

**Goldman Sachs Talks**  
**Ken Griffin, CEO of Citadel**  
**Raj Mahajan, Moderator**  
**Recorded: May 18, 2022**

**Ken Griffin:** I think one of the biggest mistakes we make in our country is this sort of sense that when you go to college, you're done with the learning phase of life. Right?

When you go to college, what I hope is that you now learned how to learn. Because what defines great careers is the learning you do over the next 40 years in your career.

[MUSIC INTRO]

**Raj Mahajan:** I'm very happy and delighted to welcome Ken Griffin back to Talks at GS. Ken founded Citadel in 1990 with his partners. And he remains the CEO and co-CIO. In 2002, with his partners he founded Citadel Securities.

Ken, thanks for joining us today. And thanks for the partnership with Goldman Sachs. And on a personal level, it's been a privilege to call you a friend for the past 15 years.

**Ken Griffin:** Well, it is great to be here. And it's great to be back here again with you.

**Raj Mahajan:** Let's rewind the tape to when you were 17 and you were profiled by the *South Florida Sun Sentinel* about you were a leader at your high school computer club, president of the math club. You were running a mail order software firm, if I have that right. I actually didn't know that one. And you already had designs on the stock market.

So, tell us what was driving you at that early of an age at 17 to be an entrepreneur?

**Ken Griffin:** It's like Trivial Pursuit.

**Raj Mahajan:** I know.

**Ken Griffin:** Look, I've always liked solving problems. Like, if you could tell me I could wake up and solve problems, I'm a happy guy. So, if you think about math or you think about software engineering, that's all about problem solving. And business is about solving problems to meet

the needs of consumers. Like, that's what we do at Citadel. That's what you do here at Goldman Sachs. How do you structure a trade? How do you create a product? How do you help a company change its capital structure to build a factory? It's all about solving problems. So, it's not that I was driven to be an entrepreneur, per se, it's that I just loved solving problems.

**Raj Mahajan:** In 2008, you, like the rest of the industry, were under an extraordinary amount of duress. You know, what decisions did you make in 2008, 15 years ago, that really were pivotal to your survival? And what lessons did you learn about markets and leadership from '08?

**Ken Griffin:** I'm going to give just a couple of highlights of '08. And I can't help myself because I'm at Goldman Sachs. And one of the people that I was really grateful to have in my life through the crisis was Lloyd Blankfein because if you wanted to talk to somebody who really had a view of the world and what was taking place in the world, Lloyd had an extraordinary perspective. And was, frankly, an incredibly thoughtful advisor to me in that very difficult moment.

Now, I will share with you a moment that was one of those moments you wish you'd never had on a phone call with Lloyd. I was calling Lloyd. I'm like, "Okay, when is this crisis over?" And Lloyd goes, "A forest fire ends when there's nothing left to burn." And I was feeling like I was kindling wood.

So, it was a pretty tough moment in '08. Big picture, we got through '08 because of Long-Term Capital back in 1998.

**Raj Mahajan:** Wait. Say more about that.

**Ken Griffin:** So, when Long-Term Capital failed-- let me just give you the big picture. Imagine that a hedge fund client that was down 70 percent, do you think they'd still be in control of their portfolio?

**Raj Mahajan:** Of course not.

**Ken Griffin:** Okay. They were down 90 before they lost control. They had the most thoughtful structure to how they financed their business and to how they managed the various forms of risk in their business to literally be down

90 percent and still be in control.

And so, when long-term capital failed, I actually interviewed a number of the senior people at LTCM to understand how they pulled off that miracle. That ability to survive in the state of the world where your first reaction was of course you're not in control. They were in control till almost the bitter end.

So, that dictated how we created our capital structure, how we funded the business, how we managed our affairs. And I'll tell you, the '08 financial market calamity was far worse than the '98 calamity. And thankfully, we had had that playbook of how Long-Term Capital survived '98 to help us get through 2008.

Now, big lessons for us. Don't pretend to be a bank. A lot of the businesses that we were in in '01, '02, '03, '04, '05, '06, '07 really availed themselves of the phenomenal growth in wholesale funding. And if you go back to that period of time, what you saw was that non-banks like Goldman, like Citadel, and I'm going to use a word that we don't want to hear, like Lehman, had access to cheaper and cheaper funding to fund their businesses every single day over the

period of that seven year run. Until the wholesale funding market just literally disappeared.

And the survivors when that wholesale funding market disappeared are the firms that either became a bank or firms like us that were able to salvage just enough liquidity to get to the other side.

But post that moment in time, we're in the moving business, not the storage business. So, we're looking for higher return in asset ideas. We're looking for a velocity of ideas in our portfolio. We're not interested in what would look like a more classic carry trade, like a bond basis trade. That was a big part of the business back in 2007.

