

**Goldman Sachs Exchanges: Great Investors
BlackRock's Tony Kim on the 'dawn of a new
intelligence era'**

**Tony Kim, Head of Tech Sector Fundamental Equities,
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Date of Recording: October 3rd, 2023

Michael Brandmeyer: Welcome back to another edition of Goldman Sachs Exchanges - Great Investors. I'm Michael Brandmeyer, Global Co-Head and Co-Chief Investment Officer of the External Investing Group at Goldman Sachs Asset Management and your host for today's episode.

Today, I'm delighted to speak with Tony Kim, head of Tech Sector Fundamental Equities at BlackRock. Tony has been running BlackRock's global technology funds since 2013 and is among the most prominent public market investors in the technology space, overseeing about \$20 billion dollars in assets.

Tony was in my section and study group at business

school, so we go way back. And I've really been looking forward to this conversation. We will be discussing Tony's views on the tech ecosystem, the IPO market, public and private valuations, AI, quantum computing, as well as how to build a great team. Tony, welcome to the program.

Tony Kim: Thanks Mike. It's great to be here.

Michael Brandmeyer: Let's begin by discussing your background as an investor. What drew you to the technology sector?

Tony Kim: Well, it was after graduate school I studied engineering. And this was back in the mid '90s. And I went into finance and investment banking. And the natural progression was, well, you know something about the technology because you're in engineering. And they said, "Go West, young man." So, I ended up at California, Silicon Valley, and that's how, basically, it started.

But I gravitated toward the technology sector because I had a technical background. But it's also the dynamism and what I perceive to be the future. So, that's what drew me there.

Michael Brandmeyer: So, fast forward, you're named lead portfolio manager for the BlackRock technology team in 2013. And you've developed a pretty unique way of looking at the tech ecosystem. Can you describe your investment process and framework?

Tony Kim: Yeah. I'm a huge student of history. And I was always attracted to ancient maps. And I loved maps as a kid. And the technology industry is very fast. I often said the technology industry is as diverse as the S&P 500 within the sector itself.

And so, the only way to really interrogate this was to build a map of the whole technology landscape, everything from the foundational silicone to the hardware to the software to the applications and all these other services around it. And then geographically, it's not just the US, it's China. It's Taiwan. It's Korea. It's Europe.

And within that whole context, I felt to really interrogate to that scale and to fully have a comprehensive understanding of the whole universe, I basically built this map. It was the initial guidepost. And then from there you

start to interrogate each one of those areas. And so, you get a much more comprehensive view.

Michael Brandmeyer: Yeah, you walked me through some of the models at one point in time. And I was really amazed by not only how well you had modeled these sectors, but how it really shows the inner connectivity of all of these different segments and how they relate to each other.

Tony Kim: Absolutely. And you definitely get a better sense. And because you have a complete view, it's like sensor intelligence at the edge, you're seeing where the hot spots are. Where the new inventions are, the new companies.

And this also would extend, obviously, to private companies as well as public companies. And it's never more evident than today. In AI, to understand the full complete system, the subsystem, the ecosystem of AI, and it's pretty obvious today with the complete mating of the silicon, the data, and the compute, and the software. And so, when you see these kinds of combined industries or combined sectors, this is where it really helps in understanding that.

Michael Brandmeyer: Yeah, we'll dive into some of those segments in a few minutes. You started as the PM back in 2013. And you mentioned, you know, such a dynamic sector of course. Talk about how your approach has evolved over that period of time.

Tony Kim: I would say it's clearly two phases, maybe three phases, you could say. Into 2013, and it really extends to post-financial crisis, 2009 to 2019, those are what I called the golden age of tech. This 10-year period with low rates. I know you've had many, many speakers, I'm sure, talking about free money and what that fueled.

But it fueled this dynamic period, this golden age of tech where we had the birth of cloud computing, the birth of social media, e-commerce, advertising. What I often call the holy trinity. E-commerce, FinTech, and SaaS, okay? And with low rates at the dawn of these industries, that was a great 10 years.

And this phase two happened, which was COVID, war, inflation. And it all crescendoed. It actually peaked in '21. And then the beginning of the end from '21 through '22

and into today. And then you could argue that was a very painful 2022 and we had to make a lot of adjustments, as I recall, in 2020, early '22, late '21. Significant adjustments to portfolio and how we perceived these companies and the risk to capital availability, the risk of capital was just understated relative to what we were habituated to in this 10-year period. And then now we have a third age, you can call it, the AI age.

