



MACRO Voices

with hosts Erik Townsend and Patrick Ceresna

Tian Yang: Fiscal, Sisyphus or Hercules

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Erik: Joining me now is Tian Yang, CEO and Head of Research for [Variant Perception](#). Tian prepared a slide deck, which everybody is going to want to download, [Variant Perception](#) is very well known for their excellent graphs and charts. Registered users will find the download link in your Research Roundup email. If you don't have a Research Roundup email, it means you're not yet registered at [macrovoices.com](#). Just go to our homepage [macrovoices.com](#), click the red button above Tian's picture that says, [looking for the downloads](#). Tian, I gotta compliment you, the last time that we had you on the show, you mentioned one of the leading indicators which your firm is particularly well known for, called LPPL. And I'm going to have you explain what that means in just a second. At that time, you said the LPPL indicator was flashing a basically a top or at least a short term top on the gold market. You called it, to the day, and we saw the market trade off substantially from there. Tell us a little bit more, just so we can understand this, how that indicator works. And is that same indicator flashing any signals on, I don't know if it's gold or any other markets right now.

Tian: Yeah, well, first of all, thanks for having me back. Always glad to be on MacroVoices. Regarding LPPL, it stands for Log-Periodic Power Law. And to us, it's a better model to figure out the end of a trend, compared to kind of more standard things people might use, such as looking at RSI, or looking at deviation from moving averages. Essentially, the marginal edge you get with LPPL is that it captures the underlying wave of the market and not just kind of the parabolic price move. So in a way, you're not just getting a parabolic price move but with this kind of extra condition to understand that the market is behaving in a disorderly pattern, where essentially, the price action speeds up as it exhausts. So to us, this is a kind of typical trading pattern you see towards the end of a lot of fairly major trends. And typically, the risk-reward for a fade is usually quite good. Now, we didn't obviously come up with an idea all by ourselves, Didier Sornette is kind of considered the, I guess, the godfather of LPPL and popularizing it. I think we've just tried to make it a lot more practical and actionable, you know, get the models running in daily intraday basis. So, obviously, people that are interested to find out more, a quick Google will work but in terms of life today, I think, well, even just literally before we got on, we got an LPPL crash climax on palladium. So it feels like maybe this is it's finally time. I mean, it's been a pretty mega, that downtrend, many false storms. It's also kind of interesting because the linkages to kind of South Africa, and South African equities have also been extremely bottomed out, years of kind of foreigners withdrawing money. So I think palladium is potentially a very interesting one for a tactical bounce. The other one, which is probably not going to be that surprising to listeners, is China has had multiple LPPL crash climaxes in, essentially, the last few weeks on various China linked equities. So on that, the one thing I will say is that, obviously

with a lot of the structural problems in China, you know, I think most investors are probably wised up to the fact that a lot of these things are sort of features and not bugs, of investing Chinese assets. But nevertheless, there's going to be very interesting kind of trade structures you can put around it in a one by two core spreads and things like Han Shan you know, there's a lot of these kind of very cute trade structures where you can cap your downside, and get the exposure, you know, if we get a squeeze, so, you know, those are kind of a couple of kind of live trading signals as generating right now.

Erik: Let's move on to the slide deck, unusual title, [Fiscal: Sisyphus or Hercules](#), what are we talking about here?

Tian: So I think we wanted to really put into context, just how extreme the fiscal deficit and the fiscal impact of the US government policy has been. So the kind of story of Sisyphus is this idea of him rolling the boulder up the hill, condemned by the gods to keep rolling. And obviously, if he stops, then the boulder tends to roll downhill. And to us, that's a pretty interesting analogy for where we are where, you know, it's extremely rare in the history of the US data to have such large fiscal deficits, whilst US households actually drawing down savings as well. So the US government has really done a big job boosting growth, boosting the economy. And there's an element of, when we dig under the hood, on the data, in terms of which sectors are creating jobs and so forth, that there seems to be a decent amount of dependence on the US government carrying this on this year as well. So that's why we thought it'd be a quite nice visual to just describe how meaningful the fiscal impulse and the fiscal deficits have been, but also just the dependence we have on that right now.

Erik: Tian, let's move on to page 4, tax receipts. What's the story here?

