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Systems at Risk | Episode 7
Ryan Ingram, Chief Risk Officer, Abaxx Exchange

After exploring algorithms, data, and models, host David Greely takes a deep dive into the human element of optimizing risk management with Chief Risk Officer at Abaxx Exchange, Ryan Ingram. Join us for an episode dialed in on chronic issues facing risk managers in today's commodities and energy markets along with an optimistic take on what's gone right after an unprecedented two years containing a global pandemic, extreme price volatility and war.

Ryan Ingram (01s):
You know, I think there's a very human nature to risk management that is often overlooked that, you know, you can't, you can't write it into an algorithm or you can't write it into a process, you know, with, without some human input or discretion that that's absolutely needed in this line of work.

Announcer (17s):
Welcome to Smarter Markets, a weekly podcast, featuring the icons and entrepreneurs of technology, commodities, and finance ranting on the inadequacies of our systems and riffing on ideas for how to solve them. Together we examine the questions are we facing a crisis of information or a crisis of trust and will building smarter markets be the antidote?

David Greely (43s):
Welcome to the final episode in this series on systems at risk on Smarter Markets. I'm Dave Greely, Chief Economist at Abaxx Technologies. Our guest today is Ryan Ingram, Chief Risk Officer at Abaxx Exchange. We'll be discussing his perspectives on risk management in the clearing house ecosystem, including what's gone right during this tumultuous year and how that ecosystem can be made more resilient for the future. Hello Ryan, welcome to Smarter Markets.

Ryan Ingram (01m 11s:
Hi Dave. Yeah, thanks for having me here today. It's been a really great series so far.

David Greely (01m 14s):
You're currently the Chief Risk Officer at Abaxx Exchange, and you've also had quite an interesting career in risk management, particularly at futures exchanges, spanning work at the CME, ISDA, Goldman Sachs, the Hong Kong Exchange and the World Federation of Exchanges. Can you start us off this morning by walking us through your career a little bit and what have been some of the common threads across these roles?

Ryan Ingram (01m 40s):
You know, there's really been two common themes throughout my experience. The first is change specifically regulatory change that was motivated by the famed market events of yesterday's and the second would be the corresponding evolution and clearing risk management that followed. My more relevant experience starts in my hometown of Chicago at the CME I worked in the Risk Department of the Clearinghouse and in those days, the clearinghouse is more typically described as the back office of the exchange and funny enough, they even put us down the street at a different, and suppose we spoke somewhat unfashionable jargon that didn't make sense much of anyone outside the clearing introspect like that way. I found the management pretty interesting, but that all changed in a very dramatic way after the great financial crisis of 2008 it was decided by the G20 that clearinghouse, you know, like the CME and like ice.

Ryan Ingram (02m 35s):
We played an even more fundamental role in mitigating systemic risk. The collective objective was to ensure that the financial markets are better prepared to sustain future market events of this magnitude and just, how do we do that, well through thousands of pages of regulations, countless consultations, academic white papers, regulatory round tables, but to me that was kind like getting advanced degree in real time was, it was, it was pretty cool. As I got more, more curious and involved in both the regulatory and industry discussions, I took an expanded role with ISDA, the International Swaps and Derivatives Association to lead their clearing risk

committee, which was on behalf of the largest clearing banks who were members to clearinghouses around the globe. The best part of the job was conference calls. We'd never say that today, but during those days the brain power and, and the intelligent swagger what I still fear the smartest minds in the room was on full display.

Ryan Ingram (03m 28s):
And, and the hardest part of the job was actually deciphering their thoughts and their perspectives into concise consultation responses and engagement materials. But yeah, no, after that, it wasn't too long before I joined the credit risk department at Goldman Sachs and as the impact of new regulatory policies for risk and capital were becoming more clear and better understood. We initiated, you know, firm wide efforts to assess capital requirements for cleared markets to scrutinize the credit exposure that had been parked at clearinghouse and it was really the time when due diligence on clearinghouse risk frameworks went to high gear. It was impressive times and kind of, you know, ones that hadn't really been a massive priority in times past like many at Goldman Sachs. I never thought I'd leave with the confines of 200 West in New York, but I'd always had an affinity and always, you know, want to take my experience from, you know, the us and Europe about east.

