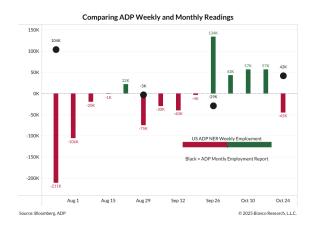
The payroll report is done by a survey of establishments, businesses, and roughly 600,000 businesses is what they shoot to survey. One of the questions they ask them is, they constantly ask them, and that is part of the question, what has your level of employment been? They're asking businesses for the last three months, so this month, the previous month, two months ago. We always ask that question. It has not changed. In November, if they do the survey, they're also going to get the October numbers, and they'll be able to put out a payroll number for October and November.

That is why, by the way, the payroll number always gets revised, because we always ask you for the three-month number, is that we ask you, what is this month? What was last month? What was two months ago? The reason we ask that is not that companies change, oh, I told you it was 100 people we employed last month, but it was really 97 or 105. It was, I did not report to you last month, for whatever reason. I forgot to answer the survey, we were closed because of a snowstorm, whatever the reason was, but I will report this month.

So, they can, so effectively, the survey result was zero in October, so now you can report it again this month. So, the survey question does not change. So, you can get the payroll report. Why cannot we get the unemployment report? Because that is a household survey. That is asking people, how many people live in your household?

How many are working ages, 16 to 64? How many are employed? How many are actively looking for jobs? Those are the questions we ask. We do not ask, and what was it last month? And what pollsters and surveyors will tell you is, if you change any question, no matter how slight, and what was it last month, you will get a different result.

You will change the result of the question, and that is why you have to keep the question exactly the same every month, so you can compare it to the previous month and the previous month. You change the question, you get different results, because people interpret the questions differently. And so, they cannot really do that. So that is why we will not get an unemployment rate. Unfortunately, this matters, because in the series of charts I'm going to go through, I would argue it is the unemployment rate that matters more than the payroll report. But let me get into it.



First of all, what is the state of the labor market right now? I've got a funky-looking chart here, ADP. Quick story about ADP, ADP, for 15 years, has put out a monthly guess at payrolls. ADP has 500,000 businesses that process payrolls for about 26 million people. that is their latest update, or something around 20% of the labor force. So, it makes sense that the largest payroll processing company could actually combine and put together all these statistics to tell us what is happening with the labor market.

And they've been doing it for 15 years. And they do it two days before the payroll report as a way to tell you, I'm going to tell you what the payroll report is two days before it happens. Their original goal, 15 years ago, was to be very accurate, so then they could then put it behind a payroll and charge everybody an arm and a leg to get the payroll report two days early. They've never really been accurate when it comes to guessing what the payroll report is going to be. Now, it is an open question. Is it that ADP is wrong, or is it that the payroll report is wrong?

I do not know. But I will tell you this. We care about academic statistics because we care about the Fed and Fed policy. And the Fed has decided that their gold standard, that is the term that Paul used, is the payroll report and CPI. They're wrong or they're right. That is the gold standard.

I'll use another sports analogy. If you're a baseball fan, the umpire is calling the strikes out of the strike zone. He's calling the high strikes above the strike zone strikes. Or if they're outside, he's calling them strikers. As long as he does it for everybody, it is fine. If you only, do it for one team and not the other, that is a problem.

Well, this is the Fed. Are they calling high strikes? This is the BLS data. Is it calling high strikes? Or is it called wide strikes? I do not know.

I do not think anybody knows. But as long as it is consistently done, and that is what the Fed does, we look at this data and this data only, and that is how we set policy. So right or wrong, that is where they set policy. And they have not been getting that data. So, we've

been looking at alternate data sources to try and figure out what is happening. ADP also came out recently, and it became known in August, lots of stories today, that Chris Waller, Federal Reserve Governor, said in a footnote to a speech in Miami that they get weekly data from ADP, and it is highly accurate in telling them what the state of the labor market is.

Wait a minute, everybody said. We not only look at this monthly ADP report, but for a fee, you could get detailed data, underlying data, broken down by industries and all kinds of cohorts from them for a fee. Why am I not getting this data that you're giving the Fed that is supposedly supposed to be very accurate? What am I paying for second rate data from you from ADP? ADP felt embarrassed. And then they said that they would start offering that data, and everybody said, oh, OK, so you're only going to give it to the wealthy people that can afford it.

What about the rest of us people that would like to see it? And they said, OK, we'll put it out to everybody else. So, the red and the green bars are this supposedly weekly data that ADP puts out that Chris Waller said is very, very accurate, and that when ADP originally said, originally, they were not going to give it to the Fed anymore, Jay Powell wrote an open letter to ADP saying, please do not. Please, please keep giving it to us. It is very, very important. OK, there it is.

There is the weekly data. Now it is a rolling four-week average. It is a rolling four-week average. I multiplied it by four to make it a sum. Because I want to compare it to the monthly data. So, in July, this is July, the monthly ADP report was 104,000.

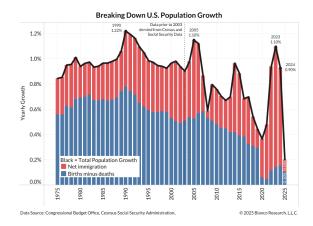
The rolling four-week sum of this weekly data was minus 211, ADP to ADP, monthly to weekly. In August, it was minus 3 to minus 75. In September, it was minus 29 for the monthly, the black dot, to plus 134. And in October, it was minus 45k to 42. Now part of this could be that this weekly data is a rolling four-week

on Friday, and this is the complete month. So, this is the rolling four weeks through October 26th, maybe the last five days of the month, and it includes a couple of days in September.

Maybe that makes a difference. I do not know if it makes 100,000 jobs difference, but it makes a difference. So why am I bringing this up? When you look at alternative data, they give you wildly different answers, and you've got to be very careful in looking at this alternative data. And everybody's looking at the alternative data, and they're cherrypicking the weekly data from ADP, the Revell data, and say, oh, my God, it is terrible, the economy is falling apart and everything. So, first thing I wanted to point out is the alternative data is all over the place.

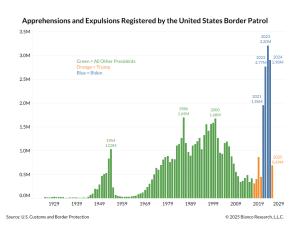
But what matters for the Fed is what the payroll report says, what the unemployment rate is. That is what matters. Whether or not it is inaccurate, it is calling the high strike, or it is calling outside the box, you know, outside pitches, strikes. does not matter. That is the way that the Fed works right now. So, this data might be useful to tell us about the state of the economy in an abstract, but it is not going to get the Fed to move.

They're going to wait for their own data as well. I do want to go back to population growth. I got a couple of new charts I want to show you and stuff. So, I've been talking about population growth. One of the problems is, to go back to this chart, is 42 minus minus 104. We've also seen that as well, too, with some of the data from the BLS on the monthly payroll report.



So let me go back to this chart here. Population growth was 0.9% in 2024. It has fallen to 0.2% right now. The difference is the red bars; the black line is the population growth of the United States. The red bars is how much of that comes from immigration, and the blue bars is how much of that comes from births, deaths. You can see that that got very low in 2021, and that was all the excess deaths because of COVID.

And it is still not really recovered to any kind of pre-COVID level. But we've seen a dramatic drop in the unemployment rate, excuse me, in the population growth of the US. Where does that come from? A big drop off in immigration. Immigration has gone from 2.9 million people. This is the yearly number of people that are encountered at the border.



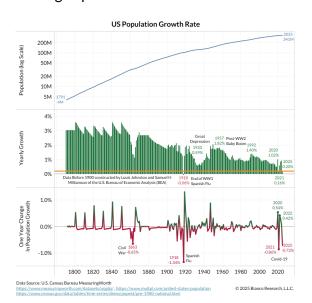
This is all we've got right now for data. 2.9 billion people were encountered at the border in 2024. 3.2 million people were encountered at the border in 2023. We're

down to 700,000 who were encountered at the border in 2025. The majority of them came in the first quarter. In 2024 and 2023, when they were encountered at the border, they were processed and led into the country.

