THE RISK TAKERS: THE ART OF RISK MANAGEMENT | PORTFOLIO, VOLATILITY

Hosted by Kokou Agbo-Bloua
Societe Generale's Head of Economics, Cross-Asset & Quant Research

EPISODE 35

What kind of risk taker are you? The answer may reveal more than you think.

In this episode of 2050 Investors, host Kokou Agbo-Bloua takes a closer look at risk and its role in the financial markets. Kokou explores traditional risk management models such as Value at Risk, volatility and heteroskedasticity (volatility of volatility) and explores the interplay between Main Street and Wall Street.

Later in the episode, Kokou sits down with Hatem Mustapha, Co-Head of Global Markets, to discuss the ins and outs of managing risk in global market activities. They examine different risk management models, their pros and cons, and the importance of framing the tail risk, the blind spots investors have in managing risk and the world of 'unknown unknowns'.

2050 INVESTORS – EPISODE 35 SCRIPT

The Risk Takers: The Art of Risk Management (ft. Hatem Mustapha, Co-Head of Global Markets at Societe Generale) | Portfolio, Volatility

Background sound effects:

General chatter, sound of keyboards, phones ringing, background conversation on the trading floor.

Kokou: Hey team!

Team : Hello Kokou!

Kokou: Hope you had a fantastic weekend. Let's start the morning meeting. Today's the day we get the US non-farm payrolls, a crucial economic indicator. It should be out in the next few minutes. Given the robust US corporate earnings we've seen in recent months, I anticipate the number will be quite strong.

Siri: Hum, I'm not so sure, Kokou. The recent jobless claims and manufacturing data were a bit concerning. But what do I know? My insights are only as good as the data I'm fed, you are the expert here.

Kokou: Well, this is why there's a market, Siri. Everyone has different views, opinions and expectations. People agree to agree or to disagree. And you know what?

Siri: What? I can agree to disagree with the expert?

Kokou: Ha! Everyone can get it wrong, no matter how smart they are. What matters in the end is to be right more often than you're wrong over time. And more importantly to be good at managing your risks when you get it wrong. Cut your losses early.

Siri: Wise words!

Kokou: Reminds me of this quote from John Kenneth Galbraith, the economist: "There are two types of forecasters, those who don't know and those who don't know they don't know".

Siri: I like it.

Kokou: Just wait a second, Siri! Speaking of forecasts, let me just have a quick check with Peter, here…

Walking closer to a trader. Noise of phones ringing, keyboard typing sounds getting louder.

Kokou: Hey Peter, do you have a minute?

Peter: Sure, Kokou!

Kokou: What's the risk report looking like today? Are you feeling bullish or bearish on the non-farm payroll release?

Peter: Difficult to say. I don't have a strong view. There are good arguments on both sides. So I'm light on risk. Things could go either way, you know. I'm a bit short beta, short vega but long gamma, but I always make sure I stay within my risk limits. My VAR is only 10% of the max stress test. So we can provide liquidity. Client activity is strong, and we've got good two-way flow….

Kokou: Good point. I like the long gamma, short vega exposure to capture event volatility risk premium. What's the probability priced by the market?

Peter: Based on option prices from interest rate swaption, currency options and the VIX for equity volatility, it looks like there's a 60% probability the number will be bad.

Siri: Sorry to interrupt guys, look at the TV, the results are coming in.

Then Bloomberg TV breaking news flash: "Non-farm payrolls fall short of expectations, equity markets plummet, bond yields slide."

Wave of excitement through the trading floor. Phones ringing louder. People shout. Buy/sell trade orders are sent around.

Kokou: Oops, I was not expecting that. The market is really taking a hit now.

Peter: Sorry Kokou, I really need to go. Client orders coming in, need to price a few things…

Kokou: Sure. Good luck!

Siri: I don't think I got a single word of your conversation. Vega, gamma, beta?…

Kokou: Don't worry, we'll cover a lot of that in a minute.

Welcome to 2050 Investors, the podcast that deciphers economic and market mega-trends to meet tomorrow's challenges. I'm Kokou Agbo-Bloua, I head up Economics, Cross-asset, and Quant Research at Société Générale. In this episode of 2050 Investors, we investigate global markets, investment and risk management.

From managing multi-asset portfolios to running a portfolio of businesses, we explore the age-old question: does taking on greater risks truly result in higher return over time? What are the advantages and limits of stress-tests, cross-asset correlation, value at risk and hetero-skedasticity? Finally, we explore whether the rise of machines and algorithmic trading could amplify systemic risks and lead to the next Black Swan?

