

Chris Bloomstran on Investing in Flation: Surviving Financial Instability

Chris Bloomstran, President and Chief Investment Officer of Semper Augustus Investments Group, joined the MOI Global community at Latticework 2022, held at the Yale Club of New York City on December 13.

This talk is available as an episode of Invest Intelligently, a member podcast of MOI Global. ([Learn how to access](#) member podcasts.)

The following transcript has been edited for space and clarity.

Chris Bloomstran: Thanks to John for getting us all back here in person. When John asked me to talk, he said the theme of the day was somewhat geared around inflation. I came up with what I think is a witty title. I ran it by him and, in kinder words than this, he said it's a dumbass title and maybe I should just call it, "Investing in Inflation."

I said, "Well, John, I could talk about disinflation, deflation, inflation, and hyperinflation so we're covering all the -flations." We submitted it. I ran it by my wife, and she did say it was a dumbass idea for a title.

Anyhow, we look forward to getting John over here live next year. He promised me he would come. This is recorded, so he will hear that, and he's obligated. The lawyers make me stop here.

We just had an SEC marketing rule change that affects a lot of us in the room. No longer can I say we've increased our expected investment return from 40 percent to 50 percent. Now I'm required to show that we borrow money from client accounts to fund our personal hedge fund, financing things like political contributions and the jet. Also, as soon as there are elected officials, realize there are claw-backs and how quickly they extradite.

The premise and what I thought I'd talk about is the outcomes from too much debt in our system.

We had a lot of debt in the 1920s. There was a spike in debt from 150 percent to over 250 percent of GDP in the early 1930s, but it had nothing to do with debt levels rising. That was the depression. Nominal GDP declined from 102 billion to 54 or so billion. During the spike, debt actually declined by about 10 percent. But the economy was cut in half. By the time you got to 1971 around the time we went off the gold standard - and by the time you get to 1981 at the end of a 16- to 17-year bull market in stocks and at the end of the inflation that persisted through the 70s, credit market debt couldn't be high because absolute interest rates were sky high. The long bond, the 30-year Treasury yield was as high as 15 percent that year.

The Fed had pushed rates to 20 percent, so you couldn't have a lot of nominal debt because you couldn't service the debt. From that point forward, we had disinflation for years. We brought the money rates down. Corporate debt rose. Stocks recovered from cheap levels.

By 2000, we hit 250 percent total credit market debt to GDP - this was far in excess of where we had been at any time in history. I thought, "Oh, boy! That's a problem." I've got these numbers emblazoned on the brain, but we had a 10-trillion-dollar economy. We had debt at 250. We had 25

trillion dollars in debt.

The stock market was so cheap in 1981 that, on what was then a 3-trillion-dollar economy, the stock market was worth a trillion dollars. It was one-third the size of the economy. Debt in 1981, when rates were so high, was 4.5 to 5 trillion dollars. It was 158 percent of GDP at the outset of the bull market.

By 2000, our economy had grown from \$3 trillion to \$10 trillion. There were \$25 trillion in total credit market debt in the system. The stock market was about 150 percent of GDP – call it 15 trillion. At that point, a lot changed.

Since 2000 when the debt level got so high, real GDP per capita had not grown nearly as fast as it had since the 1870s. It was clipping along at 0.5 or one percent where previous growth had been more like 1.5 to 2 percent.

We had the financial crisis seven years after the 2000 peak, and the economy had grown by 40 percent – from 10-trillion-dollar GDP to 14 trillion dollars. It took debt up by double though. Debt levels grew from 25 trillion dollars to 50 trillion dollars over that stretch. We got the housing bubble. We had excesses in commercial real estate. The S&P, which had been at 1500 and change at the peak in 2000, had recovered to 1500 and change before the crisis.

Since the crisis, the Fed intervened. The global central banks intervened. We had all the QE. We ran the government balance sheet up dramatically. But since the financial crisis, debt levels have not grown. We had a spike to over 400 percent during the pandemic. We crushed nominal GDP, and the government balance sheet exploded. Debt rose and GDP fell. But now we've recovered and we're back to that 350 percent of GDP after the pandemic.

Since 2007, we've taken the economy from 14 trillion up to today it's pushing 26 trillion; it hasn't quite doubled. Call it 85 or 90 percent. Debt has grown from 50 to over 92 trillion dollars; that's about the same rate of growth as GDP. That's how you go from 350 percent to 350 percent.

My premise here is we have so much debt in the system – primarily government debt – that the next dollar of government debt is essentially deleterious to the economy. We won't grow real GDP much with a working assumption that, at some point in the rest of my investment lifetime, we have to bring this debt level down from 350 percent to some more manageable level to, say, 250 percent. But I thought 250 percent was a crazy number in 2000; maybe 200 percent. I don't know what the number is, but there are a handful of ways to do it, and they all involve “-flation.”

We could have a deflation like the 1930s. That would be gruesome. We'd shrink nominal GDP; the creditors of businesses would become the equity owners because we'd have wicked bankruptcies. We didn't have a lot of debt in the 1930s. But today, corporate debt is almost at an all-time high. That's non-financial debt, non-banking debt.