**Raj Mahajan:** Terrific color. So, bringing this to a topic that's near and dear to my heart and quants, what's remarkable at Citadel is you have this world class fundamental equities business. And you have a quant business. So, how do those two coexist? Will they continue to coexist? Will one crowd the other out? Especially with the proliferation of data.

**Ken Griffin:** Well, I mean, first of all, I never worry about

the crowding out effects within our four walls. You know, we compete with 1,000 other hedge fund managers. So, my real competition is 999 other firms, plus what are the banks doing, plus what are the large asset managers doing? So, there's like an endless amount of competition in this world. I'm not worried about internal crowding out dynamics. First and foremost.

Number two is the fundamental equity business at its core is good old-fashioned stock picking. And, you know, we very much appreciate the relationship we have with Goldman Sachs because a big part of that business is access to management. And to really have the opportunity to spend time with the C suite executives and to understand how business models, I don't want to make this sound trivial, how do they work? How are they evolving? How are the competitive advantages changing? How is the competitive landscape changing? That you get from your C suite interface points. The talks with the CEO, the CFO, the COO.

**Raj Mahajan:** You've been very consistent about that over the years.

**Ken Griffin:** And it's really important. It's good old fashioned stock picking. And it's appreciating what part of the business model do the others that we compete against not fully appreciate or understand? It's that difference in analysis.

And I love that business because I think that business is timeless. I think the ability for humans to understand how businesses are evolving and changing is something that will be outside of the reach of analytics that are found in stat arb or generative AI. This is a timeless business for us.

You know, a simple story, to make this point clear is go back to roughly 2006. How many firms in retail, in consumer retail, had a mobile strategy?

**Raj Mahajan:** I don't know.

**Ken Griffin:** Probably none. Maybe Amazon had something kicking around in the back room. And then the iPhone changed the world. And if you're in retail today and you don't have a mobile strategy, you're probably not even really in business. All right?



So, these kinds of sea changes are really important to our fundamental equities business. And I think my PMs just do a phenomenal job of staying on top of these transformative moments in markets and how that's going to impact businesses and create value.

In our stat arb business, what you're really largely taking advantage of is you're taking advantage of the fact that humans can't keep pricing consistency across thousands of assets at one time. And a computer using historical data, historical relationships can do that pretty seamlessly. And that's really the core of most of your stat arb businesses today, is to think about that [UNINTEL].

**Raj Mahajan:** Short term mispricing [?].

**Ken Griffin:** Short term mispricings. Now, actually, we probably talked about alternative data five years ago. There's no way we couldn't have. And it was all the rage that alternative data was going to transform the industry. And it's had a modest impact, which was, frankly, our prior back then.

And the reason for it is most of your alternative data sets

just do not have a richness of information that transcends that that you have in management team interactions. You know? I've got credit card data for a few million Americans with all kinds of sampling bias. What do you do with that?

**Raj Mahajan:** The conversation with the CEO is more powerful than--.

**Ken Griffin:** It's much more powerful. Because what you're really more interested in is their new product that's going to just take three points of market share away from everybody else. So, stat arb business, a really good business for us. Great leadership team. It's been incredibly successful over the years. But it plays in, fundamentally, a very different arena than how our fundamental equities business manifests itself.

**Raj Mahajan:** Speaking of fundamental equities in competition, competing outside your four walls, you're part of a group that we would refer to as multimanager platforms. And there are more of them today than there were. And they've gathered assets. They've done exceptionally well on a risk adjusted basis. Hundreds of portfolio managers are now moving to these platforms. So,

in the future, do you see four to five years from now the existence of a single PM long/short equity fund? Or will it just all start to migrate to platforms?

**Ken Griffin:** Well so, first of all, I think there's a huge distinction between us and most of the, quote, "multimanager platforms." We are multimanager teams. So, if you're part of Global Equities or Ashler and you're a technology portfolio manager, you're working with the other tech PMs. You're sharing ideas. Your analysts are comparing notes. It's a team sport. And that's very different from most of our contemporaries that really try to have each manager be completely standalone. I mean, they literally think about things like what if we have two managers that cover tech in the same elevator at the same time? Are they going to start to have more correlated trading?

**Raj Mahajan:** Really important distinction.

**Ken Griffin:** Hugely important distinction. So, for Citadel, it's a team sport. And then we want to have our teams equipped with the best insights and resources to be successful. And you can make very different investments

across teams than you can against a set of, like, single sole proprietors. It's a very different ethos.

So, we're really excited about the fact that we compete with so many firms and have this different approach because they trade a lot. And I need liquidity to monetize my research. And they give it to us.

**Raj Mahajan:** Do you have any concerns about the growth there? You know, they haven't necessarily lived through an '08, maybe as robust risk management capabilities?