Tian: Yeah, so I think we wanted to flag that there's a lot of weird things in the data, that we've been trying to figure out the underlying rationale to explain. And in a way, the sheer amount of weird divergences right now speaks to just how unprecedented an environment we live in today. Particularly, what's been very interesting is that, we see divergences between US government tax receipts, and things like nominal GDP. And these divergences still kind of hold, even when you break the data down. So, it's pretty rare for taxes, nominal taxes on production to be not growing, whilst nominal GDP is super strong, historically, this series extremely well correlated. Similarly, personal tax receipts in the US have also been extremely flaccid, even falling, which, again, is very rare outside of recessions. So we wanted to dig into the rationales. And I think there's various explanations for, such as COVID, enabling kind of tax avoidance, with people setting up small businesses, and things around the kind of IRA, Inflation Reduction Act, tax credits, and so forth. So, you know, essentially putting it together, it looks like maybe even the government ran a bigger deficit than they intended last year, because of these various loopholes and shifts under the hood. So there's a risk that, this year, it might be hard to keep the same rate of fiscal stimulus. But you know, that's the reason to keep an eye on the data. And as of right now, we're still kind of going along at the same kind of 6% to 7% of GDP deficit run right as last year. But I think that's one thing that, when we looked under the hood, in the data we were somewhat concerned about, and we're tracking,

Erik: Tian, let's move on to page 5, job opening data is worse than headline distorted by labor hoarding.

Tian: Yeah. So that's a really interesting divergence under the hood in the US labor market data. So I think it's felt to us a little bit like there's a bit of a paradox going on with the labor data, where, again, the aggregate headline numbers, you know, you look at non-farm payrolls initial claims, those numbers all look very strong still. Yet, there's a lot more stories about companies doing layoffs doing hiring freezes. And it turns out, if you take the data and break it down by micro businesses, versus other businesses, you can kind of get a much clearer picture of what's going on. So for these micro businesses, in which is defined as less than 10 employees, they're the ones that were most affected by COVID. So out of COVID, they weren't really able to improve their hiring, but they massively raised the amount of job openings. So essentially, there's like a million extra job openings resulting from these micro businesses. And yet, if you take all the other businesses with more than 10 employees, there's a pretty unequivocal relationship where, after COVID, they've had a surge in hirings, and job openings. And those have now all rolled over and drawn down quite strongly. And the draw down is pretty dramatic, right? To the point where it's below a trend. And I think this gives a better sense that, for bigger businesses, they are starting to feel more profit margin pressures, and they are looking into doing more layoffs or hiring freezes. And it's actually visible in the aggregate data. But it just so happens that the micro businesses are still lacking, workers are having big skill mismatch issues, and so they're the ones that's really propping up the data. So just looking at overall job openings, or overall hires, might be giving to a simplistic picture of what's going on, presumably, these micro businesses, smaller jobs tend to be less well paid. And, that might also explain why you have a lot of these stories about multiple Americans having two, even three jobs, that people can find a job, but they're not particularly happy with their personal finance situation. So I think breaking it out by micro business, and the rest gives a much clearer sense of what's actually going on in the US labor market.

Erik: Tell me about earnings per share forecasts on page 6.

Tian: Historically, there's a pretty good correlation between job openings, data and the forecast earnings data. And again, this is somewhat intuitive, because if companies were feeling more optimistic about making money, then presumably, they will want to take on more workers. And then, they would obviously advertise for more jobs. And what's very interesting right now is there's been a pretty clear break down in that data where job openings are down a decent amount, but forecast earnings are still very strong. And this is a pattern that, actually, even if you break out the AI and tech pieces and just look at non-tech, more traditional businesses, it still does hold and there's still a bit of a, you know, obviously non-tech EPS is coming down, but there's still a bit of a gap there. So, these are hinting at the fact that earnings estimates are quite optimistic and there may be downside risks. Where, again, these earnings forecasts are probably somewhat linked to nominal GDP, in a sense that, fiscal's there, that economy is doing fine. But there are a lot of these kind of under the hood signs that whether it's to do with labor layoffs, or indeed, the kind of lagged effect of previous rate hikes, they are starting to come

through. So I think that's where we try to just show this gap, which does warrant that, to be optimistic on equities here, you can't really rely on the earnings growth necessarily coming through, it's probably much more of a bet that, we're going to get a bunch of cuts and a sustained re-rating, rather than earnings growth matching these very elevated estimates.