Michael Brandmeyer: We'll unpack a couple of those topics. But before we get there, one of the things I think that's interesting to your approach is how you truly have a go-anywhere passport. You do midcap. You do large cap. You do international. You do private. And so, you really have a global view of the technology space. And you talked about the heat map and you're looking for different and interesting new trends. Talk about what you're seeing right now in the private markets. You're invested there, in part, to stay up with what's going on with the new in the venture space, but in part to catch those trends early. What are you seeing?

Tony Kim: It's two worlds in privates right now. It's the haves and the have nots. Unfortunately, the haves are,

maybe 10 percent of the market. Anything associated with AI and everything else is have not.

Michael Brandmeyer: Right.

Tony Kim: Now, let me rewind a bit. Ten years ago, I saw the collision. What I've seen, the coming together of public and private markets. And I'll make that distinction between my colleagues in the early-stage world, which is quite different to then, let's call it, the mid- and late-stage worlds. That's where I participate.

And I saw those two worlds, at least in the mid- and late-stage world, coming together more, much more with the public markets. The valuations are tied to the public markets. The companies are just somewhat smaller than the public markets would all have one ambition of, ultimately, getting to the public markets. And the kind of capital that was required for that. There was a lot of coming together.

And so, as a public investor and a private investor, what I was looking for in the private space were unique company, differentiated, that I could not replicate in the public

market. So, trying to find those unique N of 1 or new categories, breakthrough new differentiated companies. Get them in a little bit earlier, two to five years earlier before, hopefully, a public offering. And then I would be a large shareholder in those companies.

So, that was the conceit. And with the explosion of the private markets between 2013 and 2020 call it, we had a lot of success and a lot of good companies.

Michael Brandmeyer: Yeah, I think the industrial logic of that is sound, right, because you're looking early at these trends to find the companies that you think are going to become very big. And the CEOs, obviously, want BlackRock and other large public market investors on their cap table before they go public. So, there's the real--

Tony Kim: Yes. I mean, it serves multiple functions. You have a lot of early investors that ultimately will transition out when the companies go public. And so, there's this intermediate period between then and the post-IPO world. And if you can get a few large public investors, crossover investors, as you transform your cap table, that was one of the strategies. And then we then become, obviously, often

one of your biggest public shareholders. So, that industrial logic makes all the sense.

But as an agnostic investor, like you say, I'm agnostic to public and private. So, to me, in that late-stage market, to me, the valuations are 100 percent linked, okay?

Michael Brandmeyer: Right.

Tony Kim: There's no question as to how those two things are linked. It's just the slightly more immature version of a public company. Okay, but that said, in this private space, I don't really want to replicate what I can already replicate in the public markets. I'm trying to look for these unique things.

Now, that said, all of this was going fine. And then it has lots of similarities to the dotcom. And we can talk about that a little bit later. But as we were asymptoting to the peak here in 2021, lots of bad behavior. Lots of free money. A lot of irrational valuations, etcetera. And so, then we've crashed. The public markets are down. You've picked a sector in tech, but it's now 20 to 80 percent depending on what part of the tech stack you are. Call it on average now

30 or 40.

Michael Brandmeyer: And I think it's really masked by the valuations of some of the bigger players in this space.

Tony Kim: Exactly.

Michael Brandmeyer: If you look at how much median tech valuations were down over the course of 2022, I think it hit, like, 60 or 65 percent. And so, if you take those bigger companies out, the adjustment was much more violent than we even saw in the public indices.

Tony Kim: Exactly. The dispersion, unprofitable, smaller cap, FinTech, e-comm, these companies are down 80 percent. But then you have the IBMs that were up in 2022. But in fact, the best performing sector in tech in '22 were Japanese hardware companies.

Michael Brandmeyer: Interesting.

Tony Kim: Yeah. Because you had the yen trade. Safety. Low growth. Low vol. All these things. And so, you have radical dispersion in the performance. But the problem

with the private markets is that the valuation discrepancy at the peak was, maybe, 200 percent. The values of a SaaS company that was trading at the time, egregious valuation of 15 times revenue or whatever. Private markets companies were getting funded to 40 - 50 times ARR. Okay. And then those 15 times software companies are down to six. And those 40 or 50 times ARR companies are maybe still down to 20 or whatever. There's still a gap. And this is why the IPO window, still, has not yet opened. You know? The LPs, the early investors, the managements, etcetera, etcetera, I don't think they've fully come to realization of the valuation gap that still persists.