In 2025, when they're encountered at the border, they're turned away. They're not allowed in the country. Also in late October, Fox News had an exclusive. The Trump administration is claiming, there is no backup, they're saying that 1.6 million people have self-deported. There is a program. If you're undocumented or illegal in the country, you can call up ICE and say, I'm here.

This is me. This is my address. I'm going to voluntarily leave. ICE will say thank you very much. You have 30 days to get your affairs in order. Do you need a plane ticket?

We'll buy you a plane ticket to your home country. Do you need a couple of thousand dollars in travel expenses? We will give that to you to leave the country. It is cheaper than having ICE agents arrest you. They're claiming 1.6 million people have left the country. They're also saying that they've already arrested and deported another 515,000 people, and they've got 485,000 people currently in detention in the process of being deported.

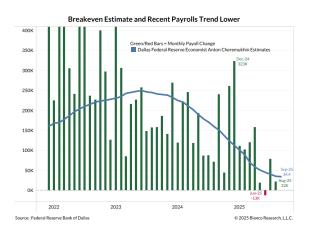


If this 2.1 million is true, I'm going to go to this chart, new chart here. I did find yearly population growth data back to 1791. This is the growth rate. This funky looking stuff is that it was estimated by Lewis Johnson and Samuel Mellisom of the BEA, the Bureau of Economic Analysis. They interpolated from every 10-year census, a yearly growth rate, and that is why it looks like that. It is a guess, but I'll talk about that guess in a second, but here it is all the way through.

The current estimated growth rate of 0.2% by this measure has only been lower two times in American history, 21 because of the excess deaths of COVID, and 1918 because of the excess deaths of the Spanish flu. Even though this number bounces around, even with the Civil War, we never got anywhere near zero population growth in the history of this country. If the 2.1 million number that I showed you before is accurate, and maybe it is not, maybe it is overstated, we could wind up having actually 2025 being a negative year and being the biggest contraction in population in American history, excluding the only other negative year, which was 1918. Here is the rate of change in the rate of change, the first derivative. How much does this yearly growth rate change from year to year? In 2020, before COVID, it had spiked to a 70 year high, 2021 with excess deaths, it was a 100-year low, 2022, it was at a 70 year high, 2020, 2025, other than 21, it is at a 100-year low.

We have unprecedented volatility in the population of the United States. Why does that matter? Because economic growth is made up of two major categories, growth of the population and productivity. The growth of the population is all over the place right now, and it is on the downswing. So, you're not going to get that. So, all you've got left is productivity.

So here is the payroll report that we've got only through August. They should have the September number out fairly soon because it was technically done before the shutdown. They just need to get back into the office, have their cup of coffee, and then plot out strategy within the next week or so, I would not be surprised if they wind up releasing the payroll report. We'll give them a couple of days to figure it out at the BLS. Here it is at 22,000 in August, and you could see that in December it was 300, and you could see that that number has been moving way down. The blue line is an estimate from the Dallas Fed as to what is the breakeven rate.



So how many jobs do we need to create? And the answer is, simply, what is the population growth of the country? Well, back in 23 and 24, that number was 250k. That number is now 34,000. This is what is the issue when it comes to everybody that is screaming and yelling, oh my God, look at what is happening to payrolls. They're falling every month.

They're falling, they're falling, they're falling. This is terrible. You're right, they're falling. But you're not asking the next question. What should it be? And if your answer is, well, it should be 150,000 like it has always been, you're forgetting what is been happening in the population, the country that we've never seen in American history in the last five years.

This is unprecedented volatility. This is why people like Mary Daly earlier this week and Jay Powell say that the supply of labor, that is the breakeven rate, how many jobs do we need to create, which is driven primarily by the growth of the country, population growth of the country, and the demand for labor, have

both been falling. And they're both oddly, they both use the word oddly because they just give talking points, in balance. Meaning, yes, the numbers come down a lot. Yes, it is usually associated with recession. But now, given the population growth, it is normal.

And if you're going to stimulate the economy, thinking that what we need is we need 150,000 jobs every month, where is that coming from? We do not have population growth for it. We have 212 million people that are between the ages of 16 and 64. That is the working age population. We have 160 million that are working. That gives us 52 million people that are not working between 16 and 64.

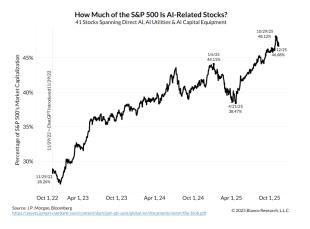
And that is not getting bigger because the population is not expanding in the country. And by the way, in six years, the census is telling us there will be more 64-year-olds turning 65, leaving the workforce, then 15-year-olds turning 16, entering the workforce. So naturally, that is going to continue to decline even without population growth. that is in six years, that'll start happening. So, there is more 10-year-olds, or even back of six years, there is more 58-year-olds in this country than there are 10-year-olds in this country. And so, as that goes, that number is going to go down.

And with no population growth, how are you going to get 150,000 jobs a month? You've got to ask those 52 million people that are not in the workforce, who are they? Well, upwards of 15 to 20 million of them are students because it starts at 16. So, it is high school students and college students. It also includes military. It includes incarcerated.

It includes disabled. It includes people who voluntarily do not work, like housewives, or those that are independently wealthy. So, you've got to ask those 52 million people a question. What is it going to take to get you into the workforce? Because we want 150,000 jobs a month. Wage inflation will translate into higher overall inflation, too.

Pay me more, and I'll stop being a student, and I'll start working. Pay me more, and I'll stop being a housewife, and I'll take a job. And so that is where we are with that. A couple of other quick topics here. I know I'm running a little bit here with all my antidotes. So here is a table of AI-related stocks right now.

This comes from Michael Kembliss over at J.P. Morgan. They have identified 41 S&P 500 companies as being Al or Al-related. They're broken down into four groups. here is the Magnificent Seven. here is other direct Al. here is the utilities that power the Al, the data centers.

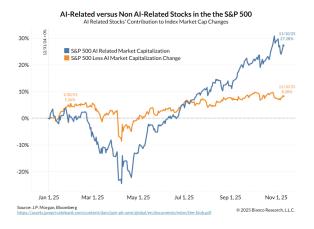


And here is the capital equipment makers that help make the components that go into building out Al. If you look here in the bottom right, what it shows you is that as of November 10th, Monday's close, we had 47% – these 41 companies were 47% of the S&P 500. 52% were the other 459 companies. And then here is a bunch of statistics. Their market cap, the percentage of S&P, their contribution to the S&P's return, their forward PE ratios, and the like. And a couple of things I want to point out.

Now, with a couple of exceptions, Palantir, maybe CrowdStrike, maybe Tesla, do you really see nosebleed valuations as measured by the forward PE? The average is 25. The average for all of them is around 25 or so for the forward PE ratio. I'm sorry, that is the average for the S&P, it is 25. The average for all of them is around 36 to 38. Now, it is higher

than the S&P's 25, but they're also high growth, highly – they have high growth expectations.

It should be higher, but they're not – a lot of these companies are not grotesquely overvalued. As I pointed out, CrowdStrike, Palantir, Tesla, there are a few of them that are. So, a couple of quick charts, and then I'll highlight what it means. So yes, 47% of the S&P is now related to one theme, Al. It was up from 26% a couple of years ago, and it continues to move higher. The all-time high was 48% in late October.

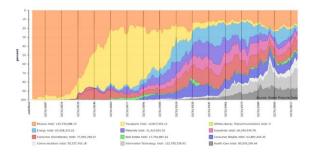


The AI-related stocks, as of December 10th, were up 27% for the year. The other 459 stocks were up 8.2% for the year through Monday. If I were to look at it in a different way, the S&P was up 16.5% through Monday. 11 of that came from the 41 AI stocks. Four of that came from the other 459 companies. I've been talking about the 4, 5, 6 markets for a year now, that I think that going forward, cash will return you 4, bonds will return you 5, stocks will return you 6.

Where are we looking right now for 2025? Cash is going to return 4. Bonds are somewhere in the high 6s to low 7s. The X AI stocks, if I were to go with the previous number, is around 8. This is about 2 percentage points above. This is about 2 percentage points above.