Ryan Ingram (04m 15s):
And so when the perfect role landed in my inbox from a prior colleague at the CME to join Hong Kong Exchanges and clearing, I felt it was an opportunity that that may never come up again and so off I went bags, packed, nothing shipped moved really on the plane over to Hong Kong and my role there was really just to integrate risk policies from the international community, you know, from a lot of the evolutions and discussions that took place, you know, in Europe and in the US and then help integrate those into Hong Kong to make it even in a more attractive kind of international financial center and I can say without any doubt the time in Hong Kong has definitely been the most impressionable and instrumental to my career, but by, hey, let, let me stop there, Dave and I'm sure the other experiences will feather in.

David Greely (05m 02s):
No, that's terrific. It it's, it's a great tour to start off with and I know when we've talked in the past one thing I've always found very interesting in speaking with you is with that experience comes, I think of focus on, on the, the human role of risk management and, you know, often people think of risk management is very calculations and statistical models, and those are all very important, but, you know, I think over the course of your career, you've mentioned that, you know, there's also been people that have really helped shape your approach through your career.

Ryan Ingram (05m 34s):
Without a doubt, without a doubt. I mean, I, when I, before I came into call it the risk management community, I hadn't really understood it and I suppose for many people, , it is something that, you know, seems kind of arbitrary or seems kind of up in the atmosphere, talking about possibilities of things that may never come to fruition. But, you know, when you're in the room with, with some of these people and some of these minds who kind of live it and breathe it, and who have seen it in action in the past, you know, your whole perspective change and for me, you know, at each of my companies that I've worked with you know, there's always been some form of a mentor or someone who left kind of lasting impressions on me and I feel that that is something that can never be replaced you know, you can't, you can't really replace those experiences with a machine or an algorithm, you know, you kind of have to touch it and feel it and understand live it and I think that's something that's I think becoming increasingly important and somewhat kind of missed in some of the times.

David Greely (06m 33s):
Could you share one of one of those mentors with us?

Ryan Ingram (06m 36s):
You know, I would say that one of my best kind of group mentor experiences was my time at ISDA. The role was to lead a community of very intelligent minds with very big personalities. There's a friend of mine who were predecessor of mine there, his name's Edwin Buddy who was tasked to lead these brilliant minds to a common goal or common objective and then I think Edwin together with our dear friend Oliver Frankel, who was part of the industry chair, you know, really put things into direct understanding for me and how crisp and how well reasoned they were and understood kind of, you know, financial markets, risk, clearinghouse risk, the, the role of a clearinghouse you know, it's not just a set margin requirements, it's to kind of ebb and flow and react to market events, to ensure kind of the continued resiliency of the financial market.

Ryan Ingram (07m 33s):
And, you know, I remember the first time I met Oliver in person, it must have been 2013. We were in Canary Wharf at a regulatory round table to discuss the potential impact of our proposal from the BBCs what most of us would refer to as, as bottle three, which would go on to shape the capital requirements for clear derivatives and whether it be the capital against positions parked at the clearinghouse, or whether it be the quantification of capital for commodities, for example, most of those referred to it as Sacar. I remember it explicitly, because I was sat next to, to David Murphy and Mariam Rafi and during the coffee break I went up to Oliver and, and asked him how he thought the conference was going. He looked at me dead in the eyes and just said, you know, they just don't get it and turned around and walked away.

Ryan Ingram (08m 20s):
And you know, it, it was kind of an impressive statement from Oliver at the time, but you know, it's, it's still, you know, now almost eight, nine years later and, and we're still talking about the capital requirements against clear derivatives you know, you see it in the headlines, you see it from a various different bank clearing members who are going through an internal exercise to quantify, you know, the amount of capital that costs per position per clients and you see some very unfortunate reactions where some of these clearing members are forced to purely on, on grounds of capital requirements or capital consumption to, you know, cut certain clients from their book and to me that's kind of impressive foresight, you know, that was, that was many years ago for someone who, or a group of people who were at that conference, who could had the foresight to see, you know, how these proposals from regulators from academics would actually shake out, you know, many years later and we're seeing that now and I think that's for, for me, that stuck with me in those type of minds and, and those types of people who contribute to discussion, you know, are, are something that are not easily found. Most people kind of view it as a day job. They don't really have the deep passions that, that some of these brilliant minds have and I'm yeah personally I'm forever grateful for those relationships.