Michael Brandmeyer: So despite the fact that NASDAQ is up a lot this year, not as much as it was quite recently, but it's up considerably, you don't think we're in any sort of equilibrium yet?

Tony Kim: No, not yet. Even that NASDAQ, if you take out the super seven or the magnificent seven and you take out AI, the rest of NASDAQ has not done great. Because you don't truly know what those private markets are because it's not always mark to market.

I'll give you another little data point. Globally, there are roughly 1,000 public unicorns in tech.

Michael Brandmeyer: Right.

Tony Kim: 1,000. Okay. 28 trillion of market cap. Something like. Plus or minus a couple trillion maybe. There are last count I saw, there were 1,300 private unicorns. So, there are more private unicorns as those marks, and not the real value. Maybe you cut that in half. Maybe it's 500 - 600 unicorns if you just discount that by 50 percent. But even if we take the base number, 1,300 unicorns private versus 1,000 public unicorns, there is no way on God's earth that those 1,300 private unicorns can all go public.

Michael Brandmeyer: Well, even at the robust numbers of '21, it would take a decade for all those companies to get--

Tony Kim: Prior to '21, when you had 200 SPACs, 200 IPOs, you had 400 IPOs and SPACs. I think this year it's like three or four.

Michael Brandmeyer: Right.

Tony Kim: Okay. Typically, you have 30, 40, 50 globally. Let's even say 40. And there's 1,400. You know, that's 30 years of inventory. It's never going to get cleared out.

Michael Brandmeyer: So, assume some of those valuations are still coming down and assume that does go down to 500, what's going to happen to all those unicorns?

Tony Kim: I think they fall into three camps, in my opinion. The top 10 percent are the best-in-class companies. And they are these unique, breakthrough, awesome companies that, no matter what the environment, they can make it. There is the bottom ten or 20 percent that go to zero. And then everything else in the middle, the 50, 60, 70 percent, there's a question. Do you either become a zombie where you just exist? Or do you have to merge or consolidate, trade sale or something? You need to find another solution. Or you force your way into the public market as a mediocre kind of IPO.

So, again, the top 10 percent, you'll be fine. The bottom 10 percent, you go to zero. It's the stuff in the middle that's the problem.

Michael Brandmeyer: Right. So, every banker in the world brings their favorite companies through your offices. It's one of the leading public market investors in technology. We've had a small opening sitting here in the fall of 2023 in the IPO window. Do you think the deal flow is starting to pick up? Are you optimistic about how many of those companies will get public in the next, say, six to 12 months?

Tony Kim: I think a few more will try this year. A handful. In general, the pricing maybe is not optimal from my perspective as a public investor in many of these companies. But that said, the reaction to these IPOs still suggests that-- and some of these are really good companies, it's just that, maybe the valuation is still not quite yet at the levels that the investors want, and the companies were willing to accept. And then we're entering another wave of interest rate fears and recession.

And so, 2024, yes, I think there will be more with the steady state economics. But the market is going to be very discerning as to they want that 10 percent. And if you're not in those great company cohort, you're going to struggle.

Michael Brandmeyer: Okay, so let's talk about AI.

Definitely the topic du jour. There's investing in AI-oriented companies. And then there's the impact of AI on everything else. So, let's unpack both of those things.

Tony Kim: I think this is, obviously, the single biggest thing driving technology industry, maybe the only thing driving the technology industry right now. But it has such universal impact. And I think for the first time, because I lived through the dawn of the internet, the fiberoptic telecom boom, the Telecom Act of '96, the telecom boom, the build out of the internet, the ecom, the social media, the SaaS, the 3G, 4G, 5G eras, etcetera. All of these were amazing, amazing. A lot of them were tools and utilities and infrastructure enabling things.

But I think with this one, I feel a little different in that, for the first time, it has an element of intelligence, of challenging human intelligence, right? And so, we're at the dawn of that discovery of where this can go. And so, that poses very different kinds of questions. Okay, so that's number one. And it has such broad, horizontal appeal. Right? It has impact across every industry, every sector,

every person in humanity. All right, that's number one.