**Ken Griffin:** Look, I think the risks that will hit us in 2027 or 2030 are going to be different than those that we experienced in '08. You know? The world's always changing. What's going to catch you off guard?

So, I think that '08, it's still in everyone's stress test numbers. It's a moment in time that I'll never forget. But I think to be myopically focused that that's going to be what happens next is a real mistake.

I mean, look at for example the UK government bond crisis

just a few months ago. That was terrifying how the long-dated gilts market just went into complete disarray.

**Raj Mahajan:** We noticed.

**Ken Griffin:** Right? So, is the next crisis going to be a similar dislocation in the US Treasury market? History in finance doesn't necessarily repeat itself. It does rhyme. And what we're always thinking about is where we've seen in the world signs of changes in market structure, market dynamics that should give us anxiety about what might play out next here in our core portfolios in Western Europe and the United States?

**Raj Mahajan:** I want to actually go to your other business, which is Citadel Securities. And so, today, for every five shares of stock that trade in the United States, at least one of those is executed by Citadel Securities. It's pretty staggering. And the market share number is even higher in options. Clearly, this has been noticed by Washington and regulators and there's a raft of SEC proposals that are coming out around market structure. Are there some that you think make sense? And others that give you pause?

**Ken Griffin:** We have advocated with other major exchanges for years to cut the tick size for your most liquid stocks.

**Raj Mahajan:** For US stocks. Yeah.

**Ken Griffin:** For US stocks. Right? And this is where we will quibble with the exchanges. There are at least 50. There might be 200 stocks where you should definitely move your tick size from a penny to half a cent. Which would deal with a lot of, like, the vast majority of the issues that the SEC theoretically is trying to address.

Now, I picked that word "theoretically" carefully. It's not clear to me if the goal of this legislative onslaught is to actually make the cost of retail trading just flat out higher. That there's a paternalistic mindset in Washington that we don't want--

**Raj Mahajan:** We don't like zero commissions. We don't--.

**Ken Griffin:** We don't like zero commissions. We don't like

trading for, you know, close to no-bid ask spread. We think it should be more expensive to trade. It's like a cigarette tax for stocks.

And I think there's a perfectly legitimate argument that a fair number of retail investors lost money in their investment strategies over the height of the pandemic. The whole meme-stock [UNINTEL].

**Raj Mahajan:** For sure, yeah.

**Ken Griffin:** Right? But on the flip side, you exposed tens of millions of Americans back to our financial markets. And you radically increased the number of families that participate in the US equities market. Most importantly, we democratized finance. Like, a country where everybody owns a part of the future of the country, which we do as shareholders, is a country that has much better policies.

And we should be fighting to get people engaged in the stock market in their twenties. Because in your twenties, it's like, ah, you know, I did the following really stupid trade that my five friends told me to do. But in your thirties, is part of your 401(k)s in equities. And you need

that to retire in your sixties and seventies. We need people exposed to the markets early in life.

**Raj Mahajan:** So, what you're saying is the democratization of finance and markets may be a more effective way to address the wealth gap than policies coming out of DC?

**Ken Griffin:** Okay, I mean, number one, if we want to deal with the wealth gap in America, we have to fix schools in America. We don't have enough time to talk about this. But K-12 education is fundamentally broken in America.

You and I are worried about, like, the impact of ChatGPT on white collar jobs, right?

**Raj Mahajan:** We'll get to that.

**Ken Griffin:** And these kids are going to face the reality of what job can they be employed in without basic skills in math, reading, and science? So, that's the starting point to fix the wealth gap in America.

But the second is to get people in America to start saving at



an earlier age because the compounding effect of saving at an earlier age, and being in the right portfolio of investments, is really important to helping to diminish the wealth gap in our country.

**Raj Mahajan:** Ken, one of the things I love about you is you put your money where your mouth is. And so, you've given away nearly \$2 billion in recent years to causes focused on expanding access and opportunity through education, as well as, you know, innovation in healthcare. Can you maybe speak a little bit to why you're so focused on those areas in your philanthropic strategy?

**Ken Griffin:** Look, we go back to education as the talking point I was on three minutes ago. My dad was the first in his family to go to college. And for my grandmother, nothing was more important than her grandchildren going to college. And she paid for all five of her grandkids to go to college.

Education, in my family, has always been first and foremost. And I've lived a life that's been blessed by having a good education. It's not complicated.