David Greely (09m 33s):
Yeah. I know for myself often I've appreciated the, the mentors more in hindsight than I was aware enough to at the time and learning from someone else's experiences can be unbelievably helpful in a career, but there's also learning from our own experience. And, you know, over the course of your career, there have been quite a few big market events in the industry from the global financial crisis to the COVID pandemic and beyond. I'm curious if there have been any market events or experiences that have played a large role in shaping your own views on risk management.

Ryan Ingram (10m 07s):
I came into the industry, Dave, not too long after the, the global financial crisis, which by many measures as the most significant and recent times, you know, not only in terms of quantitative metrics, but also because of the result it had, you know, in the future of, of risk policy and, and regulatory policy. But what happened not too long after that in my experience was the demise of MF Global and it was the first time that I really understood how risk and default management are meant to work at a clearinghouse, the complexity of that demise and how it impacted the clearinghouse and its role such a counterparty put all the risk and regulatory frameworks into focus. I mean, my opportunity to be pretty involved directly in the default management process has provided me perspective. That directly impacts how I approach risk management to this day. I mean, you can never be over prepared and you never want to be under prepared and so, you know, to me personally, I really feel that a lot of the regulatory and industry initiatives are all within the genuine spirit of protecting us as a financial markets and then, yeah, I mean, of course you, you move forward to current day events, you know, we've experienced kind of unprecedented volatility and all of which put clearinghouse risk management in the spotlight and that's not always a bad thing.

David Greely (11m 19s):
No, absolutely not because for far too many of us who aren't in risk management day to day, we don't realize these systems are there and what they're doing until they break. But I'm curious, going back to MF Global, was there something that happened in that default process that surprised you that left an impression for thinking about risk in the future?

Ryan Ingram (11m 39s):
Yeah, yeah, no, absolutely. I mean, it, it was the nature of, of their demise at MF Global, you know, how it kind of uprooted some of the accepted norms of risk management and how they operated and it really kind of became, you know, it's not the only clearing member, that's defaulted at a clearinghouse, but it was a unique one and just by the very nature of me being involved in, you know, actually the default management process showed me the importance of, of what many people feel, our kind of, you know, over engineered risk frameworks, you know, they exist for the very reason that, you know, when you have this type of event or this type of market scenario,

that these things are anticipated, you know, there are fire drills, there is planning, you know, everyone in the room comes in a war room and, and kind of the community of people that come together, it's just was pretty impressive to me.

Ryan Ingram (12m 29s):
It really has kind of been tattooed on my memory, you know, since that time, you know, I recall being in the clearinghouse all hours of the night throughout the full duration of the default management process for MF Global and working together with my colleagues in the risk department, but also, you know, the counterparts at the clearing members themselves, you know, we have very close contacts with the clearing members, you know, and worked, you know, really in true partnership with them. Not only of constant updates up to them, but also to, you know, within our own clearinghouse, you know, clearing cons like Kim Taylor and then also, you know, pretty routine and intimate involvement from the regulators you know, I still find it fascinating how quickly the community came together with a common interest and goal to preserve the integrity of the markets as the absolute baseline.
Ryan Ingram (13m 14s):
It was the integrity of the markets, but we were always kind of measuring and assessing against the amount of financial resources that available, you know, MF Global was a very unique situation where it wasn't something brought on by the clearinghouse or margin requirements or the clearing house. It was entirely different scenario, but, you know, the default management process is very similar you know, you want to assess the amount of collateral that you have against the exposures that you have and that come about and those exposures are still evolving by the day and so it was a constant reassessment of the amount of capital that we had to support the default management process that needed to be done in a very quick, but also very calculated in methodical way so, you know, that for me is impressive and, and it still sticks with me.

David Greely (13m 57s):
Yeah and of course, you know, as well over the course of your career, despite all these systems and thinking, and experience being put to work, there are still some risk management issues that persist that continue to seemingly evade a clear solution. We've seen some of those this year with what we've seen in markets. And I'm curious for your perspective, can you tell us what you see as some of the chronic issues in risk management and why are they so hard to resolve?