Number two, as this started to really come alive and, for me, it started to really come alive in January. And so, going back to your original comment about how we interrogated this, we had already been involved with many of the semiconductor companies and it's not just the semiconductors, it's the server infrastructure. It's the memory. It's the high bandwidth memory. It's the networking layers. It's the substrates. It's the advanced packaging. It's the foundry wafer.

And in the beginning, and let's call it the early phase, the January to October 2023 phase of the AI revolution, it was encapsulated there. And those companies are up 100 to 200 percent. And then as you start moving up the stack, you know, obviously the foundation models, right? And then that precipitates exploration there. And then hyper scale, obviously, is going to be buying all that silicone, right? And then running these cloud services. Okay? And then above the foundation models you realize, well, you need all this data. So, who are the providers of proprietary data, not just open-sourced public data? And then above that layer then, it's we've got to rebuild the whole data

plumbing, the data infrastructure. And you need all these vector databases and all this. You've got to redo all the data infrastructure or the plumbing layer. And then, eventually, on top of that is all the applications that are being built.

But there's a timeline to this as well. Right? You need the initial phases around infrastructure to compute. And then the models. And then the data infrastructure. And then the applications coming. And you see that in the stock performance.

Michael Brandmeyer: Well, just sitting where we are today, it sounds like a great time to be a stock picker given disruption is a good thing if you're an active investor. So, how do you think about, again, just starting within the tech sector, the winners and losers of this? And how is it informing your approach?

Tony Kim: Well, you know, people talk about this magnificent seven and the concentration of the S&P and all of these things. But if we go back to 20 years, ballparking these numbers, but 20 years ago, tech was 15 percent of the S&P 500. And now it's almost 40. Okay? And it's not like we have thousands of more companies. Right? It's the

concentration. You know, A, tech has doubled in market cap of the S&P.

Michael Brandmeyer: Right. The number of companies have come down.

Tony Kim: And the number of companies is not that much bigger. But the market cap concentration is actually even more intense.

Michael Brandmeyer: Right.

Tony Kim: And so, there is this power law already being played out over the last 20 years.

And then when you look at the composition of what is going to come with AI. If you believe, and I have a view that if AI consumes what we think of software, it could write the software. It will become the new software. You know, maybe ex some, you know, a pretty UI. This concept that a lot of private companies have is are you just a front end, a pretty fancy UI? But it's really about the intelligence, this AI intelligence.

Michael Brandmeyer: A UI, user interface.

Tony Kim: Yeah, user interface. I'm sorry. Yeah. A workflow. A simple user interface. But really, it's the intelligence, which is an algorithmic, some foundation model, fed with mass data, either private proprietary data, open data, or synthetic data, which AI is going to build a lot of synthetic data, sitting on a mountain of compute. And the more compute you have, the more data you have, the more intelligent you are.

So that, to me, is the new stack.

Michael Brandmeyer: Right.

Tony Kim: You need more compute to drive more intelligence. And more intelligence is driven by how much data you have.

Michael Brandmeyer: And so, as you think about change and your framework for change, is it new tech companies that are going to eat old companies? Or that the existing company is going to adopt AI in a way that will advance their cause?

Tony Kim: Yeah, you're getting right at the point here. We've seen this concentration to bigger companies. And then when you look at this composition of the new AI world, that bottom layer, that compute layer, you notice that many of Silicon Valley doesn't invest there. Why is that? Because it's hard. And it's a lot now more hardware. Hardware. Silicon. AI computing. Whatever. This whole layer. It's hard because it's billions of dollars with no revenue, five years minimum. You've got to build the chip. Billions of dollars of R&D. There's not this quick buck of, like, a SaaS revenue model. So, there are far fewer companies being funded here.

And then it's not just that one chip. You need to design three, four, five generations of chips. Multiple billions of years.

Michael Brandmeyer: So, that would suggest that the big--

[OVERTALK]

Tony Kim: So, the [UNINTEL] guys still continue to dominate at that layer of the stack. And then that gets

instantiated in hyper scale. I don't think people even realize how much capex that's being spent.

So, private markets can't fund that. So, that bottom layer of the stack, that power equation equates to those companies. That middle layer, the foundation model, is also billions of dollars of investment. And talent is a huge shortage. But the dollars. And guess where those dollars are going, to buy the compute.

Michael Brandmeyer: Right.