Erik: Let's talk pricing power on page 8.

Tian: Yeah, so this is actually really interesting. I'm not sure if we talked about it last time, but we wanted a way to quantify how much pricing power US businesses had, because obviously, this is a big, a pretty key topic in terms of whether you want to call it a *greedflation*, or just drivers of inflation in the post COVID environment. Basically, a lot of the work we've done has been inspired by the kind of original work that Isabella Weber did on *greedflation*. We looked at a lot of her methodologies, and essentially, the TLDR takeaway is that, in aggregate, US corporates don't really have pricing power anymore, their ability to pass on costs are much lower today. So if their ability to pass on costs are much lower then that probably explains why you're starting to see a bit more margin pressure, a bit more news around layoffs picking up, sort of faults. So it's just like a confirming factor, because obviously, if corporates have pricing power in aggregate, then they're able to pass costs on. But this effect has kind of started dying away a little bit.

Erik: Let's move on to inflation leading indicators, I should mention for our listeners benefit that this was recorded just before the CPI data came out this week. So Tian and I don't know what the data is yet. What's going on with respect to page 9 in the charts here, on inflation leading indicators starting to bottom?

Tian: Yeah, so first of all, obviously, I have to acknowledge that the trailing inflation data has been pretty disinflationary, and I think the narrative has, broadly come around to the disinflation story. And obviously, with shelter CPI being such a big piece of the basket, and shelter CPI having a lot of distortions coming out, that is going to go lower, right? So, I think the data probably isn't going to be a shock, in terms of upside surprise, immediately, but a lot of the longer term leading relationships have started bottoming. And so, it kind of suggests that, as we go towards the second half of this year, inflation risk might start being more biased to the upside. Again, there's some very interesting relationships such as relationship between savings deposits and the median CPI, where, again, it's hard to have it both ways, right? Like, if we're going to get a soft landing, where the US consumer remains super strong, and they keep drawing down savings, then typically, that means they're in the mood to spend. And typically, when they're in the mood to spend, and savings get drawn down, that does actually lead to more inflationary pressures. So, I don't think it's necessarily a massive problem right now. But it does kind of suggest this, this general consensus view that's already priced into kind of fixed income markets that the Fed needs to cut a lot, that we're going to be below target. It seems a little bit optimistic based on the kind of bottoming leading data. And even when we break things out, for example, we have leading indicators for all of the kind of top economies around the world, so essentially, the top 30. And then we can take all the inputs into those models and build simple diffusion or breadth charts for those as well. And that's kind of the top right chart here on

slide 9. And again, the majority of inflation inputs are actually starting to rise again, quarter on quarter. So there's various things that suggest that the market seems very complacent on the kind of disinflation narrative, and that leading indicators are starting to suggest that we might start to see more of an upside surprise there.

Erik: Moving on to slide 10, we've got headwinds and liquidity.

Tian: So I think, you know, we will categorize it as more of a moderate headwind, in terms of just the level effects. So, we did a ton of work last year, on trying to understand and reconcile all the different narratives and metrics out there on liquidity. Obviously, some people look at their balance sheet, TGA, RRP, you can look at yield curve credit spreads, too. And, we wanted a way to generalize everything into like a kind of a more holistic framework. And what we came up with was actually heavily inspired by Perry Mehrling's work on the hierarchy of money. And essentially using that to quantify liquidity. You can think of it a little bit like how a P/E ratio is like a measure of the margin of safety in equities, right, where the amount of earnings you have supports the market cap of equities. So, the analogy to liquidity is how much kind of money have you created up and down the hierarchy of money, total mid-support asset prices. So on these measures, what we're seeing is that, the market cap of asset prices are actually now pretty high, relative to kind of the amount of money that has been created, especially after the rally last year. So that's what's kind of suggesting more of a moderate headwind right now. So you know, the margin of safety embedded in the monetary system is sort of a bit less than last year.