We could have hyperinflation. But we might wind up with something in the middle. I think we'll get something in the middle. If I had to guess – and this is all macro, and who knows; we don't spend our life on the macro.

Back to 1790, we only ran federal debt during wars. We financed the war of 1812. We financed the Civil War. We financed World War I and World War II. We had a little spike during the depression, but that was more a function of declining GDP.

I don't know what war we're fighting today except perhaps a war against reason and logic. We're not in a big shitty war, and yet we've got debt levels that exceed – on the federal balance sheet – non-debt held by the public. This is the portion that's held by the Central Bank. It has exceeded our debt level in

the middle of World War II. This is absolutely insane.

Starting in 1971 when we went off the gold standard, we started running persistent budget deficits. The exception was 2000. At that time the White House attributed that to their prowess, but their prowess had nothing to do with it. That was the tech bubble and all the stock options that were given away as compensation and on exercise. The exercise was a taxable event. Silicon Valley was sending a mountain of money to Washington DC. But then we entered the pandemic years. We ran back-to-back 3-trillion and 3.1-trillion-dollar deficits, 15 percent of GDP respectively. We're still running a deficit north of 5 percent today on this massive recovery in the economy.

Prior to the financial crisis, the asset side of the fed balance sheet consisted almost exclusively of Treasury bills. We had the crisis. We had the alphabet soup of federal programs. We spiked the balance sheet from what was 750 billion dollars, continued the QE through 2014, and we started to taper in 2017.

We took the balance sheet from \$4.5 trillion in 2017 down to \$3.7 trillion. Of course, we did the taper, and maturing Treasuries and maturing mortgages were allowed to roll off. Somebody had to finance the paper. We had a liquidity crisis. We had a liquidity crisis in the repo market. The Fed was back in the QE business – except they said it wasn't QE.

The pandemic hit. We were really back in QE. In the ensuing two years, we've taken the balance sheet up to 9 trillion dollars. It was spectacular. The magic moment was, of course, the inception of the Fed back in 1913. The two seminal markets were the inception of the Fed and Nixon taking us off the gold standard.

This debt problem is global. In the industrial world, Japan invented everything we've tried to do from a central banking standpoint. They invented QE. They invented negative interest rates – all in an attempt to create inflation since 1989. The Japanese economy has not grown at all in nominal terms for a third of a century. It's remarkable. If you look at the size of Japan's balance sheet to GDP, they're at 250 percent and we're at 130 percent. You could say that, even though they are an insular economy, we have room for more rounds of QE.

When you think about today's inflation print, we have a stock market at least that starved for the crack cocaine of easy monetary policy. We're banking on interest rates back at zero percent and the next round of QE. Our central bank probably won't have an easy go of it by shrinking its balance sheet by 25 percent or by 50 percent.

The point here is, when you're running large budget deficits as we continue to do, when a mortgage matures and the Fed doesn't roll that security, the Treasury is still borrowing money and somebody has to buy the paper. If the central bank is not going to buy the paper, that means the private market – that could be insurance companies, banks, households, bond mutual funds, foreign central banks – somebody's got to finance the paper because the Fed is going to roll that issue. It won't shrink the balance sheet because we're not running a surplus. You start to have liquidity problems, which is exactly what happened in 2019.

I don't expect them to get very far, but I do think it's conceivable you could get to subsequent rounds of QE. In that environment, the premise here is the period of the '70s could be the roadmap for what we will experience.

When we were at the height of the pandemic, everybody pointed at the growth in M2 – the money supply. Instead, it's growing 25 percent. We should have inflation in the system immediately, but we didn't get it for a couple years. The monetary base was growing at twice the rate. The monetary base

is the amount of currency outstanding. The monetary base was growing, and so were bank reserves. That's the dealer banks that buy the Treasuries at auction, sell them to the Fed. But it's also the 5,000 or so banks that leave deposits on reserve at the Fed, and they're paid interest for those deposits.

We have the inflation now. The Fed eliminated required reserves. Now, we're at the point where the monetary base has shrunk from about 6.3 trillion to 5.3 trillion dollars - by a full trillion dollars. It's negative. The growth rate year-over-year of M2 is now running mid-single digit, and yet you have this inflation that's running white hot - albeit shrinking on a month-over-month basis, and even now on a year-over-year basis.

The amount of reserves the banking system has at the Fed has dropped by a full trillion dollars - from about 4 trillion to about 3 trillion dollars. That's a function of the Fed. Now, having shrunk the balance sheet, the asset side, the Treasuries are rolling off. They're having a harder time rolling off mortgages because the CFAs or whatever - those in the mortgage business in the world know - you've got duration and convexity in mortgages.

As interest rates rise, what would you think is the average duration of a 30-year mortgage? People move, they sell their homes before the 30-year mortgage is up. When interest rates rise, you don't move. Nobody refinances their houses. Suddenly you've got a much longer piece of paper. You've got negative convexity.

Prices tend to get crushed when interest rates rise, but they're capped when interest rates come down. You don't have that many mortgages that are yet rolling off the Fed's balance sheet, but they are shrinking the balance sheet by \$95 trillion, and they're bringing down the Treasury numbers by a pretty heavy amount.