Tony Kim: Okay, so those two are inexorably linked. The data, the compute. And those two things equal intelligence. Right? Obviously, you need the algorithms. And you need something beyond transformer, I think. You've got to have to build reasoning and forward planning and cognition. Another thing above and beyond the ALM.

But if that becomes the new tech world, the tech stack, where do small companies fit into that equation? I would say there are areas, certain areas, maybe some application areas, or maybe very deep verticals.

Michael Brandmeyer: We want to be informed by who's got the proprietary data and the expertise in subsegments--

Tony Kim: Exactly.

Michael Brandmeyer: ...of industries of the economy.

Tony Kim: Absolutely. Yeah. Just because you're running an LLM that can do general intelligence, it does not at all help you with finding drugs. So, there will be, I think, those vertical industries. So, there are things like that that can form up.

Michael Brandmeyer: Drug discovery. Radiology.

Tony Kim: Radiology.

Michael Brandmeyer: Very technical areas.

Tony Kim: Material science. Maybe energy. Maybe even financial services. For sure, legal.

But there will be some areas for these new companies. But I also still see the perpetuation of this power law mechanic.

It's even more amplified as we go into the next phase of AI where compute and data are so, so critical.

Michael Brandmeyer: It's very exciting. But when you take a step back and you really think about it and how disruptive this is truly going to be, and we're not talking about 20 years from now, we're talking about over the next decade, how do you think about the impact on society?

Tony Kim: Ooh. Well, there are two schools of thought. If you have great ideas, AI's going to help you to implement these ideas. But if you don't have any ideas, then you have a problem. So, it's about creation, net new creation of ideas and implementing those ideas.

Now, from what you hear the statements made by the leading frontier model companies. They're talking about intelligent scaling 100x, 1000x in the next three to five years. It's no open secret. They've made statements that it can be quite disruptive to labor. So, there are different perspectives here.

But regardless, it's going to change a lot. And the labor pool will need to be reskilled. And if you don't use AI, I

think you're going to be behind. But the jury's out as to how much the labor impact will be. There's an optimist scenario. And there's a very negative scenario.

Michael Brandmeyer: Let's move on and talk about another area where you've been an early investor, which is also quite mind bending, let's talk about quantum computing.

Tony Kim: Yeah.

Michael Brandmeyer: Why are you so interested in quantum today?

Tony Kim: Okay. So, I've been 30 years, 25 years in the semiconductor industry. We are hitting the limits of Moore's Law. You know? It's harder and harder and harder to continually shrink. And if I were to buy a fab today, it'd cost me \$25 billion for one fab. Right? And in the future, it'll be \$50 billion. Right? You're not getting these improvements anymore. So, you know, the classical computing of the 1970s to 2020s, it's been amazing. It's still going. It's going slower and more expensive. But it solves a certain type of problem. And AI is coming in and

even pushing that even more to the limit.

Okay, so as I saw that and, what's next after AI? Right?

Well, what I'd say, absolutely tangential and supplemental to AI is if we can solve a new kind of computing platform, quantum computing. And people need to realize, I'll make a very simple analogy. Classic computing is a binary world. Zeros and ones. Quantum computing is nature. You look at a flower or a tree, that's quantum computing because how is it taking sunlight and creating energy? The natural world of quantum mechanics is quite different than the classical world. Okay?

And if you look at the kinds of problems that are currently being solved, we can do Excel and Power Point and web video, and now transformer model AI amazingly. And it's with incredible, 99.9999 percent precision in doing those calculations.

But classical computing cannot model the natural world. We cannot model chemistry and biology and advanced new materials science. Drug discovery is all trial and error.

Michael Brandmeyer: But people have been talking about

quantum computing for years and years.

Tony Kim: Yes.

Michael Brandmeyer: And we can want it to be the next thing. The question is, is it ready to come into real production and actually be something that can be used?

Tony Kim: In 2018 is when I made my first foray in. I thought it would be seven, eight years, or five years in. I'm involved with a quantum computing company in photonics. And there is a number of things that need to be done. But I would say we are on the precipice.

In the quantum world, there are many different methods. To me, there are analogies where quantum is to the work in foundation models. Quantum versus what's going on in fusion. Three really big science projects, let's call it.

Okay, obviously the AI and the foundation models that have come to fore, easier to get to, implement, faster adoption, etcetera. And then fusion is still probably 20 - 30 years away. But also, there's a lot of physics involved to crack fusion. And billions and billions of dollars. And all

three require a lot of money.