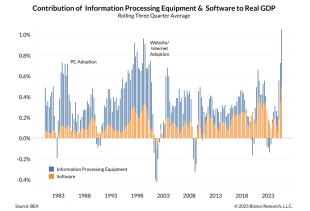
It is a little bit above, but in general, the 4, 5, and 6 X Al stocks is holding up so that this is

what you should expect. I've also pointed out, this is normal. This is not an, whoa, man, the market's only going to give me 4, 5, or 6. No, you've been spoiled with 20% returns in the stock market, thinking that that is normal. That is abnormal. A lot of that comes from one theme of AI.



This funky chart comes from Brian Taylor over global financial data. He's collected all this data forever and ever, and he's put together 12 major themes in the stock market back to 1800. He's looked at concentration themes in the market. Now, this chart's a little bit old right now, but the question is, if half the stock market is still in the stock market, what is going to happen? He's tied up in the AI theme, and he does not have AI as a theme. He does have information technology as a theme, but AI runs the gamut of, Apple is a communication services company.

Amazon is a retailer. These are not technically information technology companies, but they are definitely in the AI theme. You can see that right here, where they are on the list and moving up. The question is, when was the last time we saw roughly half the stock market tied up in one theme? That is the yellow part right here, which is transportation, and that is the railroads in the late 19th century. It has been over 100 years, maybe closer to 125 years, since we've seen the stock market this concentrated.



It was not this concentrated during the internet boom, during the PC boom, or during the television boom, or during the radio boom, or during the telephone boom. Really, it was railroads is the last time we've seen this. This is unprecedented, at least in our lifetimes, that we've seen the stock market basically this concentrated, and it is having a big impact on the economy as well, too. Here is contribution of information processing equipment and software to real GDP. 1.1% of real GDP's growth in the first half of this year, we have not gotten the data because of the shutdown for Q3, has been because of Alrelated stuff, information technology, and software. The economy grew at 1.2% in the first half.

That is a little misleading because we had that big drag because of tariffs on exports, because we had that rush of exports. Remember, we had that rush of imports. Imports are considered negative GDP. If you import a car from Japan, it is lost GDP. We did not make the car in the United States. We brought it in from Japan, so it is counted like lost GDP.

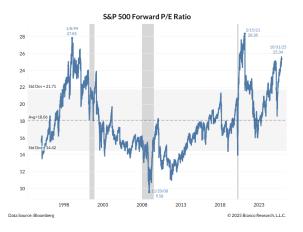
That is why it is a little bit misleading. If you look at it at real final sales, it is still, I should maybe recast the chart that way, it is real final sales. If you do it that way, it is still a majority of the growth in the country this year. Oxford University is reporting that 32% of all new construction right now in the commercial space, not residential, but in the commercial space, 32% of construction in the United States right now is data centers. And it is

about to surpass office construction. Office construction is forever within commercial; offices always lead the way.

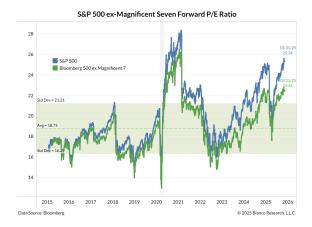
But now it might be data centers in the next year or so. They're almost caught up to offices. And again, I show this again, how the enormous of the data centers. This is Metis data center in Louisiana. It is called Hyperion. Here is Manhattan.

There is Central Park. This is how big this thing is. 1,700 football fields is what it is going to be. It is going to cost \$27 billion to build it. That is what it is going to look like now. That is what it currently looks like for the moment.

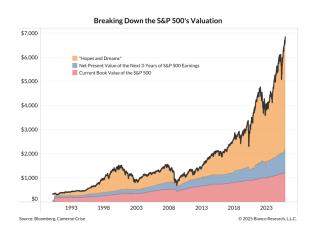
And it is going to cost another \$100 billion to put all the Nvidia chips and everything else in it. And it is going to power this massive Al expansion by meta into the Al universe as well. Quick words about valuations in the stock market. here is the forward PE ratio, Wall Street's favorite metric. At the end of the month, it was 25. The only other times it was higher than that was the bubble peak in 99, 2000 and 2021, right before two big selloffs as well.



But wait a minute, how much of that is AI? So, I decided I'll do it this way. The blue line shows you that same 25 forward PE ratio. The green line shows you XMAG 7. That is the easiest way to do it. And that is the majority of the AI related companies anyway. The PE XMAG 7 is still 22.



That 22 right now, this is the average in the standard deviation for XMAG 7. that is still above one standard deviation. that is still in the upper 10, 15 percentiles of all readings over the last decade. So even the stocks that are not AI related are getting Dicey evaluation. Because the way everybody says AI, I see this on social media all the time. You say to them, if you buy the S&P 500 ETF, you've got half your weight in AI. And their answer is, well, good.



That gives me another reason to buy it because I want to be exposed to AI because that is going to go to the moon and make me rich. So good enough. I'll buy the S&P. Well, that brings the prices of the other 499 stocks higher and that gives them high valuations too. What does valuation mean? Cameron Price at Bloomberg puts this out.

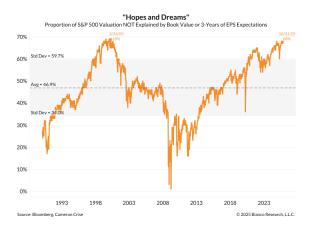
These are his hopes and dreams. I've gone through this several times. If this breaks down the S&P, this is the S&P. It breaks it down into

three major components. Book value, cash flow. This is the way you would value the stock market if it was a bond.

What are the assets worth? What is the cash flow? The cash flow being the three-year earnings estimate that Wall Street does. Yes, they do three-year earnings estimates and you discount it back. And that gets you to about 2,100 or 2,200 S&P points. So, if the S&P were a bond, its fair value would be, let's say, 2,200.

Well, it is 6,800 is what it is. The rest of this is what is called hopes and dreams. This chart shows you the percentage of the S&P that is made up by hopes and dreams. The low was in 2009 at 3%. The market should always be these number hopes and dreams should always be positive. A company is not a bond.

A company, go back to this chart, a company is not a bond. It is strategy. It is product. It is management. It is reputation. They can change all and any of those to make it worth more than just the assets and the cash flow.



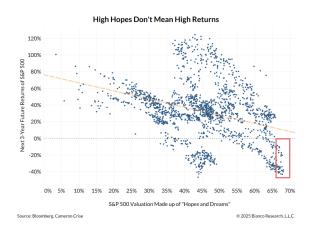
So, it should always be positive. How positive should it be? I compare it to it over the last 30 years. Its average has been 47%. It is currently 68% of the S&P is made up by hopes and dreams. That is equal to the March 2000 peak.

It is 69, effectively, right now. So, the market is extremely overvalued. What does that mean? It is not a timing tool. It does not mean the market has to go down today or tomorrow or next week, but this shows you the hopes

and dreams, how much of the stock market is hopes and dreams, and this shows you the next three-year return. So here is the range we're in now, and all the dots are below zero in this range.

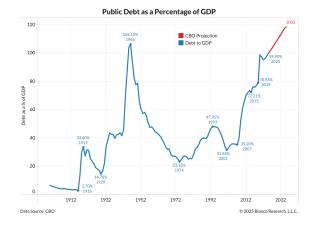
So, we're at 68%. I just scored 66 to 70 in the box. What that means is that over the next three years, the stock market usually loses money. Because you're paying up so much for earnings, and you have such high expectations for those earnings to be met. They're not met, and the market eventually disappoints. Maybe it started.

Maybe it already peaked two weeks ago. Maybe the market rallies for another year or 18 months and sells off. But really, to say that now we're going to get a dot up here with this high evaluation, you'd have to basically say, what is the highest guess on Wall Street? Forget the median estimate for earnings. Who has got the highest earnings guess? Okay, companies are going to do better than that, and maybe they will because of Al, reducing headcount and middle management and increasing margins.