Money's not making its way into the system. I talked about when the monetary base was growing at 60 percent. M2 was growing at 25 percent. We've taken the velocity of money down to almost one. In the early years of my career, I presumed the velocity of money was always two.

The GDP is derived as M2 times the velocity of money. M2 is derived as the monetary base times little "m," which is the money multiplier. In both cases, money's just not sloshing around through the system. When you think about the shrink of bank reserves by a trillion dollars, the Fed has only shrunk the balance sheet by 500 billion. But why are total bank reserves down by double that - a trillion?

Well, you can get more if you are a bank in Treasury at 4.5 percent, let's call it, versus the rate at which the Fed is now paying banks to keep money as reserves in the system. They're paying around 3.9 percent. There's not a lot of motivation to keep money tied up in reserves.

Because we're not seeing the velocity of money increasing, it probably doesn't mean the banks are making a lot more loans. This money is not finding its way into the system. It's a reconfiguration of what's on the balance sheet. Today's inflation is not that unusual.

Back to the 1700s - we have this working premise that the central banks and our Federal Reserve are almighty and all powerful. They can control the inflation rate through monetary policy. But we've seen Japan fail at it for a third of a century.

The Fisher equation - Irving Fisher - postulated that, if you take nominal interest rates plus the inflation rate, you essentially get the real interest rate. His point was that central banks don't control it. It's simply that nominal interest rates generally gravitate toward the inflation rate.

That intuitively makes sense to me, but you've got a Fed today that insists it is that powerful. They'll point to history. Central bankers of old will tell you our second most recent Fed chair, who has won a

Nobel Prize for essentially studying the Great Depression – he most certainly did not read Murray Rothbard’s *America’s Great Depression*. Rothbard shows you that the Fed was active in manipulating short-term rates, but it called it the rediscount rate at that time. They said they were slow to act and prevent the Great Depression. They were cutting rates in concert with their central bank partners in Germany, France, and Great Britain.

What you’ve seen is that those rates do match the inflation rate over time. Prior to 1913, there was no central bank manipulating the rate, yet they were all fairly constant. You could plug in any rate you wanted. We pulled the discount rate, but you can run 10-year Treasuries or any of the short-term Treasuries and they’ll fairly match over time.

The stock market is what I wanted to get to when it comes to the comparison to the 1970s. The Dow hit almost a thousand – 995 in 1966. By 1982, the Dow was 777 or 778. It was down almost 25 percent. For those 16 years, you got the dividend. You essentially had a zero total return, but inflation averaged 6 or 7 percent over this period, so you lost 75 percent of your purchasing power in what was a series of rolling gruesome bear markets. The Fed was very active during this period.

Jay Powell said in a speech recently that the Arthur Burns Fed essentially screwed up the 1970s and did not respond to rising inflation. There’s this notion, though, that the inflation of that period was linear. I’d never had that much reason to doubt it until I pulled the history of the Fed funds rate, overlaid it with the stock market, then overlaid it with inflation.

Oil prices offer another great proxy because the Fed did fight a couple of big bouts with oil – the Arab oil embargo. They were fighting Nixon’s policy of wage and price controls.

In any event, though, you had the 17 years. But compare Fed funds and inflation. For that entire period from the late ‘60s until 1970, William McChesney Martin was still running the Fed. Burns came in 1970. He got tarred and feathered by these current monetary modernists suggesting he screwed the whole thing up. For most of that time, for most of his tenure, which ended around 1978, they had the Fed funds rate ahead of the inflation rate and ahead of the PCE, which is the Fed’s preferred gauge for inflation.

Another note on how brutal the ‘70s were: We went from 50 percent household ownership of stocks in the late ‘60s to 10 percent by 1982 because of this grueling period of bear markets. People bought 13, 14, and 15 percent bank CDs. The long bond was 15.70 and change while Treasury bills were pushing 20 percent.

Inflation is bad for stocks for a whole host of reasons. Hyperinflation is good for stocks. It turns out, with local currency, you at least salvage some percentile. But inflation takes a machete to profit margins. I don’t have good data. I’m trying to get good data. If anybody has great data, what I need is sales. You’ve got all the margin levels that existed at the time, but you don’t have a good sales number.

NIPA profits are a pretty good proxy for what margins look like. S&P profits generally track NIPA. During that period, the profit margin for the stock market dropped from 7 percent and change down to 4 percent. By the 1982 low, profit margins had been almost cut in half. We were at a 4-percent margin, and the high interest rates recapitalized the market – not north of 20 percent where we began the period but at 8 percent. A 4-percent profit margin times eight means stocks traded at 32 percent of sales, and nobody wanted to own a stock.

Here are your granular periods. The Fed never says they put a finger in the air and check the stock market, but that’s insane because they do. The Fed pays attention to the stock market. You get bad

bear markets, and the Fed reacts to bad bear markets by lowering rates and easing monetary policy. When things get white hot, they don't suggest they had anything to do with it through too loose monetary policy.

From '66 through '67, the Dow dropped 20 percent from 1,000 to just under 800. The Fed reacted later and it did not cut rates. Later the Fed took interest rates from 5.75 to 3.75.

Later the market fully recovered back to 1,000. The Fed chased. If you overlay inflation rate chart on the stock market chart, you'll see the Fed funds rate was ahead of the inflation rate for the entire period. Then came the next bear market. It took the market down by 30 percent to 700. The Fed came in later again.