Ryan Ingram (14m 26s):
Great question. In my view, I think we always have to remember that there is no single solution, you know, the market characteristics, the market participants the nature of the products, you know, the personality of the products and the legal and regulatory frameworks that exist in many different jurisdictions you know, there will never be a single, you know, defined risk management approach and I think one of the issues that we continuously face in our industry is that there's a real lack of appreciation, you know, for different means to the same end, you know, for example, what works in the US, you know, would never apply one for one to a jurisdiction say like Hong Kong. Yes, the rule of law is similar. Yes, they embrace risk management. Yes, they embrace the international principles, but how risk management gets deployed to that market.

Ryan Ingram (15m 16s):
And those types of market participants is not the same as the US or Europe and so my experience is my experience kind of working on risk and reg policy in the US and Europe and just has really helped me understand you know, the need to maintain a principles based, you know, kind of outcomes oriented approach to risk management. You can point to any number of issues or any number of challenges, you know, noteworthy news bites and the headlines, but until you really understand the nuances and how things are applied and why they vary would never really have a strong appreciation to those reasons and here's an example. I mean, another challenge that, that we're faced with, or maybe just the reality of a cleared market is that there's incredible amount of interdependencies and it's between the financial markets, the equity markets, the derivatives markets, the repo markets you really have to appreciate how all these things come together in their own unique way.

Ryan Ingram (16m 13s):
And so, you know, we've seen a lot of headlines about the intensity of margin calls from clearinghouses lately. However, you know, on the one hand, we need to recognize that risk models react to volatility, that that is their very purpose and so the constructive challenge that we face as a clearinghouse or even a cleared derivative industry, is that, you know, we need to be best prepared and best optimized such reactions and again, this is where we start to observe some novel solutions emerging, you know, technology solutions that help optimize collateral flows, collateral usage, specific asset usage across different clearinghouses. I think that we'll, we'll see more and more of these trends, you know, it's, I think it's a matter of time, you know, as the entire industry optimizes to, you know, the realities of the interdependencies that we have, you know, among and within the crude industry.

Ryan Ingram (17m 00s):
So what we can say is and what we can observe is that the challenge has, has been analyzed to extensive means and I think that another parallel to this is the emergence of risk governance and so you see things like business development concerns or challenges or frictions and then you fit that into the governance process that exists at a clearinghouse and that's where we see the emergence of, you know, different committees, you know, participant committees that involve regulators committees that involve clearing members and committees that involve their clients it's through these committees and this kind of governance process that maintain our ability to not only optimize against different reactions and different outcomes, but to reach the outcomes that we need to best reduce the frictions that present themselves to us all within the right spirit of risk management and so, you know, if you ask me kind of what's the chronic issue, it's kind of a lack of appreciation, but I would like to say that, you know, we've made huge headway in this area and it's actually been quite enjoyable to see it happen in different jurisdictions.

David Greely (18m 01s):
Yeah. So it sounds like it's not so much about a particular solution, but about having the right process and framework and, and people at the table to keep working the solution.

Ryan Ingram (18m 12s):
It's always that, you know, I think there's a very human nature to risk management that is often overlooked that, you know, you can't, you can't write it into an algorithm or you can't write it into you know, kind of process, you know, without some human inputs, kind of discretion that's absolutely needed in this line of work.

David Greely (18m 31s):
And I wanted to ask you because even within the field of risk management, you know, you, you've had a lot of experience within one particular aspect as well, which is you've worked at a number of regulated futures, exchanges, and clearinghouse and one of the important roles of the clearinghouse is to act as the central counterparty, the counterpart to every trade done on the exchange. And this is a great risk management tool for all the trade participants. But what special challenges does that create in managing risk for the exchanging clearing house and how are these challenges handled?

Ryan Ingram (19m 06s):
This is one of the most interesting debates that continuously comes up throughout, you know, industry discussions or regulatory consultations or, you know, flashy headlines in the news you know, the role of the clearinghouse is not a risk taker where we're effectively a risk neutralizer or a risk moderator, right you know, the catch phrase that you always, the bumper sticker for a clearinghouse is, you know, the buyer to every seller and the seller to every buyer and so, you know, we're not meant to be taking risk ourselves. However, we are meant to understand the aggregate risk that we have under management at any given point in time, such that where the music to stop or were there to be a massive volatility event or a clearing member were to default, you know, would we have sufficient resources to default manage that portfolio in a way that doesn't disrupt the broader markets?