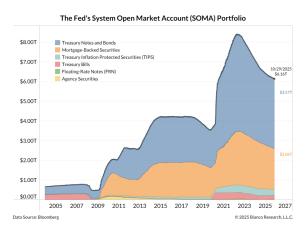


That is the argument to be made. Well, we'll see, but historically, when you buy stocks at this high evaluation, it is usually very hard to meet those expectations, and they struggle. It is not a timing tool, but it is an expectations tool, and it feeds into my four, five, six premise, too, that with that valuation, four for cash, five for bonds, six for stocks, but you're a little bit extra with AI, and we'll see where AI

goes. Final thing I want to talk about is the funding markets. I know I'm running really long here. Sorry about that.



What is the public debt as a percentage of GDP? \$38 trillion of debt. The all-time record was 1946 to finance World War II, and then right after World War II, we undid that, and the red line on this chart is the Congressional Budget Office's estimate of where we're going. We're going to reach 120% by 2035, so we're going to set a new record. The bond market is huge, and it is getting huger, to use bad English. At the same time, here is the Fed's system open market account, the SOMA portfolio.



This is the Fed's balance sheet, the assets of the balance sheet. It was \$8.5 trillion at its peak. It has been coming down because the Fed has been doing quantitative tightening. here is how much of it is made up of notes and bonds. here is how much of it is made up of mortgages. It has been pulling back on the size

of its balance sheet, which has been reducing reserves.



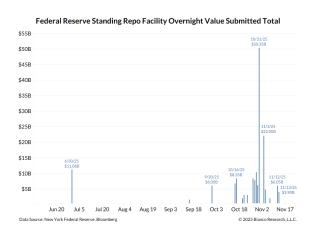
Let me go to this chart. This is the reverse repo facility. What is the reverse repo facility? It is primarily for money market funds that have excess funding, excess money. I've got all this funding. I bought some treasury bills.

I got this extra money. What should I do with it? I could put it out in repo, but that might artificially depress the repo market below the Fed's target rate. The Fed has said, look, you could take it to the New York Fed. You could give it to them. They will give you an interest rate that is competitive in the marketplace for overnight money, and you have as a counterparty the best counterparty you could possibly have, the Federal Reserve.

Federal Reserve defaults on you. If you could stop, everything else is worth zero then at that point. So, this is a sign of how much excess liquidity is in the financial system, because the money market funds are putting it out to the Fed. When you put it to the Fed, it cannot be rehypothecated, meaning that you cannot use those bonds to pledge against other bonds to pledge against other. Let me back up and say this more correctly. I have a billion dollars worth of two-year notes, and I need a billion dollars of cash to meet a settlement.

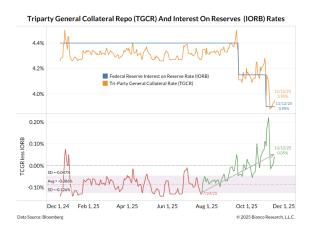
I give that billion dollars of two-year notes, or I pledge it to a bank, and then that bank then uses that collateral, gives me a billion dollars of cash, and I promise to give them back their billion dollars of cash tomorrow. But tomorrow comes, and what I do is just roll it over another day, roll it over another day, roll it over another day, as long as I need that cash, and as long as they have my collateral. What does the bank do with those billion dollars? They might want to make the same transaction with somebody else. They take those same bonds, and they pledge them to somebody else, rehypothecation for a billion dollars of cash, maybe another bank. And then another bank might do it, and its daisy chains along.

By giving it to the Fed, if I have a billion dollars of bonds and I need a billion dollars of cash, I give it to the Fed, the Fed gives me the cash, and then I just roll it over every day. Those bonds cannot be rehypothecated over and over again in that daisy chain. So that takes liquidity out of the financial system. So, going into 2023, we had tremendous liquidity in the financial system. It has been coming out. We're effectively at \$7.2 billion, or \$0.0072 trillion.

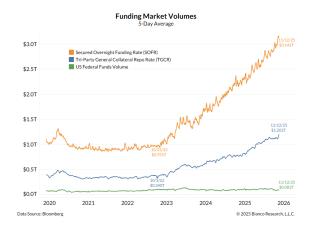


Effectively, we're at zero. Now, this is the reverse repo facility. The Fed also has a standing repo facility. So, this is a way that, all right, that is the way you get rid of excess liquidity. You put it at the Fed, where it cannot be rehypothecated. What if there is not enough liquidity, and you need extra liquidity?

Hey, I need a loan. I need a loan. I have bonds to pledge as collateral. But all the banks say, because of quantitative tightening, we can only hand out so much money based on the reserves that we have. We have, we cannot do this infinitely, we can only do it up to a certain level based on reserves, and as the Fed does quantitative tightening, they're removing reserves from the financial system, they're removing reserves, and they're lowering the amount we can do. So, you show up to me, and you say, here is bonds, I need a loan to meet some obligations, and you say, I cannot do it, you can go to the Fed, you could go to the Fed and do it.



So, before September 30th, that number was effectively zero every day. Now all of a sudden, this facility is starting to get used, and some banks go to the Federal Reserve in order to borrow money from them. And so, this is a sign that we've got tightness in the market. Why does it matter? So, this chart here shows you the general, the tri-party general collateral reporate, the TGCR, and interest on reserve balances in blue. What is this?



Most repo transactions, I'll show that chart in a second, is at a tri-party level. What that means is, I have a billion dollars of bonds, and I want to borrow a billion dollars. So, I found a bank that is willing to do it for me. here is my billion dollars of bonds, you give me a billion dollars of cash, and we'll undo that transaction. We both have a counterparty risk. Counterparty risk to me with the billion dollars of cash is, what if I go to the bank the next day and say, I want my bonds back, and the bank says, we file for bankruptcy, they're in bankruptcy, they're in bankruptcy court, you cannot get them back.

You are now short of a billion dollars of bonds. Or if the bank says we've got your bonds, we would like our cash back. And you say, I went out of business, you do not get the cash back, but you have my securities, and bond prices plunged in value, they take a loss. So, you have a tri-party where you have like JP Morgan, or Bank of New York Mellon, I think they're 80 or 90%. You say, we'll put them in the middle. I'll give my bonds to JP Morgan; they'll give them to you.

You give the cash to JP Morgan; they'll give it to me. They charge a fee. And then our counterparty is either JP Morgan or Bank of New York Mellon. If you go out of business, or I go out of business, JP Morgan, or Bank of New York Mellon will stand in the middle and make the transaction hold for either side of the party. They'll take the credit risk for that fee. That is the tri-party rate.

Normally, this number is wrong. 8.6 is what it is. Normally, the tri-party rate runs around 8.6 basis points below interest on reserves. Now it is running six basis points above it. In other words, the funding markets have tightened up by about 13 to 15 basis points. Now, why is that happening?

Because the bond market is too big, and the Fed has done too much QT, so that the funding markets are too small, given the size of the bond market. So, if you've got demand for funding, because you've got a huge \$38

trillion market, the funding is being supplied by banks that are getting their reserves being reduced constantly by the QT, the price, the cost of money goes up. So, what effectively happened is the Fed has cut by 50 basis points, but 13 to 15 of that has been given back because of tightness in the funding market, and as this arrow shows, it is not done. Now, one last thing about this thing, two things, and then I'll stop and ask questions. You'll see certain spikes on this chart here. What are the spikes?

These are the 15th and the 30th of the month. What happens on the 15th and 30th of the month? Monday, we had a three-year note auction. Tuesday was Veterans Day, and the bond market closed. Yesterday, Wednesday, we had a 10-year note auction. Today, we have a 30-year note auction.

They settle on Monday. The way the market works is Monday comes about \$150 billion to \$200 billion, I forgot the exact number, but in that range of bonds settled, the Treasury expects the buyers of those bonds to pay them \$150 to \$200 billion cash. Where do you get that money? If you're a hedge fund, if you're a dealer, if you're a bank, and these are the primary buyers of this stuff, some unlevered insurance companies might just write you a check for the money. They'll take those bonds, put them out as collateral to get the money to pay for you, to pay for it. There is excess demand for repo on the settlement dates, the 15th and the 30th.

The 30th is the 2, 5, and 7 settlement dates. The 15th is the 3, 10s and 30s settlement dates. That extra demand sees that the price of funding spikes on those days. The funding rates will spike on Monday. How much will they spike? They spiked all the way to 50 basis points on October 31st.