And to further explore the complex world of risk management, today we are joined by Hatem Mustapha, co-head of Global Markets at Societe Generale. Hatem will share his unique insights in running a global markets platform and how to navigate the evolving world of risk management.

Let's start our investigation.

Siri: Markets and trading floors are noisy, intense and as usual, slightly chaotic.

Kokou: Yes, you're right. This is a good example of risk events in markets. Economic data, corporate earnings results, geopolitics, etc. A disappointing jobs report and suddenly, the whole world's on fire. Bond yields are plunging, equity markets are crashing, and investors are panicking as they fear a recession would inflict more losses on their investment portfolios.

But… sometimes markets do overreact.

Main street, also known as the real economy, and Wall Street, the world of financial markets, are not always in sync. Markets reflect the current health of the economy but also anticipate the potential risks in the future. In other words, they constantly incorporate the probability distribution of any outcomes in the prices of financial assets.

Siri: You mean like the precogs in the film Minority Report, who can predict future actions and events before they are committed?

Kokou: In a sense, yes. But unlike precogs, markets often get it wrong. What's interesting is that asset prices can in turn influence the real world too. George Soros called it "reflexivity". An article from Investopedia.com defines the theory of reflexivity in economics as "a feedback loop in which investors' perceptions affect economic fundamentals, which in turn changes investor perception".

Irrational exuberance in a bullish market, for example, can boost confidence and push businesses to invest and consumers to spend. It increases what economists call, "the marginal propensity to spend". Similarly, market crashes can jeopardise companies' ability to finance themselves, leading to lower confidence in the future and reduced hiring and investments - A sort of self-fulfilling prophecy.

Siri: Are you humans seriously, okay? Or is this one of those virtual reality games where you all pretend the world's ending?

Kokou: Siri, it's not a virtual reality, although some days, it does feel like it. Markets move based on what might happen. But there's a method to this madness. Let me explain.

First, what is Risk? Humans have evolved to avoid it. Think about Darwin and his theory of evolution by natural selection: the survival of the fittest. Those who took too many risks didn't get the opportunity to pass on their genes to the next generation. Nevertheless, risk was a relevant driver for exploring new lands and finding new ways to upgrade tools, migrate, farm and so on. Afterall, a healthy dose of risk aversion is ingrained in our DNA. But in modern times, taking calculated risks is essential, not simply in finance but in business and in life.

Siri: Ah yes, calculated risks. Like starting a new relationship: there's a possibility it doesn't work out, or you might just find companionship and true love!

Kokou: Didn't know you were such a hopeless romantic, Siri! I get your point thought, but when we talk about risk in financial markets, we're using tools to measure it, not just relying on gut instinct. One of the most basic tools is the Capital Asset Pricing Model, or CAPM. It is a framework that describes the relationship between risk and return. The idea is simple: the more risk you take, the more return you should expect. But measuring risk isn't easy—it's a mix of maths and human emotion.

Siri: Hum, human emotion? My favourite irrational force. Please, go on.

Kokou: Emotions are powerful indeed. To paraphrase the famous quote by Blaise Pascal, the French mathematician and philosopher, when he talks about love: "The market has its reasons, which reason knows nothing of"

Siri: Well, put. The book "Manias, Panics and Crashes: A history of Financial crashes" is also a great read to explore the irrational rise and fall in asset prices.

Kokou: Very insightful, indeed Siri. Now, there are a couple of ways to measure risks, and this article from Investopedia, entitled "Common methods of measurement for investment risk management" goes through some important concepts.

Let's begin with Standard deviation, which is usually a good metric to measure the risk of an asset. It tells us how much a stock price swings around its average price. Metaphorically, it is something like a financial seismograph, it measures the tremors in an investment's performance, helping anticipate earthquakes in portfolios or assets. It's often used to gauge the historical volatility of an investment relative to its annual rate of return. For instance, a stock with a high standard deviation experiences greater volatility, thus making it riskier.

Siri: Roger that!

Kokou: Standard deviation is calculated by looking at the differences between the daily returns and the average return, squaring those differences, adding them up, and then taking the square root of that sum, divided by the number of days.

Siri: Easy-peasy. I could write a python code to do that.

Kokou: Yup, that's exactly how risk management tools are designed. So this number is often annualised by multiplying it by the square root of 252, which is equal to about 16, by the way 252 is the number of working days in a year. So an asset with an average daily fluctuation of plus or minus 1% has a volatility of roughly 16%.