Ryan Ingram (19m 57s):
And that is the real trick and so, you know, you could say, all right, well, why not over collateralize, every position that I have such that I will always have enough money, then you run into situations such as, you know, margin funding costs, liquidity management cost and frictions, you know, and you've seen it even in the news, you know, certain members or participants in the community, you know, the funding cost is high and if you look at the aggregate amount of margin posted to clearinghouses, somewhat motivated by post crisis regulations, you know, it's in the hundreds of billions of dollars and so you really have to think about and consider that type of money leaving the, the financial system. Is it for good purpose absolutely, does it make sense to get a more scientific calculation on your risk models absolutely and so those types of things I think, think are, are some of the bigger challenges that clearinghouse face and I think it's the right scrutiny. No one's saying that there shouldn't be scrutiny. In many ways people would suggest that there should be even more margin at the clearinghouse, but there is a very large contingency of members who would feel very differently about that prospect.

David Greely (21m 04s):
Right and we certainly have seen that in the LNG markets this year with the funding costs going up on both the absolute price level, going higher, the volatility going higher, and that creates a real struggle and of course these markets exist. So, you know, the energy material food we need can, you know, get from where it's produced to where it's needed and so those funding costs are not trivial, but

as you said, if it's needed to help manage the risk, there's a careful balancing that occurs there. Now, the clearinghouse isn't on its own in all this, right. The clearinghouse works with its clearing members, its FCMS to manage this risk in the future's market for the benefit of the participants. What role do you see the clearing members playing in this ecosystem?

Ryan Ingram (21m 51s):
A critical role to be frank you know, the, the clearing members have long been the intermediary between a very large population of clients and the clearinghouse itself. You know, there are many different ways to approach this. However, one would really need to recognize and appreciate the actual risk management role that a clearing member provides in intermediate clearing model to a clearing house. You know, it's very different than a retail market, a derivatives market, even a commodities market, you know, has a different risk profile than equities, for example and so, you know, having, having a clear member perform a lot of the kind of risk management services for their clients actually is somewhat of a shock absorber for market events, right. If the inspiration were to have a clearinghouse, the risk manager for 10,000, 40,000, 100,000 clients it's somewhat of a different animal than if you were to have you knowing members performing some of those risk oversight for their clients.

Ryan Ingram (22m 55s):
The benefit also of a clearing member is that, you know, they have a single client who may executing trades or trades different venues, their ability to have the purview of their client's exposures across multiple exchanges is very important. A single clearinghouse wouldn't necessarily know all the other activities of individual clients at different exchanges across the world, but a clearing member, you know, likely would, you know, then with that oversight or that insight would be much better positioned than a clearinghouse by definition to better risk assess their total client exposure for any given client and I think that is somewhat overlooked at times, it's a uniqueness of the market. There was no regulation to have an intermediary it has kind of evolved that way over time as I would call it kind of a, a community of clearing and that I think is something that we also need to always and forever keep in mind. There are other ways to do it and other ways will evolve, but it can't be with the sacrifice of the risk management framework that exists and is provided by the clearing themselves.

David Greely (24m 01s):
Right and given this role, is there something more that clearinghouses need now from their clearing members or perhaps that the clearing members need from the clearinghouses?

Ryan Ingram (24m 13s):
There's always that question of more having worked at both a clearinghouse and a clearing member, you know, everyone always wants more. The better question is what more do you want and when you have more, what, what would one do with it and so there's an incredible amount of data that's out there. That's now published by the clearinghouse directly by regulatory mandate in the post crisis reforms, to my understanding to this day, you know, of even though that data is posted, it's somewhat hard to read it in a way that's meaningful to in-house risk management and so yes, it gives you kind of point in time statistics, but it wouldn't give you, or it, it would fail to give you kind of up-to-date reactive risk kind of insight and so, yeah, I think that, you know, there's been an incredible amount of increased collaboration and transparency between the clearinghouse and clearing members.