Will they spike all the way up there? Will they spike to 30? Will they spike to 7? That remains to be seen. In these non-funding settlement dates, we are still 13 to 15 basis points higher

and at an uptrend. The market is undoing the Fed rate cuts with this type of money.

Why does this matter? The Fed sets the funds rate, \$86 billion, to be traded in the funds market. The tri-party repo market is \$1.1 trillion. The overall secured overnight funding market is \$3 trillion. Tri-party repo is part of SOFR. Then there is broad markets and there is other measures there.

The point is, this is why the Fed has these administrative rates like the reverse repo, the repo interest on reserves. Nobody uses the funds rate market anymore. Some federal home loan banks and a couple of foreign banks to the tune of \$86 billion, but the overall funding market is 30 times larger. In order to get these rates, this orange line to adhere to the ranges that are set by the Fed with the funds rate, they use interest on reserves, standing repo facilities, reverse repo facilities to force these market-based funding rate numbers into the targets that they set with the funds rate. They're starting to diverge from those targets because the bond market has grown so big because of huge deficit, massive government spending, that the funding markets cannot meet it. What is the fix?

The fix is simple. The Fed stops QT. They're going to do that in three weeks, but will that be enough? Will we have to see them buy assets or inject liquidity into the market? A lot of people are saying that. Okay, do it.

Fix the market. Bring the funding market back into balance with the size of the bond market. What is the problem? What are you telling Washington? You've got a 6% deficit to GDP, 100% debt to GDP. Do not worry.

We'll print money to fix the funding markets so you can borrow even more, make the government even bigger. Just keep going and going into infinity with your borrowing. We'll just keep printing money so the funding markets can keep pace with you continuing to fund this ever-larger market. What is the risk? The same thing I was saying with the

employment report. If you're stimulating because you want 100,000 jobs and you're not going to get it, what is all that excess cash going to do?

If you're telling the banks, get bigger, get bigger, get bigger, get bigger, what are they going to do with this money? They're going to put it to work. They're going to lend out more. They're going to overstimulate the economy, an economy with no population growth. What is that going to do? Unless we have a productivity miracle, we're going to hand out loans to businesses.

What are businesses going to do with it? They're going to invest in capital equipment and expand their businesses. They're going to buy things, and they're going to create higher prices. Just print more money. Expand the standing repo facility. Buy back assets.

Buy back the bills. it is not QE as opposed to bonds, which is QE. I do not think there is a difference between durations. What is the harm? The harm is you're stimulating into a 3% inflation world, and you're encouraging more economic activity, which is not going to create more jobs. It is going to create more inflation.

I'll go all the way back to the beginning, and then I'll end here. The vast majority of the economy is the bottom 50% of the country, if not the bottom 70% of the country. They think this economy is a train wreck. They think it is a train wreck because prices are going up faster than their paycheck. Let's print more money to meet the ever-funding markets. Let's demand that the Fed cut rates because we want more jobs when there is no population growth.

Let's lower mortgage rates so everybody can raise houses. You're just going to exacerbate decay. You're going to make cheap money, so the stock market goes up. These people in the bottom 50% cannot afford less things, and this is just going to get worse. That is the concern. That is the issue.

I'll bring it back to one last thing, and then I promise I'll go into questions. This is why the Fed is fracturing. Trump pushed them by wanting to fire Paul, but in the Timoros article yesterday, he said they're fracturing along three lines. One, how do we know that the rise in inflation that we've been experiencing is a one-time tariff-driven event and maybe is not more permanent? I happen to think it is more permanent. Two, how do we know that the labor market creating 20,000 jobs is not at normal break-even and it is okay?

Three, the other thing that they're fracturing on is what has been fair value. How do we know it is 3%? How do we not know it is closer to 4%? That is why you're getting different people arguing different things at the Fed. These are the questions that need to be asked. What is the inflation rate?

Is it temporary or a one-time thing? You used the word transitory five years ago, and it was a disaster. You're trying to use that by using one-off with tariffs again. You better damn well be right, because if you're not, the price that is going to be paid, you do not want to know what the price is going to be paid. You think the public's angry now. Wait till prices spike.

It was not really a one-time thing. Tariffs were actually a way to un-anchor inflation, so everybody raised prices. We have a revolution in this country. They're already angry enough that they think we have already got the worst economy in 73 years with an all-time high in the stock market. Two, what about the jobs? If you're stimulating because you think we need to be creating 150,000 jobs a month and we have no population growth, where are these people going to come from?

A pool of 52 million people is where they're going to come from, and you're just going to have to raise wages in order to get them into the workforce. What is that going to do to the existing bottom 50% that already have a job? Those people are going to have more money.

They're going to go to the store. They're going to buy more things. Prices are going to go up.

Inflation is going to go up. They're going to get angrier. Three, how do we know that we're not already at neutral if not stimulative already because interest rates are too low? You keep telling us it is 3%. The market keeps saying it is 4%. John Williams, who put together the r-star model, thinks that he's right, the market's wrong, but there is an open debate.

People are making these arguments. They're coming down on different sides of all these arguments. This is the way the Supreme Court works. We do not always seek a 9-0 vote on everything the Supreme Court does. The Fed should be the same. If we get a 5-4-3 vote on something in the future, I will applaud it.

That is the way it should have always worked. Then the chairman does not matter as much. Trump can put whatever he wants in place, and he's going to demand that we cut rates to 1%. There is 11 other people, and they've got 11 other different opinions, and you do not get to say where we're going to go.

Q&A

With that, let me stop, and let me start to address some of the questions that you guys have. First name only faces, I know who you are.

Let's go from there. JS, the slide that shows on a Ford word count shows a low in August of 25, followed by a spike. What caused this dramatic increase? Let's go to that chart here. There it is right here. You're talking about this law right here and the dramatic spike.

I actually think what happened was that this is more, I'll call it environmental. You had Mondavi Nguyen as mayor of New York on affordability. Whether or not you think his idea of free buses and rent freezes is a good idea or a bad idea, he basically touched a nerve and said, you cannot afford to live in this city, and it is too expensive, and everything is

going up. I hear you, and I've got a fix for it. Whether or not he's got a fix for it, they voted for him because he identified the problem. I'll use an analogy.

Back in 2016, Trump kept saying, I'm going to bring back manufacturing jobs. I'm going to bring back the working class in this country. Obama was not running but was campaigning for Hillary. He famously said, "What is he going to do, wave a wand? Those jobs are not going to come back. When you ask those people, do you think Trump's going to bring those jobs back?

If they were serious, they would say, he at least says he's going to try. The other side said, screw you, you're not getting your job back. Same thing here. Mondami said, "I'm going to do something about affordability." On the other hand, Cuomo just said, "I'm an unqualified communist." In New Jersey, Mickey Sherald won.

She was arguing about a cap on electricity prices. Data centers are driving up electricity prices. Again, affordability was what was driving that issue, and she won. Abigail Spanberger won against Virginia. She was arguing about affordability. Winston Sears, the Republican who was voting for her, was arguing about cultural things like transgender and stuff.

The public said, "I care about prices. That is what I think you're seeing right now. It is becoming increasingly clear with the election and what you're seeing with the social media count. News counts are very similar to this. I just picked the social media count as one because I do have news counts. We're starting to realize that affordability, which is inflation, is a big freaking problem.

As much as we want to say it is not, it is gone from nine to three. I do not see it in my life or whatever you want to say. The financial markets are going up. Bond yields have been falling for the last few months. The conclusion is inflation is a non-problem. The Fed says it is well-anchored.

It is not. The public is seething mad about prices. That is what you're seeing. They're reflecting that is what I would argue for you here. Do you see the macro getting worse in the US? If so, what is the driver?

I see the macro. It depends on what you mean by the macro. The circumstances that are leading the stock market to going up might be getting better, cheaper money, if the Fed cuts rates. The circumstances that are causing affordability might be getting worse. Trump is not helping himself by giving the Biden line going, you're wrong. Prices are down.

You're actually doing okay. Quit your bitching about prices. that is what Biden did. It worked out disastrously for him. I cannot believe Trump is making that same mistake as well. The other thing is they're going to start lashing out.