Siri: A tech stock that is more volatile with swings of 3% on average will have 3% x 16 = 48% volatility.

Kokou: Exactly! In addition to Standard deviation, there is the famous fear index called CBOE volatility index, or the VIX index. The VIX measures the market's expectation for volatility for the

S&P 500 index over the next 30 days. So a VIX index at 16% means 1% average daily price swings expected over the next 30 days, for the S&P 500.

Siri: Is that a good number for sentiment?

Kokou: Yes. Between 10 and 19% : sunshine expected for markets. Above 25%, clouds and rain. And above 40%, I would say thunderstorms ahead.

Siri : So, for anything above 25%, traders should stand under an umbrella, ella, ella, eh, eh, eh

Kokou: Or just buy stocks in raincoats, Sirihanna!

Now the not so basic concept is that volatility can itself be volatile over time. Let's say an average daily return of 1% for 6 months followed by a turbulent period with 3% average daily moves. This is called heteroskedasticity, which in Greek means "different variance". It is the opposite of homoskedasticity "same variance".

Siri: Volatility of volatility. That's hard core.

Kokou: Definitely. Moving on to the third concept, we have 'Sharpe ratio'. This ratio enables investors to assess how much excess return they're receiving for the extra volatility of holding a specific asset. A higher Sharpe ratio indicates better risk-adjusted performance. For example, a Sharpe ratio of 1.5 is generally considered good, 2.0 is very good, and 3.0 is excellent.

Siri: What about Beta? We heard this a lot on the trading floor.

Kokou: Well, Beta measures a security or sector's systematic risk relative to the entire stock market. It provides investors with a quick way to assess an investment's volatility compared with a benchmark, typically the broader market. If a security's beta equals one, the security has the same volatility profile as the broad market. If its beta is equal to 2 or -1, it means the security should move up by 2% or -1% if the market moves up by 1%. And Beta is equal to the covariance between the stock returns and the market returns divided by the market returns variance.

Siri: Not sure I've understood everything, but I get the idea.

Kokou: Ok let's finish with one last but important concept for risk management. It is the Value at Risk or VaR.

Siri: Var? Is that a Nordic god with a hammer?

Kokou: Nice one, Siri. Sorry to disappoint you, but VaR is a statistical measure of the potential loss in value of a risky asset or portfolio in a given period for a given confidence interval. It provides a single, easy-to-understand number that encapsulates the downside risk of an investment. VaR is like a financial weather forecast, telling you the chances of storms ahead, much like Thor's hammer, Mjölnir, which brings thunderous warnings of impending danger. For example, suppose a portfolio of investments has a one-year 10% VaR of $5 million. As such, the portfolio has a 10% chance of losing $5 million over a one-year period.

Siri: Interesting.

Kokou: The VaR has some notable limitations: it doesn't provide information about the severity of losses beyond the VaR threshold. It'll tell you the likely forecast but won't give you the chance for a low-percentage storm that could wipe you out. So, these tools give us a sense of what we could lose. But even then, as we're not precogs, we can't perfectly predict how people will react when they see dark clouds forming.

Siri: So do we need more sophisticated tools?

Kokou: There are plenty more, such as CVAR, delta, gamma, vega, vomma, vanna, rho, expected shortfall and the list goes on. But what matters is to understand the psychology of markets and the pricing of risks in times of fear vs greed, or bull vs bear markets.

Siri: You mean swings between too much or too little risk aversion?

Kokou: That's correct. Imagine you're offered $100 with 100% certainty, or $200 with a 50% probability. What would you take?

Siri: Well, I'm a machine that likes to take risks, so I'd do the maths and pick the $200 with 50% probability. But you humans? I bet most of you would settle for $100.

Kokou: Most likely. Humans on average prefer certainty, even if it means giving up a chance at something better. That's risk aversion at work. And it's hardwired into us. However, in bull markets, investors can behave irrationally and take on too much risk even if the odds are against them. When asset prices go up for too long, they can be perceived as a safe bet even though they are more susceptible to crash. A good example was the house price bubble that ended with the great financial crisis in 2008.

Siri: But doesn't more risks mean more returns?

Kokou: Well, not necessarily. In some cases, more risks can lead to lower returns when the risk is mispriced. However, taking no risk at all for too long can be worse because of the opportunity cost. Entrepreneurs, traders, risk takers, for example, thrive on risk because they know that failure is just part of the journey to success.

Siri: Yes, the glamorous 'fail fast' culture of startups.