Ryan Ingram (25m 06s):
A lot of that comes through the risk governance process that I was referring to before that wouldn't have existed as clearly or as decisively in the past and so I would say that, you know, we are probably 5 less than 10, at least five years into this kind of new framework of massive disclosure and transparency between the clearinghouse and the clearing members and I think we're still, you know, waiting for that to bring better clarity and for it to be digested by the clearing members. But I'll just come back to that, you know, if, if there were no clearing members, you know, who would perform that, that very valuable, positive challenge constructive criticism, contribution of insight to the clearinghouse and so, you know, there are many flavors of benefits that come from, you know, this type of model and call it the integrated ecosystem or interdependent ecosystem that exists between clients clearing members and the clearing house and so I, I think that will continue to be an important feature and one that I think will become more obvious as we move forward.

David Greely (26m 08s):
Right and you brought up that you've worked at, you know, clearing members, as well as at clearing houses. I'm curious, looking back on your time, you know, working for clearing members, was there an aspect of, of the business that you found particularly challenging?

Ryan Ingram (26m 23s):
What was always interesting was you have a very small community. I think within a clearing member, a bank who are tasked to do this type of due diligence and risk assessment at clearing houses globally. I mean, I remember my time from Goldman where we had a global CCP team in credit risk departments that would be tasked to assess, understand, read the rule book, read the disclosures, understand the risk policies, understand the risk models, understand every intimate detail of a clearing house, all in the interest of ensuring that that was a worthwhile counterparty to the bank and so this was an incredible, a monumental task that, that still kind of amazes me that Goldman is a clearing member, as well as, as well as all the others, our task to do. And so, you know, the level of interest and scrutiny on the risk framework of a clearing house has probably never been higher, but that's for all the right reasons on the other side, a clearing at a clearinghouse, you know, the due diligence request the risk assessment, the disclosures, you know, is, is also a monumental task. You know, how do you provide the right level of insight in a meaningful way that is usable to your community in the joint interest, you know, of your market and that's, I dare I say fun times, but these are kind you know, you know, monumental times that are happening in real time.

David Greely (27m 52s):
Right and I've really been looking forward to this conversation with you in this episode, because, you know, when we started this series, you said, these are, you know, maybe not fun times, but monumental times we started the series with the observation that between the pandemic war, supply chain disruptions, economic sanctions that are energy commodities and financial markets and their risk management systems are being tested and the summer revealing weaknesses and potential points of failure. And I was really looking forward to talking with professionals like yourself, to better understand how these critical systems are holding up. So I wanted to ask you, what are you seeing this year that concerned you and what's the conversation among risk professionals in the industry.

Ryan Ingram (28m 38s):
It's been very interesting and kind of very, very heightened discussions. There are a lot of people are very passionate about what's happening from a product side and perhaps don't see what's happening from the risk side you know, there's a lot of headlines, there's a lot of captivating headlines and we've all seen them you know, you see them in the newspaper, you see them on the TV, you see them in, in very specific articles, you know, for a clearinghouse there's no doubt there's been record amount of margin calls at a clearinghouse, or even single day billion dollar margin calls across their clearing members and yes, that's a lot of margin requirements and yes, that does produce a lot of liquidity frictions. However, this result wouldn't be entirely unexpected given the volatility of these markets you know, some of these markets have market events have not been observed before, you know, the intersection of multiple different market events happening together in unison is something that we probably haven't seen to this extent in the past.

Ryan Ingram (29m 38s):
And so, you know, again, I would go back to what, what we referred to before. You know, it wouldn't be unexpected for a risk model to react the way that it does and what I think is actually important is for us to understand, you know, what's gone right in clearing risk management. If you think about the nature of events that have happened, the unprecedented nature of the events that happened, I mean, you have to remember that risk models are calibrated for, you know, extreme, but plausible scenarios, you know, hypothetical ones, historical ones. I mean, some of the events that have happened have actually been beyond anyone's anticipation and that's not just the clearinghouse, that's actually as well, the market itself and so, you know, what concerns me is sometimes the lack of appreciation for what went right.