Trump is also lashing out on certain things. The Justice Department is going to investigate the beef industry to get beef prices down. We're going to basically blow up the whole mortgage brokerage industry so you can keep your 3% mortgage for the next 27 years and just keep assigning it to the next house and the next house and the next house. as opposed to paying it off and then taking out a new mortgage the next day. We'll just transfer that balance to the next house and then just keep going on and on and on. We're going to start punishing businesses along the way. The macro drivers, is the macro driver going to cause the stock market to go down or is it going to cause the public to get more positive about the economy?

At least we're asking the right question. At least the Fed is now willing to stand up and say we've got three big questions we have to ask. Is inflation a one-off because of transitory? What about 20,000 jobs? Is it okay if we have no population growth? And are we damn well sure 3% is the neutral rate?

Because if we go there and we overstimulate and create more inflation, they might just dissolve the entire Federal Reserve if they

make that same mistake again within five years. I'm not necessarily being sarcastic about saying dissolve the Federal Reserve. If they wind up giving us their eggheaded arguments about why they need to go to 3% and there is no inflation and the public is near mutiny that they cannot afford anything, they are going to take it out on the Federal Reserve and there will be a new Federal Reserve Act rewritten by Congress from scratch and it will not look anything like the old act. And that is what the risk is. So at least the Federal Reserve governors are saying, damn it, you better be right about 3% being neutral. Damn it, you better be right that this is one-off because this is the institution's permanent reputation, we're putting in line here.

Damn it, you better be right that 20,000 jobs is weak and we need to cut rates and that will help increase job growth, even though we have no population growth. And those are the right questions to ask. And that is why I said the Fed is fracturing. They should be fracturing under those scenarios. How can we fix the inflation problem? What government policies would meaningfully help?

Well, that is a good government policy that would not allow an increase in supply. Let me just use one example. How do you get home prices down? First of all, let me go to my home price chart here really quickly. How do we get home prices down? First of all, 86 million people do not want to hear about home prices going down.

They're relying on a comfortable retirement because they can sell this house that they own to some 40-year-old who is borrowed from their parents and has over levered himself to his eyeballs to overpay for their home. I'm being sarcastic to get my point across. But if you want to ask, how do you make homes more affordable? We have to ask a basic question in this country. What is a home? Is a basic home shelter that is affordable or is it a piggy bank for retirement?

Right now, it is a piggy bank for retirement. Well, if it is, that means that if you're not on the homeowner track among the 86 million and you're in the 45 million, I'm sorry, you lost. You do not get to play. And that is going to make 100 million people seethingly mad. But if the answer is to make homes more affordable, we need to cut back on the building regulations, on the land use regulations, and on all of the other bureaucracy issues. Associated with building homes.

We need more homes. A few conference calls ago, I had a chart that showed new homes, new household formation since 2009 has been 21 million and homes, new homes built since 2009 has been 18 million. We're at a 3 million deficit is what we're at. We need more homes. We need more supply. that is going to lower prices.

But this is the problem. Nobody wants prices lowered. That is why we're talking about assignable mortgages, 50-year mortgages. We're trying to say that 40-year-old that wants to start a family that wants to build a house or wants to buy a house in a, in a neighborhood with a good school. We need to nearly bankrupt them to buy my overpriced house. So, I can go to Phoenix.

I'm using stark language here to kind of get my point across. So, you know, we need these to go down, but 86 million people do not want them to go down. 45 million people do want them to go down. That is the, that is why, that is why housing will forever be in tension until we get out of it. It is a happy medium, which we've never had between shelter and piggy bank. We just constantly fight.

And that is why it, and that is why, you know, to go to my longer-term chart here. That is why housing has been booming and busting. So, what can the government do? Encourage more production to lower prices. And that, but the problem is lowering prices sounds a lot like deflation. It sounds a lot like, you know,

home prices falling and a lot of people are against it.

So, it is easy to say it is very tough to do. What is your outlook for the US 10 year for stocks, gold, and silver? I think that, you know, to use the 10-year argument, I think we're in a secular bull market, a bear market, excuse me. Let me go back to my chart. We went up in the biggest move in, you know, 180 years. We went sideways.

I think we will go up again. I think that over the near term, this affordability is not going to go away. We're not going to fix it anytime soon. And we're going to continue to see higher prices. And like I said, you could say, you could say, let me put it this way. If you, I want to use strong language here, my credit cards.

If an economist wants to say it is a one-time transfer because of higher tariffs. Can we fire you in one year if it is not? Now that we've put that on you, do you still believe it? And that is the problem. What if you're wrong? The price you were going to pay is going to be devastating.

So, I'll ask you the question again. If it is not a one-time pass through in a year or in 18 months, can we fire you? Because you made that call. This is the problem that we face right now in trying to answer that question. So, I think that we're not going to fix this problem. That is why I think interest rates are going to go up.

Gold and silver, because of the tension in the housing market, because of the K-shaped economy, we're seeing gold prices go up. Silver prices go up 50% for the year. Silver prices are up 70% of the year. A lot of that is coming out of Asia. One of the most underreported stories about the tariffs is you'll get 99 stories about how tariffs are, about how high tariffs of cheap Chinese imports are hurting Americans. You'll get one story about how high tariffs are causing a lot of disruption in China.

And from what I've read and what I understand, the argument could be made that what is happening in China because of U.S. tariffs is more disruptive for them than what is happening in the U.S. because of high U.S. tariffs. that is why Xi's coming to the table and cutting deals with Trump. it is killing them. And that is why you're seeing a lot of angst out of Asia. Most of the buying of gold and silver is coming out of Asia because of the uncertainty around what is going on with tariffs out of Asia. And that is enough because gold and silver are small markets that soar.

It is not boomers in the United States saying, I got to have 5% of my money in gold. That is not what is driving it. Maybe it is coming now because they're all degenerating gambling. Maybe it is coming into a market that is already hitting \$4,100 or \$52 in silver. But that may be coming. But it has been largely out of Asia.

And like I said, I think the biggest story that we're missing is Trump put tariffs on Europe for this, Canada for this, Mexico for this, China for this. The story is it is killing them worse than it is killing us. And that is why they're dealing with us and cutting deals to bring it down. And because of that uncertainty, especially outside of Asia, they're buying gold to protect themselves. And it has been going higher. Big move up.

Another question about the word afford. In the last three months, we've changed the real economy in the three months. What has changed the real economy in the last three months? I've already answered a version of this question. It is the election. that is a social media account on looking at affordability.

And then they started to see that the word affordability and price freezes and price caps was a way to win elections. And then people are starting to say, do you know what, prices are a problem. So that chart was basically, again, showing you that there is a recognition that, man, we are not past this inflation problem. Maybe the bond market does not

believe it yet, because it is still hoping for cheap money from the Fed. But we have not passed this problem yet.

Jay asks, "I realize this is not a question with an unvaried answer. But with respect to the earlier question by one of the participants, read the party responsible for the K-shape. Do you think it is primarily responsible for such is the Fed? In some respects, yes. I do think that the Fed bears some culpability for the K. They are not unculpable for it, because it is about prices. If you've been with me for a couple of years, I used to talk about 2022. When Paul gave his Jackson Hole eight minutes there will be painful speech, I said, let me summarize that August 2022 speech. We've got high inflation.

It is killing the bottom half of the country. We have to raise rates to punish levels to bring down inflation. You, in the top 10% that owns stocks and owns a home, you're going to start seeing paper losses. Do your patriotic duty, smile, and salute that you lost half a million dollars in your stock portfolio, because you're helping the bottom half by helping to sap demand and bring down the prices of everything else. Do your duty, lose money like a true American. I'm trying to be sarcastic again here, in order to help alleviate the plight of the bottom half.

That is what he was saying. And then by 22, it was okay, you did enough. We need to get you to Degen back in stocks. Let's make money cheaper. And let's just go. Here we go.

20%, 24, 23, 24, and 25. And with an Al bubble, and let's just crank up the money machine. We'll end QT. We'll keep cutting money. And so that is the way we've gone. He needs to get back to that.