Quantum is something we're in between. And I think it's being developed for many years. But we are now getting close where you can have, not these smaller quantum machines, but a universal quantum supercomputer-like capability that can really tackle these problems that classical computers could never do like biology, chemistry, encryption and things like that.

And I would say it could be as short as four years. Maybe up to ten years. But not 20 or 30. And not zero, like the AI models are. It's within three to seven years I think you'll have a quantum computing supercomputer-like breakthrough.

Michael Brandmeyer: And would that have an impact today? You know, my mind goes to drug discovery in terms of real-world application that could be truly game changing when you think of quantum computing. Is that something that you start to think about now?

Tony Kim: Absolutely. Yeah. I started thinking about it 2018 because you're trying to think ten years, seven years.

And it's still, you know, maybe I was optimistic on seven. It's probably more like, you know, 10 in 2018. But now we're getting there. And it's leveraging a lot of the semiconductor capabilities. It's gone from quantum physics and algorithms into now implementations at the chip level. And now you've got to build these server class systems with lots of liquid cooling and things like that.

And so, I think the problem solved will be very different problem. A quantum computer can't run your iPhone. Okay? Can't do it. Or, I mean, can't do it very well. Right? But it could solve, let's find a new battery material. Let's find a new, hopefully, get a target drug. It could, you know, not the first gen, but maybe gen two or three could crack RSA encryption because if you can factor prime numbers and things like that. So, those are coming. And that will unlock very different simulation problems.

And the other thing that quantum can do, which is applicable to today's AI world, is it could generate a mountain, a mountain of synthetic data. And then you could take the quantum computer to create synthetic data to feed into an AI. And then the AI intelligence-- I mean, imagine feeding it synthetic data on molecules or

compounds feeding into an AI and building the intelligence off of that.

I think it's the next computing architecture. And so, I've always been attracted to foundational pieces of technology. Silicon. Data. Infrastructure. Databases and things like that. I've always been attracted to that. This, to me, is that next evolution.

Michael Brandmeyer: Yeah. It's probably mind-blowing when you think about AI plus quantum happening very likely within the not-too-distant future, certainly the next 10 or 20 years. And the impact's just going to be massive.

Let's just shift for a moment to the macro and talk about what you see happening in markets over the next six to 12 months. We've talked about some of the big technology trends. But now it appears we're in a higher for longer interest rate environment. That has an impact on growth companies. You've got geopolitical uncertainty and some reshuffling in the world order. How does that impact your outlook on the technology space?

Tony Kim: Well, it really impacted everything in, look, I

mean, '21 and '22. It was a complete rethink of what we thought was risk, discount rates. You know, every 1 percent, effectively, if you just do a 10-year discounted cash flow, every 1 percent is 10 percent off your valuation. That's the simple mathematics. If nothing else changes except 1 percent is 10 percent off your valuation. Rates go up 4 percent, it's 40 percent off. Then there are other side order effects, right? It impacted demand, the growth, and all of these things.

And so, from '21 to today or early '23, it was this reevaluating risk. Now, going forward, we've absorbed 4.5 percent rates on a ten year. As long as it doesn't go to 6, 5 or 6 or 7 percent, maybe that part has been discounted. What I fear now is, you and I chatted about this a little bit, does it final a trigger a US recession? That's one more thing that I'm worried about.

In terms of the geopolitics, this has an impact on inflation, actually, because to build a Fab in Arizona is 50 to 100 percent more costly than building one in Taiwan. You know? And then you're over building. And then you're choking off supply chains into China and then try to build from other sources and the cost of advanced packaging, if

you're doing it in Mexico, is higher. And so, all of these things curtail the natural flow of commerce. And it is inflationary in that regard. And the IRA and all these things. So, on one hand it helps. But on the other hand, it hurts. Which, structurally, causes higher inflation, possibly. So, yeah, I'm a little worried about a recession. But--

Michael Brandmeyer: So you're not worried about where valuations are in the public markets today?

Tony Kim: No.

Michael Brandmeyer: and you say even private markets are still--

Tony Kim: Yes.

QUESTION:

-- Overvalued.

Tony Kim: Yes.

Michael Brandmeyer: But obviously, there are a lot of

factors that will weigh on--

Tony Kim: Absolutely. I think public-- that's fair. It's not like 2001. And it's definitely not like 2000.