At this point, 1970, Arthur Burns was on the scene, the goat of current monetary thinkers. There are great articles on the Fed's website that talk about what a fool this guy was. But just follow his Fed funds rate. We had the '73 to '74 bear market and we had an oil price spike.

By 1972, we'd had six years of rolling downturns. That's when we got the Nifty 50. That's when we got the 50 stocks you could own at any price. The greatest businesses had pricing power to offset the inflation that had come in. You could pass through your cost of goods sold. You could pass through rising labor rates.

Then we had what became known as one-decision stocks. Ten of those 50 stocks didn't make it. They included Kodak, Polaroid, Revlon, JCPenney, Kresge, Kmart - all gone.

On this 45-percent decline that took the Dow from 1,000 down to 554, the Fed raised rates through most of that period because inflation was gradually rising during that period. The Fed was pretty well responsible for the 50 percent decline in stocks.

A lot of those Nifty 50s - the greatest businesses - traded at 40, 50, 60 times earnings - not dissimilar from where the big Fab Five traded at mid-30s earnings at year end 2021. Again the Fed became active. The Burns Fed took rates from less than 4 percent to 13 percent. They were up almost 10 percentage points, but then they cut them again. You have the Burns Fed raising rates.

Then, President Carter got frustrated because these rising interest rates were harming the economy. Congress was mad. Carter essentially fired the Fed chair - Burns - and kicked him upstairs to be Treasury Secretary where he could do no harm. They brought in a guy named William G. Martin who was only there for about a year. I take that back - Martin is the guy they brought in. He got rid of Burns. Brought in Martin. Martin was there for a year. He replaced the Treasury Secretary. That's when they brought in Volcker.

They brought in Paul Volcker in late 1978, but the Fed funds rate prior to Volcker getting there had risen from 4 and change to 13 percent. Volcker came in and publicly got sideways with Congress. He said, "I'm going to raise rates, and we won't target monetary policy. I'll work down M2, just fighting this thing with the short-term rates not working. We've got to get the money supply under control." But he took the short-term rate to 20 percent.

The world forgets - and what the current Fed will not acknowledge - they got to 20 percent, and the stock market had given up by this point. It was just flatlined dead. Household ownership was declining. Pension fund ownership of stocks was declining.

We had back-to-back recessions. Volker got credit and praise for his willingness to tolerate these two recessions but look what he did. The money rate climbed to 20 percent twice. But before he went to 20 percent the second time, the rate declined to around 8.75 percent. He took the money rate down by

more than 10 percentage points. The guy that fixed inflation crushed the money rate, took it straight down, then thought, "Hell, we've still got inflation. We've got to get back ahead of it." Then, he took the money rate back up to 20 percent. We had the second recession, and finally the high interest rate broke the inflation.

My takeaway from all of this - in my observation of watching the Federal Reserve as an investor for more than 31 years - is we have an activist re-active Federal Reserve. They do target the stock market. They do target asset prices. We had this period of rolling recessions. We had all this debt that now sits on corporate balance sheets.

The household balance sheet is in better shape. We gave away money for a couple of years during the pandemic. Households repaired their balance sheets. Now, it's risen here in the last two months.

But if we go through a series of rolling recessions - and, in places where you have too much leverage on the corporate balance sheet, the creditors do become the equity owners and the stock market doesn't do well during those periods - the Fed can't take the money rate up to the inflation rate because, back in the '60s, we didn't have the amount of credit market debt outstanding that we have now. We weren't at 350 percent. We were at 150 percent to 180 percent. But we're double that now. Think about if we took Fed funds to 8 or 9 percent. Think about all these companies that have debt rolling off and must refinance at higher rates. With that much debt outstanding in the system, all you would do is support the interest burden. You'd have absolutely no profits left.

In any event, I could envision a scenario of a flatline stock market over a 15- or 20-year period, the Fed manipulating rates up and down, more rounds of QE, and we just do this thing sideways for a time.

At the end of it, we won't shrink the household balance sheet with more debt. We probably won't increase debt on the corporate balance sheet. We will de-lever in places. The government balance sheet can tolerate more debt, but we can take that total credit market debt down from where it is. Think about what you don't want to own during that period, what you definitely don't want in cash.

In the prior iteration during all that inflation and through most of our country's history, if we had inflation, we were okay owning T-bills. Everybody says cash is trash when you have inflation. Well, no, that's not necessarily true because who puts money under a mattress at zero percent? If inflation is six percent, for most of our country's history, the T-bill rate was six percent. We could at least match the inflation rate with the T-bill rate. But that has not been true since the year 2000. Not in the last 21 or 22 years since we got all this debt. We've now been suppressing rates, eviscerating the household saver, crushing those with cash in the bank, and crushing those with cash in their pockets.

You don't want to own bonds in a rising interest rate, high-inflationary environment. If we're going to have a rolling period where you start the stock market as we did in the late 1960s at expensive levels - Warren Buffett in 1966 stopped taking money into his partnership. By 1969, he'd given all the money back and said, "Look, if you want to be in stocks, hire my man Bill Ruane over at Sequoia. But you ought to own short-term munis. If you want to, keep Berkshire; I'm keeping my Berkshire." But he said, "This is not a game that I know anymore. I'm out of the stock market."