Erik: Let's move on to page 11 and volatility.

Tian: So there's some extremely weird behavior within the vol markets. And in particular, what we highlighted here is that, implied correlations are extremely low for the S&P500 right now. And you can see historically, these things tend to be pretty correlated to actual realized pairwise correlations. I think this is a function of a lot of dispersion trades, where people are selling index vol, to buy single stock vol and trying to monetize that gap. But if you can just eyeball the charts, right, where implied correlation is at such a low level, that if for whatever reason, something happens to cause a decline in these dispersion trades, the index vol is going to go higher. And indeed, index volatility has been real. You know, obviously, it's been realizing low, but even relative to the realized levels, it's starting to look cheap. And so to us, it is a pretty interesting time to look at different long volatility expressions just to express that underlying theme. So I think that was just a very interesting, maybe less followed market. That's really at a very extreme levels right now.

Erik: Let's move on to page 12 and where the value is in fixed income.

Tian: I think to us, when you look at US Treasuries and nominals, you know, it's not hugely compelling. Either way, obviously, nominal fixed income will work if we get the hard landing. But I think the relative value is very much in TIPS. So you know, betting on real yields going lower. And in mortgage backed securities, in particular, agency mortgage backed where you get a

pretty decent pick-up where spreads are a lot wider versus say, i.g., corporate credit. So those are where we see the kind of buckets of value and where we will be tilting fixed income allocations on this software trade. I mean, the market has actually moved a pretty big amount already. But the idea is that, I think this year, there's going to be opportunities to trade the short term interest rate markets both ways, where, you know, as we try to price in too many cuts, it's a fade. But now that we start taking cuts out, ultimately, that's opportunity to bet on more hikes going in. Realistically, given the overall data, the market probably can't really price less than three cuts for the Fed. And that's kind of where the Fed themselves have said, they want to be right, but we always need to price some risk that they cut more, because something breaks, or, you know, there is a delayed effect from the previous kind of issues, previous rate hikes and so forth. So I think it's just a case of that's the range, right now. We came into the year shorting software futures, but that's actually have moved a decent amount. So I think it's a case of just checking the levels. But there's also a very cute environment to look at various things like put-flies, to do these kinds of trade expressions where you can really level up your payoff, but was cut down sideways. So that that was really the key point of that chart.

Erik: Let's move on to page 13, China and FX upside.

Tian: So, I think it's USDCNH upside still. So obviously, we're going to have to park a little bit when the government steps in to intervene. But you know, on most of our longer term, 12 months ahead macro effects models, where it's basically some version Mundell-Fleming, plus, we use some gradient boosting, to kind of learn nonlinear behaviors in FX markets. But basically, everything's pointing to USDCNH going higher. And it's actually aligning with a bunch of our tactical indicators as well. And you're also starting to see this in, you know, the PBOC starting to increase its balance sheet trying to intervene a bit more. So, broadly speaking, the trading bias remains USDCNH upside, until there's some signs that they really want to intervene. But to me, the really cute trade, and as we talked about, even the beginning of the call is, you want to have probably own like call spreads on USDCNH. And then also, own some kind of capped upside on Chinese equities, like, I talked about the one by twos earlier, and having both legs independently, could actually be really cute this year, because normally they shouldn't be correlated as well, right? Normally, like if Chinese equities rally is, because people think the economy is doing better. So the RMB actually strengthens. And obviously, it could happen if they do like a ton of repatriation of dollar assets. But this time around, it feels like the underlying problems are still too structural and the Chinese economy is still pushing on the string, they're going to ease policy, might not work. And so, you're going to have this depreciation impression on RMB but at the same time, you know, the equities are so bottomed out, we had all these LPPL crash climaxes that again, if you have a capped downside way to bet on the upside, it could be really attractive. So that's kind of how it's lining up right now.

Erik: Let's move on to page 14 and your global equity allocation tables.