Michael Brandmeyer: Let me ask you a really simple, but kind of loaded question just given the discussion we've had. Sitting here today, what makes a good technology company?

Tony Kim: Well, I know what I look for. I mean, I look for unique, differentiated, dominant position. Some sort of moat that you have amassed in whatever category you have. With a management or a founder that is maniacally focused. And I'm trying to simplify a lot of different concepts, you know?

Michael Brandmeyer: Let's talk about the founder and the CEO for a moment, and management teams because you've met with management teams of all the world's leading tech companies, which is an eclectic group to say the least. Are there successful characteristics that you see from this eclectic group, some common themes that you tend to see in the management teams that not only build these

companies, but navigate an environment which is so dynamic?

Tony Kim: Some are great charismatic leaders. Others are just brilliant, absolutely brilliant. Some are team builders. But I would say founders, generally, founder-led companies, I have some bias towards that in that they created the business. They know their business. They're passionate about their business.

And then there's another element of just brilliance and charisma and a force of will. And people that are just generally curious and driving for change instead of being satisfied and staid. So, I would say these are the attributes. I like this combination of brilliance and just absolute maniacal focus and drive, like, that consumes them. It's their life. Right? And those are the kinds of managements I most align myself with. Yeah.

Michael Brandmeyer: Tony, we've had many conversations over the years about building out our own teams. And I'm always intrigued by your approach to talent acquisition. Talk about how you're building your team today.

Tony Kim: Yeah. I have a lot of Gen Z on my team now. And things have changed. You and I grew up in finance and Wall Street in the '90s, in the 2000s, mid 2000s when things were just unadulterated good. And things are tougher now. And then AI's coming. At least my perception of that it is coming.

And I look at the talent, and I think Wall Street has been hiring a certain archetype. You go to the top business schools. Ivy League. Wharton. Columbia. Etcetera. And we get these MBAs. And they're all smart, per se, and they've been taught finance. And build models and Excel spreadsheets and these kinds of things.

And then I look at our role as an investor. Doesn't have to be public. I mean, public/private, doesn't matter. And I see three kinds of functions. You first need to start with a question. You have to ask the right questions. The astute questions. The articulate yourself, probing questions.

Then you need to interpret the answers. And interpretations can run wild. You know, I often go to meetings with the same people, five people, and I say, "What did you think?" And their interpretation of the

meeting was radically different than my interpretation.

And then the third part is after you get the question and the answer, you then take the answer and then you implement it in something. A product. A memo.

Michael Brandmeyer: A model.

Tony Kim: A model. A research report. Power Point. Whatever. An email. Right? And so, they are aggregating information, summarizing information, implementing it into some model. And many are really good at that, that last piece. But that's what the AI can do. In fact, it can aggregate, summarize, and repackage information better than God. And in the coming years, if it's 1,000 times more intelligent, it'll do that and it'll be automated to do that.

Can it still, yet, do this other higher-order thing?

Reasoning? Critical thinking? Creativity?

Michael Brandmeyer: And the archetype is effectively changing.

Tony Kim: Changing.

Michael Brandmeyer: What you're looking for in young talent is evolving.

Tony Kim: Exactly. Yes. I always say to my team, finance is third grade math. It's addition, subtraction, multiplication. Maybe a few exponents, okay? But okay, it's third grade math.

Michael Brandmeyer: Some statistics.

Tony Kim: Yeah, okay. But it's simple, relatively speaking.

Michael Brandmeyer: Yes.

Tony Kim: It is the nuance now of human creativity and thinking that will be even more apparent because the AI will, I think, do a lot of this automation for you in terms of the, what I call, implementation.

Michael Brandmeyer: It sounds like deans at liberal arts schools across the country are going to be celebrating this potential idea.

Just as we head into a conclusion here, I wanted to just reflect back for a minute and talk about what we're experiencing now and the correction that we're in the middle of and compare and contrast that with what happened in the dotcom bust. And you'll hear some people say, oh, it's just completely different. The nature of the companies are completely different. And other people say, well, gosh, there actually are a lot of similarities to what we're seeing. And we're actually still in the middle of it as you said, the private valuations are going to take a while to continue to adjust, which is certainly our point of view as well. So, compare and contrast the two periods.

Tony Kim: If you asked me this a few years ago, I would have said, "Oh, it's very different." And as I reflected and suffered, I've suffered through two years of agony here. And actually, I'm of the opposite view. It's very similar.