Now, I was fortunate enough that my grandmother was in a position to pay for five of us to go to college. Which is remarkable because she grew up with no running water. Like, her and her husband literally did live the American dream. They came from nothing to where she and her husband, who deceased me prior to I was born, were very successful small-town entrepreneurs. And so, I've been really committed, and in fact this is how Lloyd and I first met, we first met in the context of what's the right financial aid strategy for Harvard to make sure that every student has a chance to go to Harvard, irrespective of where they come from in life? That's how I met Lloyd Blankfein. Was arguing about those issues. To make sure that every kid in this country, if they had the grit and the intellect to get into Harvard, that they would have a way to go to Harvard.

**Raj Mahajan:** It's extraordinary. Since you brought up ChatGPT, maybe I'll go with that. You can't have a conversation without hearing about ChatGPT. And I'd just like to hear your expectations on generative AI, the economic impact. You know, our economists suggest the gains through job creation could be vast. But it's going to take time. Are you excited about this step change in technology? Or are you weary? What use cases do you

think are most applicable, potentially, to financial services?

**Ken Griffin:** I mean, can you imagine a day when your bond prospectus is written by ChatGPT? The law firms don't like that idea. But the issuers sure do. And that's a real sea change that white collar jobs are going to be impacted by this technology. That's a really significant difference than most of the technological innovations we've watched over the last 70 years which have transformed factory workers and the life of a factory workers.

And so, I think we need to all have some anxiety about how this is going to change employment in our country and how we're going to have a group of winners and losers again at a very fast rate of change.

So, just as trade policies with China had devastating consequences to single factory towns, we're going to see ChatGPT have some very significant implications on parts of the white-collar workforce. And if people aren't lifetime learners, they're going to be in trouble because they're not going to have the mental agility to learn new skills to take on new opportunities.

I think one of the biggest mistakes we make in our country is this sort of sense that when you go to college, you're done with the learning phase of life. Right? When you go to college, what I hope is that you now learned how to learn. Like, that's the most important thing you can learn in college is to learn how to learn, because what defines great careers is the learning you do over the next 40 years in your career.

And technologies like ChatGPT are going to make that really black and white for people. But I think, you know, if you look at the 30-some year history of Citadel or you look at Goldman Sachs, what's a big part of the success stories of both of these institutions? It comes down to they're both learning organizations. You work with extraordinarily bright people who have a vested interest in mentoring you. In developing you. And pushing you. And you carry that with you the rest of your life.

**Raj Mahajan:** I mean, this came up a lot in our private conversations about work from home. I mean, that ability to continue to live into those principles from a remote environment just was considerably harder. In fact, you said a big part of your success recently has been your

outspoken perspective on that. Do I have that right?

**Ken Griffin:** Well, this is like one of those mixed messages. We make so much money because our competition plays in their pajamas. And that's just been a home run for us because it's a markets business. And when you've got everybody under one roof and information moves much faster between team members who are literally this close to each other, okay, there are so many moments where, "Did you just see that?" And we're moving on our feet.

My colleagues are going to be wherever they want to be in life in ten years. Like, they're going to have all kinds of doors open to them of opportunity. So, when you're in an environment where you're-- if you're not learning from your colleagues around you, you've got to change jobs. You've got to change firms. That's what makes firms like Goldman just so successful is that constant focus on being surrounded by very good, very bright communicators.

So, there are other dynamics that go with the work remotely phenomenon. There's no doubt innovation comes down. I can tell you this. We have not had many

breakthrough ideas on Zoom calls because most of those breakthrough ideas are there are a couple of people in a room, there's a whiteboard. Somebody's got an idea. And somebody else goes, "You know what, that's really interesting. But here's the real insight." Here's the real insight. And those are the special moments that create the future of our firm.

**Raj Mahajan:** Ken, we're running out of time. Is there anything I didn't ask that I should have asked? Or is there anything that you'd want to share?

**Ken Griffin:** Look, here's one thing I would say going back to the work from home moment and the entire challenge that we have in the US economy around what does work mean in the 2020s. Everyone in this room has chosen a career in finance. The terms of engagement are dictated by the market. They're not dictated by the firm you work at. They're dictated by the market. And if you're not really good at what you do, you're going to get beat by somebody else who is.

The advantage of working at Goldman Sachs is that you work with people who are going to give you the insights and

the frameworks to be a good competitor. But you're going to have to put the work into it. Because if you're not, I'll tell you what, somebody else down the street is. And that down the street might be down the street here in New York. Or it might be down the street in Paris. Or it might be down the street in Shanghai. But these are global markets. And we all live in an ecosystem of global competitors. And the biggest advantage that you have going for you right here, right now, is a part of team Goldman Sachs is you work with people who will make sure that you can be a great competitor. But you've got to put the effort into it.

**Raj Mahajan:** Ken, that's an excellent place to stop. That was a tour de force. Thank you very much.

**Ken Griffin:** Really great to see you today.

**Raj Mahajan:** And let's do it again, not in five years. Sooner.

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