Kokou : True. Risk-taking, whether in startups, business, markets or in life, is what drives innovation. Without it, progress stalls. Yet, as markets become more automated, we're seeing machines take on more of that risk. Algorithmic trading, for example, is now responsible for a large portion of global market activity.

Siri: This reminds me of the 2010 flash crashes? One little glitch and it's like someone rebooted the Matrix. The black cat walks by twice and suddenly, we get a Black swan.

Kokou: Exactly! Flash crashes are perfect examples of how complex systems can spiral out of control. And this brings us to Nassim Taleb's concept of the Black Swan—those rare, unpredictable events that have catastrophic consequences.

Siri: Yeah, but you humans have a knack for ignoring the risks that matter most. Like, I don't know, destroying the planet?

Kokou: You're not wrong Siri, we covered this in our episode on Green Swans, remember? Climate change is a systemic risk that financial markets and risk models are only now beginning to fully grasp.

And speaking of global challenges, we've got a guest today who knows a thing or two about risk in global markets…

Let's continue our investigation on risk management in financial markets with Hatem Mustapha, co-head of Global Markets at Societe Generale.

Kokou Agbo-Bloua

Hello Hatem

Hatem Mustapha

Hello Kokou

Kokou Agbo-Bloua

Thank you so much for joining the show

Hatem Mustapha

Thank you for the invite, it's my pleasure

Kokou Agbo-Bloua

Let's first kick off with the current market environment. Could you describe the current landscape in global markets? And how it differs from the past?

Hatem Mustapha

Over the four last years, we had several events and dynamics which impacted the global markets. The type of events that we faced, they're obviously, by definition, they are new. But when you look at the type of crisis, actually all of them, they are in the usual categories of events. You can

mention the geopolitical type of crisis with the Ukrainian war and the Middle East crisis tension, the macro and economic dynamics with inflation shock, the growth concern, all the discussion about soft landing, hard landing, no landing, and how the central banks address this with monetary policy. You can also think about the AI bubble, you can make a parallel with the Internet bubble in 2000. Maybe if you wanted to find something really new in terms of crisis is the pandemic itself, obviously, which was a huge shock for the market. But even this one, if you go back very, very far in the past, you can make a parallel with the Spanish flu.

At the end, globally, I would not say that something really new happened in the market in terms of type of events. What was really new for me over the last few years is how the market reacted to these events, how the shocks propagated, and the speed at which the market moved both ways to react to the event, to the news, and then to recover. Typically, if we take the example of what happened this summer with the crisis in Japan, with the Nike down 12%, we saw the VIX jumping from 15% to 65% overnight, which is a very large move. And then it took the market a few days or maybe two weeks max to recover and to normalise to the previous market. This speed at which the market moved and recovered is really something new.

If you try to find an explanation behind this new pattern, is the structure of the market maybe with more algo trading, so following systematic strategies.

Kokou Agbo-Bloua

Excellent point. This is very interesting to clearly realise how volatility itself is becoming volatile, and particularly the change in market structure with the role of machines and algorithmic trading. This leads me to the second question, what are some of the key tools and best practices that you have come across when it comes to managing market risk in global markets? In particular, how have these evolved over time?

Hatem Mustapha

Traditionally, risk management models are based on historical observation. It would be statistical analysis with different severities which correspond to a statistical confidence interval to run the usual metrics that all the markets and the industry use models like value at risk, which something mildly extreme would happen a few times a year, or an extreme but still plausible stress test, which would happen once every 10 years. This type of stress test, the historical scenarios, is the most, let's say, common and traditional approach because it's very intuitive, because you base your scenario and your shocks on historical observation. Then the issue with this type of scenario is that, as we all know, history can, but not always, repeat itself. Then we have this, to address this

blind spot, we have the hypothetical approach, which is precisely to imagine some scenarios that never happened in the past, but that's still plausible to simulate.

Then maybe the last evolution and trend in the industry that we see from the industry, but also from the regulator, trying to push the industry to have this type of approach, is what we call the reverse stress testing. The reverse stress testing approach would not care about the plausibility, as we do in historical hypothetical, because again, historical and hypothetical scenario are extreme but still needs to be plausible, and this is super important. In the reverse stress testing approach, you would push your scenario or your shock until a breaking point, until a rupture, just to see how solid is your position or your book, and then just to explore this point. Why is it important? Maybe we can use a concrete example, which is not in the financial industry, maybe in the auto industry. You built a new car, and then you want to test how the brakes works in different conditions. You'll test your brakes in normal weather conditions with some variation of temperature, of wind, of rain. Maybe this is the value at risk. This is like business as usual, and then you have some relatively mild but extreme conditions.