Ryan Ingram (30m 26s):
To say it, I guess, somewhat directly, could we do better, absolutely. Have we learned absolutely, will we continue to learn absolutely, but I think that, you know, if you look at risk systems and, you know, I just want to take away operational risk and things like that, but if you look at, if you think of risk systems as, you know, kind of the preparedness of the risk framework and how it navigated and managed through these market events, I actually think it's pretty impressive. You know, there have been some examples of where market events have led to some pretty traumatic happenings at certain clearing houses and there's probably many more that aren't in the news, but I really think that we should also be giving a little bit of appreciation to things that went right. The best thing we can do is for all of us to be, you know, better prepared to be in better communication, to be better understanding of, you know, how these margin models will react to these type of events.

David Greely (31m 23s):
Absolutely and I think part of why so many things went right, is something you've said that risk is a thought process, a philosophy and I was wondering if you could elaborate on that a little bit more for us, like how do you think of risk management as a thought process and a philosophy?

Ryan Ingram (31m 41s):
Yeah, no, absolutely I mean, I'm very grateful to have had the experience that I've had that led me to where I am today, being able to participate in industry forums or even regulatory round tables you know, closed door industry and academic discussions. You know, you really have a different perspective that wouldn't be obvious to most people, you know, some of the people that have been very grateful to have interacted with over the times past, you know a lot of the gentlemen from the Chicago fed who have kind of been the industry stalwarts and have grown up in, you know, the Chicago markets, the New York markets our very own atomic man here in Singapore is a constant person who, who provides, you know, historical insight on why markets act the way that they act and react the way that they react.

Ryan Ingram (32m 29s):
You know, it is really not kind of a binary approach to anything in the risk management field. It's, it's really kind of a reactive and dynamic approach to, to events that happen. And I think that that experience, or that insight from people who have lived it and seen it from many different ways, you know, kind of leads me to have this philosophical approach in a way to how risk works. I mean, you know, I've spent a lot of time reading a lot of academic papers about the historical collapses of different clearinghouses throughout the course of time, you know, no, no clearinghouse demise and there is only been a small handful of them in, in, in the history of time, you know, none of them have been similar, you know, none of them are the same. The market dynamic was different. The regulatory environment was different.

Ryan Ingram (33m 15s):
The participants were different, the jurisdiction was different, you know, it's never going to be binary and I hope that it never is. It'd be a lot less exciting if it's, for example, there's three typical clearing houses in distress that are almost always talked about, you know, one was in 1974 in Paris, another one was in Kuala Lumpur in 1983 and another one was in 1987 in Hong Kong. Each of these were unique, you know, in Paris, it was, you know, futures on sugar and cocoa and coffee in Hong Kong it was a totally different dynamic. It wasn't a, a volatility event. It was actually more about the construct of multiple different entities that formed the exchange and clearinghouse group. You know, in Hong Kong, it was, it was the Hong Kong futures guarantee corporation that fell into distress as it was, you know, in somewhat disconnected to the risk management and disconnected to the exchange group itself.

Ryan Ingram (34m 12s):
You know, a memorable story of mine forever is that I, when I was working in Hong Kong just a few years back, I invited Bob Cox from the Chicago Fed, who was a long term active, active gentleman out, out in the east who had a very intimate knowledge of, of that event in Hong Kong and in fact, he was part of the governance structure of it and was very, very well involved in it. You know, I had, I brought him over to Hong Kong to give a presentation to all of HK-ex, and I would tell you that, you know, 1987 was a long time ago and, and a good amount of the employees, you know, hadn't been there or hadn't any awareness of why that event went down and so he gave a very fascinating speech to you know, to the employees of Hong Kong exchange.

Ryan Ingram (34m 54s):
I think it was very well received, just kind of the history of it. What I can say is that, you know, the, the Hong Kong exchange of today was nothing like the event that happened back then, it was an entirely different company at that time. And that was before a lot of the modern day clearinghouse constructs, legal structures and regulatory frameworks that existed. But nevertheless, you know, it's very interesting to kind of see, you know, how different dynamics came together in the past and led to, you know, friction events that were experienced and so, you know, I really think that in some ways you need to have kind of mind somewhat of a nimble mind that can react to events that happen that present themselves That may have never happened in the past

David Greely (35m 34s):
So it sounds like there's still a lot of art with the science and a big role for wisdom and experience over equations.