He was right. He picked secular high-end stocks in the late 1960s that you didn't want to own and you didn't have passive vehicles. But the point is you didn't want to buy and hold the biggest, most popular stocks - that would be the S&P 500 - because you have flatlined your total return but you lost 75 percent to inflation.

Who won the 1970s? Warren Buffett. Active stock pickers won the 1970s. Warren Buffett got control

of National Indemnity in 1967. He used that and the insurance reserves to pick up things like the Washington Post, Gillette, and his first purchase of GEICO and General Foods. He picked up these great assets during these rolling bear markets.

If we're going to have a period like that - on the premise that you'll work absolute credit markets down to a reasonable number - it's best to be a little more active with the portfolio. If that means selling some things when they're expensive and sitting on some cash for a period of time - or if it means trading within a portfolio and moving capital from the most expensive portion of the portfolio to the cheaper portion of the portfolio, the active investor wins in a period of inflation which is generally bad for stocks.

The S&P did the same thing. It was around 102 in 1966. By the lows in '82, it wasn't down 25 percent. It was back to that 102 level. The S&P did nominally better than the Dow Jones Industrial Average during the period, but not much. Investors made about 2 percent per year nominal return but lost 5 percent per year to the inflation rate.

Then, we have these various iterations of hyperinflation. If we had hyperinflation today, it wouldn't be in a single industrial economy alone like what happened in a handful of countries after World War I. Germany lost the war. They had reparations. They didn't have the money to pay reparations. They simply turned on the printing press and, in about three years, they turned the Deutsche Mark to 4 trillion against the dollar.

If you owned companies like Bear, you maintained some purchasing power, if you owned cash, if you owned Treasuries. If you owned German bonds, you lost all your money. Insurance companies didn't make it, but Bear made it. Bear was an industrial company. By the time hyperinflation ended, fast forward on Bear; it's a fun story.

The Nazis rose to power. They commandeered Bear's assets for the war effort, engaged in the war, and fought the world. If you're going to fight the world, it's probably best to win. Well, they lost. The allies took control of Bear's assets and various other German industrial assets, held them for two or three years, and eventually, to the extent you could reconstruct the shareholder roles. They found some of the original shareholders.

If you were a German investor in the German stock market, there were businesses that - start to finish - survived hyperinflation and a lost world war. After commandeering your assets by the victors, you got a portion of your assets back. If you didn't make it in cash, you didn't make it in bonds, but you made it in some companies.

Hungary had a hyperinflation pulling out of hyperinflation. Argentina has hyperinflation now. The best-performing stock markets in the world this year are Argentina, Turkey, and Venezuela. Argentina and Venezuela are up 100 and 150 percent. They're up thousands of percent over the last few years. But, these are local. If you were in Venezuela a decade ago and saw this coming, you'd get out of the country. We have Venezuelan friends who got some of their money out of the country. They got themselves out of the country.

All of these historical hyperinflation iterations were isolated to the countries you were in. You generally wanted to get your money to Switzerland if you could. You wanted to get it to the United States if you could. If you were in a place that would have political fallout and militaristic regime change, you probably wanted to get yourself out of the country.

Going back to the US, Europe, UK, Japan, China - everybody has too much debt. If we wind up solving this debt bubble through hyperinflation, it'll be on a global scale. I'm not sure it's orchestrated and

planned in advance.

The probability of getting either severe deflation on one end of the bell curve and a hyperinflation on the other end of the bell curve is not insignificant in the remainder of my lifetime. I'll pick a percentage - maybe 10 to 20 percent for either of those scenarios.

Hyperinflation is more likely only because we don't elect politicians, and we don't in turn appoint central bankers that enjoy things like austerity and gradually shrinking balance sheets.

I'm not sure the Fed's sitting here wondering about the things I'm speculating about. It might not be that this regular inflation over 15 or 20 years could be the salve and the fix for the debt bubble, but it could. It would be a long-grinding, painful process, but not nearly as painful as an outright deflation-slash-depression or hyperinflation.

For your edification and looking at all these data series that we pulled, you pull Argentina and their CPI. Then you've got the year-end linear change in the index, and you always get the hockey stick at the end when you look at these things on a linear basis - even if it's only over a 10- or 20-year period of time.

It's best to look at it on a logarithmic scale. You see, it's more gradual, but if you look at the index from 1.5 to 61, that's a severe amount of inflation. But you don't see it on an annual year-over-year change, then you've got a less dramatic but a linear rise on a logarithmic basis in the stock market. It went from 250 to 164,000.

You then want to look at the year-over-year change in the inflation rate which is now up to 66 percent. This is when you get paid on a Friday, you cash your check, you get your cash, you go buy your bread because, by the time we get through the weekend, bread will be a lot more expensive than it was on Friday.

We've done this in Argentina multiple times, multiple iterations of the currency. Brazil is not in one now, but you can't even get good long-term data on the Brazilian stock market or the economy because they've had so many different currencies over the years that there's no ability to tie the data together. That's why the wealthy in South America own lots of land - ranch land, cattle, dairy cattle, beef cattle, tangible assets. Venezuela is a mess. There you are on a linear basis with a little flatline and then, in one heartbeat, you're up a million and a half percent on inflation.