He needs to get back to that August 2022 speech. Look, you've got a good run. You're done for a while. We need to bring down; we need to make things more affordable. And we need to make it more affordable with restrictive money to slow things down a little bit. Yes, it is going to cause unemployment.

But let me go back to the survey. If you're going to tell me half a percent of the country is going to get more unemployed, or 1% of the country is going to get unemployed, but 99% of the country is not, but it is going to bring down prices. Do it, Jay. Prices are killing 100% of the country. If 1% of the country has to suffer through unemployment, these are the Hobson choices you have to figure out to make. But right now, you're more worried about the half or 1% that is potentially unemployed because you're not recognizing population growth than you are about the 99% that are suffering with higher prices right now.

So yes, I do think the Fed has some culpability. They do determine the ease and cheapness of money, and they've been making it very easy and cheaper for the last two years. And now, all of a sudden, you've been doing it and telling us there is no inflation problem. We're electing people that are talking about affordability. The public sees it differently. I would argue, just like what I said with that, it does not matter if it is right or wrong.

If the public thinks there is an affordability crisis, there is an affordability crisis. Quite arguing it does not exist. Quit arguing, yes, but the break-even rate on the TIPS break-evens is down to low twos, meaning that it does not exist. It does exist because they think it exists, and you need to address it. They think the current prices are too high. They're too high because they think it, and it needs to come down.

It is the way it works. Philip asks for the truth, but another reason is that first-time homebuyers today is sophisticated, and renting is a better deal. That is true. Renting is a better deal, but renting is also, if you want to put, if you're a homebuyer, and you're 40, and you're married, and you want to have kids, and you want to start a family, you want to get into certain neighborhoods with certain schools and certain parks. Rentals are not available. Only single-family home ownership

is available in some of those neighborhoods, and that is very middle-class neighborhoods.

I'll use the Chicago example. That could be Naperville, or that could be Warrenville. It does not have to be, you know, Winnetka or Glencoe, if you're familiar with the Chicago area. You know, you might want to be in a Naperville or a Warrenville neighborhood. I'm using them because those are like the quintessential middle-class neighborhoods in Chicago, and you want to be in a certain school district and stuff like that. You might not be able to rent your way there, or if you do, you're on the outskirts, and you do not want to be in a rental.

You want to have more room than you have with two-car garage and everything else. So, yes, it might be a better deal to a point, but it restricts your movement of what you want to do with your family. So, Phil follows. So, homes are now financial assets. The solution is more production, i.e., increased supply. Speculation equals financial assets.

Yes, again, that is the problem. What is a home? Is it basic shelter in a decent neighborhood that keeps up with inflation, or is it the piggy bank for retirement? If it is the piggy bank for retirement, it is the last 30 years. It is just boomed and busted, and it is booming again, and now you've got a certain big cohort of people that are angry they cannot buy in because the price is too high, and you've got officials saying, do not worry. We're going to stand on our head with mortgage finance to figure out how you can overpay for overpriced homes.

Again, I'm using sarcastic language. Derek asks, why do you believe homes suddenly become viewed as a speculative asset in the late 1990s? That is a very good question. Was it possibly due to government policy shift change, or was it a cultural shift? It happened in Amsterdam, too. If I go back to my chart, it happened in Western Europe, and it happened in Amsterdam.

I do not have a particular thing about the aging of the baby boomers or a cultural shift. I guess it would be that, but something changed in our mentality about home ownership in the late 90s. Maybe it was that perception that home prices never go down because they did not, because they were strictly managed with the inflation rate. Not managed by a government agency, but they were managed around rising with the inflation rate to keep shelter costs reasonable, and no more or no less. But something changed, that is worthy of further inspection.

But as the chart shows, something changed in the Case-Shiller chart I have here, and in the Amsterdam chart, after 400 years, something changed about 30 years ago, and that we turned a home into a financial asset, into a speculative asset or boomers' Bitcoin, as I like to call it. Josh asks, you're wrong adding the false narrative regarding the 50-year mortgage. A 50-year mortgage does not give you a lower monthly payment when you factor in for 50 years versus 30 years. You use basic amortization schedules. Your financial argument about this, as you will see. is incorrect. You are right that overall, you will pay more at the end of the day, but the purpose of the 50-year mortgage is to spread out the interest costs over a longer period.

So, each individual month, I pay a lower fee, but I will pay 240 more at the end of the day. But again, I want to go back to what I was arguing about with the 50-year mortgage. Any scheme that will take a \$3,000 a month price for a home down to \$2,500 by using financial innovation is just going to be a signal to homeowners, oh, we can raise the price. Because if they were able to afford \$3,000 a month last month, they could afford \$3,000 a month next month, but now they'll do it by paying more price, less interest. That is why in all these schemes, UK tried this with all these first-time homeowner schemes with innovative mortgage finance to lower the monthly payment to get first-time homeowners in. All it did was tell us it was a signal to home sellers to raise prices.

That was my bigger point. But you're right about the 50-year mortgage. You're going to pay 240 more payments for the other 50, but nobody thinks that because everybody thinks, well, it is just going to lower my cost now, and then eventually there will be lower interest rates in the future, and I can refi at a lower rate. it is just a way to get the number down for a while until rates go down, until Trump puts his Fed chairman in who says, I do not give a damn about the data. We're going to lose 1% on the funds rate, and mortgage rates are going to go down, and then I can refinance lower. That is why they're arguing about doing it at the end of the day.

Kieran asks, it seems like the housing market is being supported by a strong stock market. It seems like the mass affluent households are choosing to hold on to multi-properties or large expensive homes as empty nesters because they feel like they can afford the high cost to maintain those properties. If so, is the future of housing in the stock market also an indirect bet on Al? Absolutely it is because I'll go back to this chart here. How do people afford 46% of their income to go to housing, when from 2009 to 2021, it was more around 28% to 30% of their income? Because they look at their brokerage statement, and they say, well, this has gone up in price, and they look at Redfin, and this has gone up in price, so I'll spend a little bit more on my house.

How do sports team owners always justify spending into a loss every year on the payroll for their football team, or baseball team, or basketball team, or whatever? And the answer is, because the value of the franchise keeps going up, I'll just run it at a loss, and I'll eventually make it back when I sell it. Well, that is what we're doing with houses. The value of the franchise, the house is going to keep going up, so I'll spend 45% of my income on holding onto this big expensive house, and then Redfin will give me

reinforcement by telling me it went up. My stock portfolio will tell me that too. So yes, when AI does correct, all of this will feel it.

Everybody will feel it when AI corrects, whether you're directly invested in it or you're not as well. I talked about that about two conference calls ago. I'll probably talk about it again a little bit more in a future conference call. I also did a podcast, one of our Talking Data podcasts about the AI argument. Maybe I'll do another one on it too, because it is a fascinating subject. Greg asks, there is a portion of the home price problem in the perspective of the buyer.

When the house had eight-foot ceilings, vinyl floors, limited countertops, two-car garages, buyers will not accept that now. Today, they want vaulted ceilings, marble cabinets, granite counters, luxuries, plus added regulations for the lot. Yes, and the average size of a home is doubled. In the 1950s, you were raising a family of three or four in a house of 2,100 square feet. Today, you're raising a family of three or four in 2,100 square feet. Today, people raise two kids in a house of 4,000 square feet and go, man, we have no room.

So, it is a cultural thing about taste and everything else. And the reason people want these luxuries is because it is a financial asset. It will hold its value. The reason that I just wanted a laminated floor and 2,100 square feet is your bed's there, go to bed, wake up, go to school. We do not need anything more than that. It is shelter.

It is shelter for us to put our stuff on, to take a shower, to take a nap, to be fed dinner. And then we go outside the house to live our life. But today, now we live our life in the house with streaming and everything else. And I'm sounding like a get off my lawn boomer by talking about this stuff for the moment right now. Oliver asks, thoughts on Bitcoin's price action and what it means for the broader market. More specifically, since spot ETFs

were approved quantitatively, it is like a high beta tech momentum asset.

Given that we've seen over the last week, does Bitcoin sell-off have any meaningful signal for us? Well, a couple of things. First of all, since I'm looking at my chart right here, Bitcoin is about to break \$100,000 on the downside again right now. To answer your question directly, the average price that the spot ETFs were approved in January of 24, honed Bitcoin is \$90,000. The price is now \$100,000. So, the average holder has about a \$10,000 unrealized gain that they're sitting on, or they're sitting on about 11 or 12%.