Then you want to stress test this. With stress test, you will push, let's take the temperature, up to 50 degrees celsius. This is extreme, but still plausible. You can imagine some days with the heat, you would go to this type of temperature. Then it's important to see that your brakes still work. That's stress test. But then the reverse stress testing is you don't care about is 50 degrees plausible or not. You will take your car into a laboratory and you will push your temperature 60, 70, 100 until the brakes do not work. Then you'll see this point where your brakes do not work. What do you do with it? Either let's say your breaking point is 52, and then you say, Let's be careful. I need maybe to improve my brakes. That who knows, 50 is too close to 52, and then I make it my new plausible stress test. Or you say 100 degrees, I don't care. I'm not going to invest to improve the quality of my brakes to make it still robust at 100 degrees celsius. But it's still important to go to explore how far is this breaking point. This is super important.

Kokou Agbo-Bloua

This was quite insightful. Now, how do you balance the need to take on risk to achieve returns? Clearly, global market businesses takes risk, but they need to generate returns. So what's your approach from that balancing exercise between risk-taking and achieving returns for shareholders?

Hatem Mustapha

Great questions. There are two dimensions to this. First, setting an absolute level of risk we want to take. This risk needs to be well-calibrated versus our capacity to absorb losses and the capital

we want to allocate to this activity or to this desk. And then within this maximum risk envelope that we want to take, then we try to take what we call ‘smart risk’ in the sense of good risk-return. Typically, we would avoid to take what you call tail risk by the easy, let's say, maybe lazy approach or strategy, trading strategy, to go to sell out-of-the-money options just to take the premium hoping that nothing will happen. This is typically something which is not a smart way of allocating your envelope of risk. Then another aspect that we look at is the consolidation and the hidden concentration or correlation between different positions. Typically, especially in a big organisation, you would have different positions and risks spread over different books, desks, even regions. And then you need to be able to consolidate this and to add risks when they are correlated. Otherwise, you would lose the big picture and you will miss this concentration.

Kokou Agbo-Bloua

I really like the point around correlation. So one of the best principles in risk management is clearly not to put all of your eggs in the same basket. So how do you manage correlation risk in a portfolio of businesses? Can we even think about an efficient frontier of businesses and the idea an optimal allocation of resources among these businesses?

Hatem Mustapha

Yes, obviously, diversification is about correlation in a way. Having a diversified book is to have assets positions correlations that are either negatively correlated or zero correlation, at least no positive correlation. That's where you have your diversification benefit. However, something super important to keep in mind, correlation evolves over time in different market regime and is not stable. It tends to deform in stressed market where this dynamic of correlation will be driven by risk management like stop loss, moving from one position to another, taking your gain or cutting your losses, versus another type of regime of correlation on the long term about asset allocation and more linked to monetary policy. So, we need to be super careful about this change of regime of correlations.

Maybe a concrete example, recently, something you may have read in the news and in the market comments is what we call bad news is bad news and bad news is good news. Typically, when you had these figures around the growth, around the employment in the US, the market could react different ways. If you have a negative number in terms of economic growth, the first reaction is market anticipate rates cuts, which is normal and the right way, then bonds will go up.

But then the equity could behave differently. Either the equity will also go up because people will anticipate the impact of this lower rates on the equities because you will capitalise your future flow with the lower rates. Mechanically, this is good for the stocks. Then actually, it's positive for

the stocks. In this case, bad news is good news, and the correlation between bonds and equities is positive. Or you can be in a regime where bad news is actually bad news, in the sense that negative number on employment is negative for the economy and therefore is negative for the equities, which is the most direct and obvious reaction to the equities. In this case, the equities and the bonds will have negative correlation. This is super important and shows how this correlation could change in different market regimes. It's also super important, as you can imagine, for all this asset allocation theory in the portfolio diversification, the 40/60, etc. You can see here that this aspect is quite sensitive and more complex than it looks at first.

Then when it comes to managing the portfolio of businesses, of course, we'll take in account this correlation that I just mentioned. Again, keeping in mind that this correlation regime could change over time. But there are also a broader type of businesses. There are businesses, typically agency versus principal business. Agency business, which is good, is you don't take market risk. At the end, you don't need to take care about the correlation. This diversifies your business because it's based on fees, and this is the perfect diversification. Obviously, the level of fees could depend also on market condition, but at least in terms of risk management, it's not like raising the same type of issues in terms of correlation between asset classes. Then, of course, the agency and the fee business, even if it doesn't raise market risk, they raise other type of risks, like operational risk, legal risk, things like that. But at least in terms of diversification, it's a good complement to your mix of business between principle and the agency and fees business.