Now we're on the back end of it. The oil price has come down. We have negative CPI to the tune of 77 percent, but the stock market kept up with - to a degree - the inflation rate. This is in local currency terms. It doesn't do a lot of good. But, if you were local, you did preserve some wealth by owning stocks in the country you were in.

Zimbabwe is fun. Its hyperinflation is back. We all talk about hyperinflation. I have this 100-trillion-dollar note. I've got it for whatever reason. It's framed inside my CFA charter. Maybe that goes to the paper that either of those things is printed on. It is not worth a whole lot. But the original inflation was '07. Inflation was 25,000 percent at the peak, but it's back. That's linear, logarithmic.

Turkey is a mess now. Turkey had been a big importer of one of the net big buyers of gold and a net accumulator of dollars. But now they're dumping dollars on the market. They've got pretty sizable gold reserves as do China and Russia. That's just Turkey.

Chile is interesting. It's at the point where it's not in hyperinflation, but the inflation rate is running at 13 percent and the stock market is up about 25 percent this year. That's a country to watch where this thing could morph into hyperinflation. I don't know how these things flip from inflation to

hyperinflation but when you own printing presses, that's how it evolves.

The following are excerpts of the Q&A session with Chris Bloomstran:

Participant: While we look at the data from the past, there are a few things that are very different from right now in the future since the 1980s. The United States is a much more dominant force in the global market. Shouldn't we look at the future from a different perspective? Should we discard maybe some of the previous data? Right now, the United States, the reserve currency – it's a much more powerful country. It's a different scenario than where we were in the '70s and even in the '30s.

Bloomstran: Yes, that's a good question. When I go back to how the globe has gorged on debt, the entire industrial world, we're in better shape than most of the industrial world. We're running right up against the point where our security system runs against the wall.

We have a theoretically retiring baby boomer generation. We have positive demographic growth. Our population is growing much slower than it had throughout the history of the United States. We're growing about half of one percent, and all of that is on the backs of immigration.

In Europe, the population is shrinking, flatlining. Japan has been shrinking for a long time. China is an absolute disaster. The Chinese population is at 1.4 billion. My understanding is it will shrink over the next 40 years to a billion. That's 400 million people – more than the population of the United States; 5 percent of the global population.

China has massively overbuilt its infrastructure of buildings. It has moved a sizable portion of the population off the farms and into the cities. But, on that population shrink, and on this notion that you can't continue to build infrastructure faster than you can bring people, the remaining people out of the agrarian – China's economy looks to flatline – perhaps not unlike what Japan has done for the last third of a century.

Those who talk about stocks having been in a bubble at the end of 2021 – and, classically, you almost always get a commodity boom when you're working off stock market excesses – the pause I would have and I like it because we have 20-plus percent of our capital in the energy patch and in some commodity chemical companies. I love it.

There are some scarcities that have existed that are special to certain businesses and certain subindustries, but if the world's largest consumer of essentially all-industrial commodities and metals for the last 30 or 40 years, China is no longer going to import iron ore, nickel, and copper at the same rate as they had because their economy ran straight into a wall.

Their one-child policy was gruesome – and, for whatever reason, they thought seemingly logical. They ended it a handful of years ago. They're now a couple years away from encouraging people to have three kids. But they can't fix the problem because they ran it for too long. That's where that population will decline from 1.4 to one. China becomes the 800-pound gorilla in the room on what could be a deflationary force in a global economy.

Not exactly to your question, but the US is in better shape – no doubt. The UK was the last world's reserve currency. Charlie Munger points out famously that the history of reserve currencies throughout all of time is perfect and that they all fail.

The dollar probably eventually fails too. The crypto crowd and the libertarian aspect of the crypto crowd is rightfully concerned. But I don't think that's the right solution. There's no central bank on the

planet that will yield to a digital asset that's not their own digital asset.

You have a lot of things going for the United States. We've got about 25 percent of our capital invested in internationally headquartered companies, but there's no doubt - if you look at the 100 best companies in the world, I'm just guessing here, but - 80 of the 100 best are probably US-headquartered companies.

The Fab Five - which, if you guys saw my letter this year, I took an attribution analysis of where returns were derived over the last 10 years and took profit margin expansion up to record levels for the S&P 500, up to 13.3 percent from what had been a fairly range-bound 4 to 7 or 8 percent. We have our capital light businesses that drove that.

Declining interest rates to zero allowed corporations to put a lot of debt on the balance sheet but with no interest burden. That added about 3 percentage points to the 13.3 percent profit margin. You had multiple expansion from 13 to the mid-20s. Then, you had the Fab Five, which were spectacular businesses.

The market got this right in a period where we've had little GDP growth per capita. Those businesses with organic growth, especially those that didn't require a lot of new capital to grow - that would be the Googles and Facebooks - wonderful businesses. MasterCard, Visa - not hugely capital intensive. Tom had a chart that showed how much they do spend to grow, but it's not the classic bricks-and-mortar-type industrial growth.