And it is rapidly depreciating as we talk right now. So that is the first thing to keep in mind about it. To your larger issue, I've argued that Bitcoin is kind of in a midlife crisis. What is it trying to be? I've been a big proponent, a big fan of crypto for eight, nine years now. And I said, look, and I was basically a big Ethereum bull, still am.

That does not mean I'm planning on Bitcoin. I just favored Ethereum. Because I saw it as an alternative financial system, a way that you could have a stock market, banking system, insurance, you can have lending and borrowing, you can have ownership. It is all done permissionlessly. It is all done safely if it is done correctly. No government can take it away from you.

Nobody can steal it from you if it is done safely. I know we've had some hack problems, but they need to be worked out as well. And it could potentially be a new financial system. Who needs this? Certainly not people at the top of the apex in the United States or Europe. We've got functioning banking systems, we've got safety with our sound, we've got relatively sound money, relatively sound money.

I'm comparing it to the currencies of Third World countries and the like. Our banks do not go out of business, and we lose all of our money. We've got insurance and very few banks are out of business. We do not need it.

But 80% of the world does. 80% of the world does not live with sound money.

They live with uncertain money. They live with rickety financial systems that are subject to a lot of things. And what I've argued is if you're going to allow the crypto system to get swallowed up by the current traditional financial system or tradfi system, it is going to fail. It is just going to get swallowed up by the system and it is going to become a big bunch of nothing is what it is going to be. Running a blockchain is hard. Running a blockchain is complicated.

What is easier is why don't we just get rid of the blockchain if you want to be swallowed up by the tradfi system so that boomers buy your coin and go to 300,000? How about we get rid of the blockchain and just run it at a server at the Fed? It is much more efficient. You know you could make millions of transactions a second for no gas fee. That would be a transaction cost. They call them gas fees.

But then the Fed could come in and say we do not like you. You do not get to buy it. You're a criminal. We'll take it away from you. We'll set limits on how much you can buy. And that is the downside that you want.

And then maybe we'll break the cap of 21 million because we can. And so that is the problem you face. If you want to be swallowed up by the system and do jumping jacks. Larry Fink likes me and he's telling everybody to buy the coins so that my bags, that is what they call it, are going to go up. it is not going to work in the long run. What is going to work in the long run is we're going to build an alternate system like Uber was.

Uber never said when taxi drivers were mad and flipping over Uber cars and setting them on fire, we need to go on bent knees to the city councils to make sure that we are accepted like taxis and that then we'll sell it to Yellow Cab. No, because if they did, it would never have been Uber. Uber was saying we're building a new system. You guys are dinosaurs are going to go away. Crypto should be saying

that to the current financial system. You guys are dinosaurs and you're going to go away.

We're going to build a new system and all of us that are listening to this call, we'll make the right turn into that new financial system. But instead, they want to actively be swallowed up by it. And I just do not think it is going to work for them in the long run. I think that is why prices have stalled. What do you want to be? Tell me what you want to be and then we can answer the question as well.

JS, you made a strong case that the more the Fed provides liquidity in the face of dislocations in the financing market, the more the Fed is acting as an enabler to the president and Congress to spend more beyond its means. However, what would be the impact of financing markets in response to the dislocation the Fed sits in its hands? I think the better way to say it is Congress, look at what is happening in these markets. These funding markets are going up. You've reached your capacity. You've got hard choices to make.

You keep telling me you want to spend money. You're going to blow up markets. We're going to either have higher funding costs or you're going to tell me to get easier and you're going to risk more inflation. So, you're either going to have your constituents with pitchforks and torches outside your office because prices have gone up and you're responsible for it or financial markets are a mess and you're responsible for it. Your fix is you've reached your capacity. How much more can we do?

Maybe this is a signal we're really close to the end right now. And instead of risking more inflation by printing and borrowing and buying more assets so we could go to 41 trillion and then we could have another debt ceiling fight because the current debt ceiling is 41 trillion and you could borrow trillions of dollars more to buy trillions of dollars more stuff. The biggest driver, I think, of inflation is government spending. So let the government expand, buy more stuff, and then create more inflation. Otherwise, what the Federal

Reserve Chairman, what the Treasury Secretary should be saying is, warning, warning, Will Robinson, if you recognize that old Lost in Space reference, you are at the limits. You're getting close.

It is not a problem that it is going up 15 basis points right now. And it is concerning that it is on an uptrend, but it might never stop. And where is it going to be in a year or two or three unless you want me to print money and then you risk more inflation? That should be the answer. That should be what they're doing. But they're not.

They're all putting on their technical caps talking about Treasury bill buying is not quantitative easing and we'll buy these kinds of assets and this kind of facility, and we'll take these tweaks to the standing repo facilities so you can borrow more money. The funding problem went away. What you did was you told Congress borrow more is where you're going with that. Charles asked, what is a serious fair market depression like? How much could that cause capital gains to fall and consumption to fall? Well, I mean, you answered the question right there.

It could be very serious if you lose a lot of money, you're going to remember the biggest swing in in taxes is the biggest swing factor in taxes is capital gains. Capital gains kind of when markets go up, we pay tons of capital gains to the government and then the deficit goes down. And then when markets go down, the capital gains disappears and then the safety net kicks in because more people are requiring in the safety net and the deficit explodes. So, what could very well happen in the next fair market is you lose all the capital gains, and you lose all the capital gains, and you get a safety net, and the deficit absolutely explodes. And here we go. The economy is crashing.

Inflation is crashing and interest rates are going up. Because the borrowing needs are so tremendous. It is overwhelming falling growth and falling inflation on the next

downturn. So those are kind of some of the thoughts I would give you. And finally, a final question of the day. This might be the longest call I've ever made.

I'm getting into Rogan territory here. Texas and Florida are seeing very strong immigration. Is affordability much better there and why? Could that be the model? When you say immigration, I think you mean domestic migration. There is not people from foreign countries flocking into Texas and Florida because we've closed the border.

So, I'm going to answer the question as if you mean strong migration. People are flocking down to Texas and Florida. Yes, the regulations to build new homes and the expansiveness of it keeps the prices affordable. Maybe not prime condos on Jupiter Island in Miami. There is going to be sky high prices, but it expands. The weather is nicer.

There is no income taxes down there. In fact, Florida is even talking about doing away with property taxes. Florida is going to be able to finance itself without an income tax, without a property tax. Can 300 million people live in Florida? What am I doing here in a crappy climate paying taxes? I know it is a flaw of mine as well, but I think that that is the answer as to where we are now.

The northern climates could do the same thing. They just have to compete on price against the southern climates as well. In theory, you would argue that living in Chicago should be cheaper than living in Florida. You will pay a weather tax to live in Florida, so I will give you a discount to live in Chicago, but it is exactly the opposite right now. And that is why you're seeing this strong migration. And the last thing I'll give you, housing starts in the United States.

They do break them down by area. 85% of all new home construction in the United States is in the South and West. That is, it is either in Southern California or in Phoenix or in Las Vegas or in Austin or in Nashville or in Atlanta

or in Florida, anywhere in Florida. That is 85% of new construction. No one's building homes in New York City, Chicago, Philadelphia, Cleveland, fill in the blank Boston as well because everybody's moving in that direction. Those areas are having population declines.

The southern areas are expanding population expansion. Better weather, cheaper. And so, we're just going to empty out the top half of the country until they get to be able to compete on cost. And currently they cannot. Right now, what they're competing on is culture. A lot of young people like to live in urban areas like New York City or Chicago or Boston.

They like that lifestyle. That lifestyle does not really exist outside of maybe Miami, but Miami is so expensive. Most of it is more like a suburban lifestyle. But eventually that'll give way if the price disparity gets too great. All right, let me stop there. Let me thank you for listening to me blather on and on and on in Rogan-like territory.

Schedule looks like I'll be able to talk to you, be able to do this again in early December in the same three weeks in the same format. So, talk to you again soon.

Inquiries: (800) 606-1872

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