And if you just unpack the '94 to 2000. And then you look at the period, I don't know, you can call it the 2000-- the run up to 2020, you know, the '15 to '20 period. And you know, and there were cloud. It was all of these amazing things. But back then it was the internet. It was not only

the birth of the internet, it was the birth of growth investing. The birth of the dotcom. The birth of startup concept. The birth of the loss-making company. There may be the same analogs here.

Now, the difference people say, well, that was crazy. Actually, yes, there were two kinds of companies back in 2000. There were the dotcom, Pets.com web bands. But then the best company in the world at the time was Cisco at half a trillion dollars. WorldCom. Global Crossing. Sienna. It was the infrastructure, the build out of the internet as we know it.

So, there were two kinds of companies. They were both in a bubble. The ones that get criticized are the no revenue web bands and Pets. But 2022 is similar. Two kinds of companies. You had crypto. You had loss making. SaaS. FinTech. Loss making FinTech. All of this stuff going wild. And then you had all this build out of cloud infrastructure and all these things. And it's kind of similar in that regard.

If you look at the kinds of companies that are getting funded, the valuations, and then they both ran up. And then they both came crashing down. So, I think there's

more similarities. Even though the absolute magnitude of valuation, you can argue, was more egregious conceptually in 2000. But it's quite similar to me.

Michael Brandmeyer: Are the lessons the same?

Tony Kim: The lessons are even more apparent. I think this is the problem. And as I look back, 2000, that was-- not only that, it was also Y2K. It was all of these things all happening at once. That will never happen again. That was a once in a lifetime thing. And then as you were sitting in 2021, like you said, we were making comparisons, well it's not as bad as 2000. But in retrospect it was. But it was we needed now the second data point.

We only had one data point. And when you have one data point, you typically tend to think, well, that was once in a lifetime. Now we actually have two. And I hope the lesson learned now is that every so often, every decade or two decades, there will be the standard deviation events. And now that we have two markers that firmly entrench us, that root us, that hopefully the next time we'll have learned that lesson. I think the lesson learned is we didn't really truly learn the lesson of 2000. We were all caught off

guard, in a way.

Michael Brandmeyer: Well, we have the famous Mark Twain expression that history doesn't repeat, but it rhymes.

Tony Kim: Yes.

Michael Brandmeyer: And it definitely rhymes. Okay, let's conclude with a lightning round, which is our traditional way of concluding our podcast. What was your first investment?

Tony Kim: Wow. First investment as an investor in a fund, as I recall, is Apple. And I still hold Apple after decades.

Michael Brandmeyer: I'm not going to ask you for the return. That sounds like a pretty good first investment. What is the biggest lesson you've learned, either from a company that's worked out or a company that hasn't worked out?

Tony Kim: I think it goes to a rule of simplicity. When

something is obvious and clear and good, just let it ride. And when you know there are issues, don't try to hope that those issues can get resolved. Let it go.

Michael Brandmeyer: Which investor do you admire most?

Tony Kim: I think on the public side, we went to Columbia, we've got to admire Warren Buffett. But I remember Peter Lynch as one of the early role models of our active management industry. And on the private side, some amazing investors. But I've always liked Bill Gurley.

Michael Brandmeyer: What is the best piece of investment advice you can give our listeners that you wish someone had given you when you were younger?

Tony Kim: Investment advice? Wow. Really, really build your own conviction and keep it simple. And stick with that conviction. And you have to be intellectually curious, constantly learning. And if you can just package those together, I think you'll get yourself well.

And don't get rich quick. Get rich slow.

Michael Brandmeyer: That's good.

Tony Kim: That's not a bad thing.

Michael Brandmeyer: And finally, what are you most excited about in the world right now?

Tony Kim: As you can probably tell, I am excited about this new kind of intelligence, the dawn of a new intelligence era driven by AI, maybe quantum and things like that. I think that is probably the singular most interesting thing in technology and investing for me right now. Obviously, I have a lot of other interests, but in technology investing, that's it.

Michael Brandmeyer: Yeah. Tony, I always get so much from our conversations. Thank you for a fascinating tour of the latest in tech investing.

Tony Kim: Thanks, Mike.

Michael Brandmeyer: And thank you all for listening to this episode of Goldman Sachs Exchanges: Great Investors. This podcast was recorded on Tuesday October 3rd, 2023. If

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