In places where you had growth, the world got it right, but just like the Nifty 50 in 1972, they pushed the bounds of valuation where it didn't make sense. I have a hard time thinking MasterCard and Visa were worth 50 times earnings.

I owned Costco. I've sold it out of all of our nontaxable accounts because it was not worth 50 times earnings when it traded at 600 bucks a share. We got all that right. We have the best businesses, but we're burdened with an enormous debt burden that puts a lid on the ability of our economy to grow.

The experience of the next 20 to 30 years will be nothing like the experience of Warren Buffett from the mid-1960s through the late 1990s when we had the tailwind of rapidly growing GDP growth per capita - real GDP per capita. We're capitulated here, but we're capitulated throughout the industrial world.

The extension of that and what keeps me up at night and gives me pause is when you trap a country like China in a corner because it's got debt and it's now hitting the growth wall. Some of these places in the world have become fairly dangerous. That's when you get some of these shooting wars.

Participant: I have two questions. First, it seems if a country goes through a hyperinflation, the indices in general also do - in nominal terms - pretty well. In real terms, do you have a sense? In every chart that you showed, you showed how high the inflation was but also how the index has gone along with it. Both of them are exponential in that sense. In real terms, does it actually keep up with inflation or not?

Bloomstran: You don't lose everything.

Participant: In hyperinflation, what are some of the good assets to have? You were talking about real assets like pastureland. What are some of the other assets that have done well in a hyperinflation?

The second question concerns the US debt to GDP ratio. Do you want to answer the first question?

Bloomstran: This is now turning into the Rodney Dangerfield Back to School – one question, but in 98 parts. I’d have a hard time. I don’t have any special insight but, in a hyperinflation, if you own businesses, gold probably works. Gold is the only asset that’s stood the test of lots of time. The rule of thumb is an ounce of gold typically buys a nice men’s suit. I think it would be safe to make that case. Another 2,000 or 3,000 years from now, if I had one asset to bank on that would buy a suit, it would not be a fiat currency. It probably wouldn’t be any business. Businesses with pricing power, consumer-related, staple-type businesses would do well. They would do well under deflation as well. Some of the best businesses in the 1930s were those that sold to the consumer.

If you think about that 48 percent decline in nominal GDP, consumption started out at 80 percent of GDP when we had a 100-billion-dollar economy. Consumption was still 80 percent – 85 to 90 percent of GDP during the Depression. Unemployment rates spiked from mid-single digits to 24.9 percent. People have to eat. They have to drink. Whether you have deflation, hyperinflation, inflation, disinflation, consumer businesses would do well there – some of your commodity businesses.

I think this rush to our green carbon-free policy, net-zero-carbon by 2050 – we’ve gone too far, too fast. It’s not just the Russian invasion of Ukraine that exposed that. We don’t have enough refining capacity in the United States or in the world. We’ve gone from 250 refineries to 127. Europe has cut the number of refineries in half, but the difference there is Europe – as they were closing refineries, they were also closing aggregate refining capacity faster than their population has flatlined.

Here in the States, until about four years ago, as we closed refineries from 250 to 127, we added capacity to the current refining stocks. You’d build more stacks and more crackers. The bigger refineries added more barrels of productive capacity.

But if we do 20 million barrels total supply-demand, we import something like 8 million barrels and export a bunch. We must import heavier crude stocks. We have our complex refineries that make everything that comes out of the stack – from kerosene to gasoline to all of the distillates, diesel, jet fuel, all the way down to the heavy stuff at the bottom like waxes and asphalt. The feedstocks for petrochemicals, ethylene polypropylene is what you get out of a refinery.

Light sweet crude is conducive to gasoline. The heavier stocks are required for the other stuff. We must import some of that heavier crude. The European refineries are a little more one-dimensional in product. But, sure, if we’re 20 million barrels of oil per day in consumption, we’re a million barrels short on refining capacity in the States. Globally, if we’re 100 million barrels of consumption and supply, we’re about 3 million short. Outside of India and China, nobody’s going to build a refinery. We’re not going to build another refinery in Europe, for sure. Not going to build one here either.

Regardless of deflation, places where you have genuine scarcities that have developed – in part because of public policy – should be pretty good places to weather the extremes of hyperinflation. Hyperinflation is not the most likely outcome, but it must be on the table, and it must enter your mindset.

Participant: If energy and maybe specifically crude is a good way to play inflation, I wonder if we’re unwinding ESG somewhat or however that happens. It’s a function of not enough supply. If prices spike on things like that, can the Fed fight that given that it’s a more physical asset? If they could, how would they – thinking about the next few years?

Bloomstran: I should have added the chart. I’ll put it in my letter this year because I’ll expand on this. You guys were like the guinea pigs, but I’m going to put a chapter on this, make it better, and add some data points.

The Fed does fight higher oil prices. They had a couple of oil crises in the 1970s and early 1980s. You've fought not directly so with monetary policy, but our White House was fighting higher energy prices. The Fed's mission is to fight high levels of inflation even though they're the ones that tried to get inflation!