Ryan Ingram (35m 42s):
There's a place for both and that intersection, or that confluence of kind of, you know, quantitative and qualitative and philosophical and academic thinking you know, really do really do intersect and unique way that that may not be as prevalent in other kind of field or disciplines of study.

David Greely (36m 02s):
And as well as I want to understand you know, what's happened this year and where the concerns are and where the appreciation should be. I was also looking forward to this episode cause I wanted to understand what's being done and what we can do to make these market systems resilient to a future which is likely to be even more uncertain. So I wanted to ask you what's next for making our risk management systems even better?

Ryan Ingram (36m 29s):
Fantastic question, I think if I were to use only two words, it would be technology empowerment. You know, the sophistication of technology that exists today is much more advanced than it ever has been and, you know, you've seen a lot of the incumbent clearinghouses and, and even new clearing houses like ourselves, you know, desire and seek specifically to base our approaches and our information and our knowledge on technology empowerment. You know, the data has always been there, the type of data isn't specifically new, but the way in which we can consume and analyze this data for meaningful purposes has never been more available or more advanced than it's today. And so I think, you know, as you look across, you know, all of our peers, you know, in the financial market infrastructure world, or even in the financial institution world, you know, it's the topic of the hour of the week of the year.

Ryan Ingram (37m 25s):
And so I think that, you know, as we move forward, the continuous embracement of technology, whether it be for analytics, it's a little bit less about latency on the exchange side as it would've been in times past, in my mind, of course, I'm biased. I work at a clearinghouse, but it's in my mind, you know, the technology empowerment on the clearing side of things, the post-trade, the post-trade world is something that's getting probably a lot of the attention these days and so I think when it comes to risk systems, it's having the right data available at the right time to help one make kind of informed decisions that, that are appropriate for whatever market event may present itself.

David Greely (38m 03s):
And I was curious as you get to the stage in your career where you're becoming a mentor to others, what are some of the things you'd want to pass on or help people remember for the future?

Ryan Ingram (38m 13s):
You know, I can never touch the wisdom of the mentors that I've had, but I can only help to kind of guide them and, and show them, you know, some of the passion that that I felt in talking to some of the mentors that I had, you know, it's something that, you know, it's not just a day job, it's actually, you know, a lot of the risk people, especially in this world, once you get in the right circles of dorks, you know, there's a lot of, of genius thinking out there and kind of a lot of interesting people that you wouldn't, you know, that you wouldn't otherwise know that they just have all this knowledge and perspective sitting in their mind. I take every opportunity in any corner of the world for whatever conference it may be or whatever dinner party, it may be your social event. I wouldn't hesitate to ever to jump on a plane just to have, you know, an evening with, with some of these brilliant minds. And so I hope that you know, as I go forward and, and kind of, you know, bring that knowledge, you know, pass it forward. I hope that I can have that leaves some of that same impression on others.

David Greely (39m 08s):
Thanks again, to Ryan Ingram, Chief Risk Officer at Abaxx Exchange. We hope you enjoyed the episode. This concludes our series on systems at risk. Next week we'll kick off our next series, our Smarter Markets summer playlist. For our summer playlist, we're bringing you forward thinking global leaders in commodities, technology and finance to discuss where we are midway through this moment, this year in markets and where we might be and need to be heading next, instead of a series organized around a particular topic or theme. This series is more about who we want to be listening to this summer it's beach reading and a podcast. We hope you'll join us.

Announcer (39m 47s):
That concludes this week's episode of Smarter Markets by Abaxx. For episode transcripts and additional episode information, including research editorial and video content, please visit smartermarkets.media. Smarter Markets is 100% listener-driven. So please help more

people discover the podcast by leaving a review on Apple Podcast, Spotify, YouTube, or your favorite podcast platform. Smarter Markets is presented for informational and entertainment purposes. Only the information presented on Smarter Markets should not be construed as investment advice always consult a licensed investment professional before making investment decisions. The views and opinions expressed on Smarter Markets are those of the participants and do not necessarily reflect those of the show's hosts or producer. Smarter Markets, its hosts, guests, employees, and producer Abaxx Technologies shall not be held liable for losses resulting from investment decisions based on informational viewpoints presented on Smarter Markets. Thank you for listening, and please join us again next week.