Kokou Agbo-Bloua

This leads me to another question. Clearly, things don't always go according to plan. In your personal experience, what are some of the common mistakes that people make when it comes to risk management?

Hatem Mustapha

Actually, there are a lot of mistakes that you can make by doing risk management. I start with the obvious one, and back to something I mentioned at the beginning is around this hypothetical and historical scenarios. To think that history only repeat itself is the first mistake. You need to also think about hypothetical scenarios and not ignore that new things could happen that you never observed in the market. The second mistake would be to assume that the correlation is the fixed input of the model and do not change over time. That's also something that we already discussed. Maybe, and this would seem more surprising and more, is to be too conservative. It looks good to be conservative, it's fine, but being too extreme in your shocks, in your scenario, it's a lazy approach because at the end, you're just covering about what could happen in the future, and it's easier then to find the right balance and to fine-tune this point of extreme but still plausible.

Because at the end, you can show a very large number in terms of potential losses, but it's because of something that no one thinks would happen.

It doesn't help in managing your risk. At the end, no need to be concerned about the end of the world, as they say. The end of the world will take care about itself. Then another mistake is to rely too much on sophisticated models and to try to modelize everything. We have the example of LTCM collapse. It's a very large hedge fund which was run by a brilliant PhD in astrophysics and Nobel Prizes, trying to modelize everything. In this respect, you need to take a step back and to keep a common sense in the way you run models that are super good. You need models. But again, all the models are imperfect, and you need to have this in mind and not to rely too much on what the models are giving as an output. Last, actually, is to have the illusion that the list I just mentioned is exhaustive. To remain humble and to use a quote from you, Kokou that I heard, “we don't know what we don't know”.

At the end, the mistakes that you may make, actually, we don't know them yet, but we will see them in the future.

Kokou Agbo-Bloua

Yeah, brilliant point. I think this is the “known, non-knowns and the known, known”, and then this goes on.

This brings me to another simple question. As you mentioned, clearly machines, models that co-predict every scenarios. How do you see the role of machines, and in particular, artificial intelligence in the future of trading and risk management?

Hatem Mustapha

Actually, AI is already playing a role in trading and risk management. AI today can help predict flows, market moves, and therefore improve risk management. However, even if they are used and they are helpful, they have their limits. Back to something we discussed before, most of AI models rely on history and patterns that we observe. They have the same blind spot in the way than historical scenarios. And tend to ignore hypothetical scenarios. Unless we imagine one day that what we call generative AI would imagine things that never happen, but we are not there yet. Also, we must remember that markets are sometimes driven by emotions and irrationality, which are very human. So these are not replicated, I guess, by the AI. On the other hand, some other very human dynamics in the market, like herd mentality or trend following, are easy to replicate by the machine. So it depends. But again, there are a lot of things that the AI, as of today, is not able to

catch. Just to finish with the quote of a famous hedge fund manager, Paul Tuttard Jones. As he once said, “no man can beat a machine, but no machine can beat a man with a machine”.

Therefore, human input will always be necessary..

Kokou Agbo-Bloua

Brilliant. I love this quote. I can clearly see that our audience will be happy to see that humans will still have a role in the futures of global markets. So this leads me to a final question to end this interview. To conclude Hatem, what keeps you awake at night?

Hatem Mustapha

Actually, not market risk. My kids..

Kokou Agbo-Bloua

Brilliant. Thank you so much for your time. It was a very insightful discussion.

Hatem Mustapha

Thank you, Kokou, for the invite again. Thank you.

To conclude, here’s something to remember: life is about taking calculated risks. Without risk, there’s no reward. But understanding the balance between the two? That’s the key to success—whether you’re trading derivatives, trying to find love like Siri or trying to save the planet.

To quote Mark Zuckerberg: The biggest Risk is not to take any risks.

Siri: And if you mess up? Well, at least you’ll have a good story to tell in a podcast.

Thank you for listening to this episode of 2050 Investors. And thanks to Hatem Mustapha for his perspective and insights. I hope this episode has helped you get a sense of risk management in markets and in life. You can find the show on your regular streaming apps. If you enjoyed it, we’d love your help in spreading the word. Take a moment to subscribe, rate, and leave a review on Spotify or Apple Podcasts.

See you at the next episode!