I sat in the audience in St. Louis. We had lunch with Jim Bullard, our local Fed President. We invited him into our local CFA society. This was back before the pandemic but post the financial crisis. His point was we'd run inflation below the Fed's 2-percent mandate for so long – high teens in numbers of years – that perhaps we ought to let inflation run. As soon as you get it above 2 percent, let it run hotter to offset the 18 years we were below 2 percent to make up for the 2.

The question then naturally was, once you've let that genie out of the bottle, how high do you let it run? Will you run it at a cap of 2.5 or 3 percent for the next 18 years? Or once you get to 8 or 9 percent like we've done today, is that fine with you? You'll never get an answer.

These folks we appoint in central banking roles – they're all smart, they're all PhDs, and maybe that's the problem with central bankers is their PhDs. They don't seem to be planning the next 20 years. They seem to be reactive to asset markets, and inflation surprised them in this iteration. Some of it was natural. It was the downside of the degree to which the economy had slowed, and commodity use had slowed for a brief period in 2020 to 2021. Inflation was going to run hot.

You couldn't run the money supply as high as it was. Even though we had the monetary base growing faster, we would get some inflation out of this. I'm not sure the Fed's thinking much more past trying to get the inflation rate back down to some number around 2 percent.

But, if you go through this 15-year period where we're going to shrink aggregate debt levels down to again 250 or 200 percent, you could run inflation at an average of 4 percent or 5 percent for the next 15 or 20 years and run the money rate at half that. It would bring the aggregate debt level down, but we'd be killing the saver. You're just killing the net saver. You're killing the person with money in the bank and in cash.

Participant: Thanks, Chris. This is a sobering presentation, but it's much appreciated. You've expressed your view on precious metals. How do the miners have an ability to navigate this higher-for-longer inflation environment?

Bloomstran: We own two gold miners – Newmont and Kinross. Gold mining is hard. I've always explained our ownership of the miners as a hedge against central bankers doing bad things. They're doing bad things. Twenty or 30 years ago, ore grades per ton of dirt moved were much higher. Today's mines are more complex, but they're also good. Technology has kept up. The world always forgets. The investment world and miners always forget that, when inflation is running high and oil prices in particular are running high, the cost of oil is parallel with the cost of labor for a gold miner.

A year-and-a-half ago, you would have said Newmont was on track to do 3 trillion dollars of free cash and Kinross would do a trillion. But now Newmont is going to do less than 2.5 trillion dollars, and Kinross will only do half that – perhaps 500 million. In the stocks, Kinross is down at its lows this year. It was down 70 percent from where it traded two or three years ago. Newmont was down by half.

What's interesting about the energy patch and gold miners – I was sitting with some of my energy trader clients in Houston last week talking about this. We've got all these oil- and gas-related businesses and some of the service businesses that go with them that are trading at a premium to the underlying commodity price. My midcycle earnings numbers for an Exxon Mobil or an Equinor, which is the old Statoil, are below current levels of profitability. You don't want to run a cyclical at peak

earnings and then apply a high multiple to peak earnings. That's when markets and investors get in trouble.

The gold miners are the absolute flip of that. The miners are as cheap as I've seen them in my investing lifetime relative to the underlying price of the metal. I find them at mid-high single digits of midcycle profit, compellingly undervalued, and I would think, if you have an extreme of a hyperinflation, the miners would be a good place to be.

Even in a deflation - where you shrink the nominal economy, price levels decline, and you have a lot of corporate bankruptcies - I would likewise think the miners would be a good place. Homestake Mining during the period of the Great Depression was the best-performing of all the stocks on the New York Stock Exchange. I'm not certain about that, but Homestake was probably the best, and that was a wicked bad depression.

We used to call recessions depressions until you had the Great Depression which was worse. Now we have recessions and great recessions. In those extremes, the gold miners would be a great place. They're cheap today.

About the keynote speaker:

Christopher P. Bloomstran, CFA, is the President and Chief Investment Officer of Semper Augustus Investments Group LLC. Chris has more than 25 years of investment experience with a value-driven approach to fundamental equity and industry research. At Semper Augustus, Chris directs all aspects of the firm's research and portfolio management effort.

Prior to forming Semper Augustus in 1998 - in the midst of the stock market and technology bubble - Chris was a Vice President and Portfolio Manager at UMB Investment Advisors. While at UMB Investment Advisors, Chris managed the Trust Investment offices in St. Louis and Denver. Among his investment duties at the firm, he managed the Scout Balanced Fund from the fund's inception in 1995 until 1998, when he left to start Semper Augustus.

Chris received his Bachelor of Science in Business Administration with an emphasis in Finance from the University of Colorado at Boulder, where he also played football. He earned his Chartered Financial Analyst (CFA) designation in 1994. Chris is a member of the CFA Society of St. Louis and of the CFA Institute. He has served on the Board of Directors of the CFA Society of St. Louis since 2002, where he was elected to sequential terms as Vice President from 2005 to 2006, President from 2006 to 2007 and Immediate Past President from 2007 to 2009. Chris has judged the Global Finals and the Americas Finals several times for CFA Institute's University Global Investment Challenge.

Chris served for a number of years as a member of the Bretton Woods Committee in Washington DC, an institution championing and raising awareness of the International Monetary Fund, the World Bank and the World Trade Organization. He has also served on various not-for profit boards in St. Louis. His resides in St. Louis with his wife and two children.