Tian: So this is more for like a slightly longer term asset allocator point of view. I think to us, what we consider our kind of most unique, most powerful, for lack of a better word, alpha factors would be on crowding capital cycle. So capital cycle really works on more of a three to five year

forward period. But, to us, capital cycle is like, the fundamentals of how capitalism works, right? So quantification of capitalism, in a way, like money has to go from the lowest marginal use to the highest marginal use over kind of a three to five year period, because there's obviously lots of investors, lots of smart people trying to figure out where to allocate capital. So capital cycle, to us is first tracking where the relative marginal returns are, what's the previous investment, and what is future profit potential. But at the same time, because these are kind of three to five year forward models, the problem was obviously in the short run, we also have market pressures. And we have to manage the risk, and this is where the crowding piece comes in. So we can quantify crowding, using like a lot of data on consensus estimates and portfolio holdings from companies that need to disclose it, but we'll also do some modelling around how much of the price action is due to kind of speculative flows versus patient money flows, and ultimately turn these into a metric. So to us, the most attractive equity allocations are usually in a very capital scarce areas of the market, i.e. big future profit potential, but that have low crowding today. And this is still pulling us towards things like gold miners, oil and gas, pockets of EM, LatAM, and so forth. So those are kind of our most favored areas, China technically fits as well. But obviously, in China's case, I think it's up to the individual to decide, can they accept the political risk, you know, all the things around return of capital versus return on capital? So, that's kind of how we think about it.

Erik: And let's move on to page 15, sector allocation.

Tian: So this is, again, apply a very similar framework where we'll look at capital cycle, look at crowding and so forth. But on a sector level, you also tend to pick up on some pretty big divergences on kind of implicit interest rate exposure, as well. So, we'll calculate kind of equity duration for different sectors and different stocks. This is kind of analogous concept to bond market duration, it's obviously for equities, right, where you get a sense of the rate exposure. So, in an environment like today's, where it's a question of how much the Fed is going to cut, ideally, first, you want capital scarce sectors that have high future profit potential, but they actually have very high duration, so they benefit from rate cuts. And that naturally leads us to energy staples, and actually materials right now. We'll also do some comparative analysis on kind of sector, high yield spreads versus the earnings yield. So again, usually, if the spread is high versus earnings, you'll probably better, it tells you like the credit is a bit more attractive. And obviously, vice versa, if your earnings yield is high, but your spread is low, that kind of suggests equities are a bit more attractive. So as of right now, again, saying for energy equities make more sense, but for some of the kind of more tech healthcare names, to the extent that the credit is available, the credit actually looks a bit cheaper, relative to equities right now.

Erik: Tian, is that wraps up the slide deck, I want to ask you a few questions about things I've been thinking about. One of them is this whole question of breadth in the market. So many people have commented on this, it seems so easy to see that oh, boy, you know, major breadth divergence. Clearly, it's got to be a top but wait a minute, we've had the breadth divergence for, I don't know, months now, it feels like it hasn't topped yet, or the topping market keeps going up. What's the story here?

Tian: So we've actually done some work on kind of historical "bubbles" and what kind of behavior you typically see at the end. And so, narrowing breadth is merely one of the signals, but as you say, right, by itself, it might not necessarily be that meaningful. So, if you look at all the kind of major tops right, you know, going back to 1929 as a Nifty 50 Top, yes, you do have very narrow pockets of leadership that way outperform kind of the median stock, but then you also need kind of the median stock to actually go sideways and even start falling. And then you need monetary tightening, right? Those are typically like the actual ingredients that's preceded those tops. So in a way, if you consider all three, then you know 2022 was kind of more of that setup, where you had the monetary tightening into these tech leaders, whereas today, if all the central banks are going to start easing, then you don't necessarily have that tightening liquidity catalyst that has been observed at least a historical bubble tops. And in a way, a lot of the dynamics in the post COVID environment is tricky, right? Because these big, call it Magnificent seven or six these days, you know, they have very good balance sheets, they can raise financing much cheaper than your average business rate issue, i.g. debt, like low single digits, they're obviously less subject to kind of some of the labor cost pressures, because everyone has been studying to be a computer scientist for 20 years and are struggling to find workers. So, in a way, they're also less subject to problems, and they had a lot of fat to cut.

So I think, yeah, from a kind of macro, big cycle point of view, without monetary tightening, typically those don't burst these kind of narrow breadth bubbles. Obviously, the price action does tell you there's a lot of belief in how game changing a lot of these new AI technologies are. And, that seems to become the overwhelming narrative, and ultimately, it's going to lead to a lot of disinflation, as well. And I think that's where potentially, this excitement isn't necessarily fully showing up for, I think we did a lot of work before on what we call, the age of scarcity thesis, where yes, we get that this is clearly game changing technology, ultimately, it could help change the world. But at the same time, some of the other factors like monetary and fiscal policy coordination, which has historically been pretty inflationary, things like geopolitical tensions, the need to start building different kinds of supply chains, geopolitically, with an environment of a focus on national security over efficiency. So there's other factors that might limit just how powerful these AI technologies are, and how disinflationary they are. So to me, that's the more interesting angle, whereas on the bubble front, specifically, there might be trading opportunities, but from a historical and bubble point of view, without the monetary tightening, it's actually not that common for these things to just burst on their own.

Erik: Tian, something a lot of people think is going to define this entire year is the US elections. But boy, I think this is complicated, because so many people seem to be assuming, okay, a lot of people want to keep Trump out of office. So therefore, the Fed is just going to goose the market, you know, all the way to the election? Well, wait a minute, what if they figure out how to keep them out of office and get them off the ballot? Well, before the election, maybe that changes the thesis. What do you see here? And it seems to me like this is a year that, you know, could be a setup to take a few unexpected turns, what do you see on the horizon?

Tian: Obviously, we don't claim to be political experts. But one thing we do try and do is really think from first principles on what can be modelled and what data is available. So I think on the

political front, obviously, we can all look at polling data, you know, there's betting markets. But a framework we actually really like, something a bit additive is, essentially this thing called Keys to the White House. That was Professor Lichtman, was like a politics professor. And he's been quite famously associated with this for a while, where the key is that, he says you should think about elections, and not focus too much on the personalities and the specifics involved. Elections tend to be referendums on the past. So essentially, you can group elections into either continuation or change. So if, on the whole, people are happy with the past four years, people vote for continuation. If people are not happy with the past four years, they'll vote for change. And so, you can ask a bunch of kind of simple checklist type questions to figure out if people are happy or not. And so, when you kind of follow through this frame, it's stuff like, you know, has GDP per capita gone up? Right? Has there been social unrest? You know, questions like that what happened in the midterms? But essentially, right now it is pretty much at a knife's edge where he predicts a change election. But obviously, these things can change as we get towards November. But right now, I think all the framework in our interpretation is predicting just a change election, which will actually mean the Democrats lose. But obviously, we'll see as we get a bit closer to it, so that's like at least a bit of an additive, a different kind of framework to look at it. And obviously, if there's a change election, those are usually quite important, because market leadership tends to change afterwards. That's fairly intuitive, right? Like when you get a change election and someone new comes in, they're not like a big change in policy. You know, there's vivid examples from Reagan doing deregulation to maybe Obamacare. So when these things happen, you do get changes in leadership, and that's probably the main thing to think about. That previous winners might not continue outperforming to the same extent in a change election policy. If it's a continuation election, then generally the previous patterns carry on.

Erik: Tian, I can't thank you enough for a terrific interview. But before I let you go, tell us a little bit more about what you do at [Variant Perception](#). Your firm is particularly well known for its work on leading indicators. Tell us about what services you offer and how people can follow your work.

Tian: Yes, so obviously, the website [variantperception.com](#), I think first, we would basically work with three main types of institutional investors. So the first is probably more of a multi asset, Portfolio Manager CIO type. So, those are probably ongoing discussions, big picture macro stories, very similar to our discussion today. I think the second type we work with is more of a global macro, kind of hedge fund PM. And that's a lot more specific to market timing LPPL signals in a policy regime models and trade structuring. And then the third type is really actually bottom-up single stock investors where again, the work we do on crowding in capital cycle, equity factors, and so forth and applying to single stocks, can be a potentially additive risk management tool for them. So that's a little bit how we think about the client types and how our models apply to each one. And obviously, you know, we've maintained Twitter and some social media followings, if you want to see some of the content we put out there, you know, [Variant Perception](#), on all the usual platforms.

Erik: Patrick Ceresna, Nick Galarnyk and I will be back as MacroVoices continues right here at [macrovoices.com](#).

