ABN·AMRO Clearing

20 & 21 September 2022

AIF Magazine Amsterdam Investor Forum

For professional and qualified investors only

10th Anniversary

Banking for better, for generations to come.
Leading the way to safe and transparent markets

The **Amsterdam Investor Forum** is a landmark event in the Netherlands for the Alternative Investment Industry

Contents

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40 years'
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including Clearing technology

Services clients on over
160 exchanges, MTFs and FX liquidity providers

10 offices
worldwide

#1 clearer
major derivatives markets[1]

Top 3 global clearer
in every time zone across all listed products[1]

850+
FTE's

46 million trades
2022 peak transaction volume in a single day

5.8 billion
transactions processed in 2021

1 On turnover and market share

Net profit Underlying net profit (x EUR million)		Cost/Income ratio		Client satisfaction on a scale from 1 to 7	NPS on a scale from -100 to +100	Employee engagement
2021	2020	2021	2020			
172	14	58%	60%	5.96	46	80%

Our strengths

Sophisticated margin model
Multi product risk model offsetting correlated positions

Margin & asset segregation
Security interest/pledge as collateral mechanism

Dutch bank with sound financials
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100% owned by ABN AMRO Bank

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Capital efficiencies
Cross margining across asset classes

Asset Protection
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Welcome to the 10th Amsterdam Investor Forum!

On behalf of ABN AMRO Clearing, it is my pleasure to welcome you to the 10th Amsterdam Investor Forum. This year is a special ocassion as ABN AMRO Clearing also celebrates its 40th anniversary. We are delighted to host this event in person again following the pandemic and we are excited to see you all here so we can discuss the current investment landscape for our ever-changing industry.

The first half of 2022 has been full of surprises: markets suffered across the board with the S+P 500 losing 20% in the first six months alone, surging inflation and a crypto implosion, making it the worst mid-year performance since 1970. Rising volatility and performance dispersion have created many opportunities for alternative managers but equally have necessitated a change in risk management. Hedging against market exposure has always been key to protecting alpha and returns, but this is now becoming even more complex and nuanced.

After a strong returns in 2021, with credit, quantitative and multi strat performing best, hedge funds struggled in the first quarter of 2022, not surprising with an ongoing war in Eastern Europe, a consequent energy crisis and increasing interest rates. Despite such headwinds, commodity focused strategies were able to take advantage of market volatility and posted positive performance providing investors protection from the drawdowns experienced in other asset classes. According to recent figures from Hedge Fund Research (HFR), institutional investors in the first quarter allocated the largest amount of new capital to hedge funds since the second quarter of 2015, a positive sign for our industry.

The year ahead will no doubt bring its own risks and rewards and the trends of the past years will remain prevalent. Higher volatility, wider dispersion of performance, resurgence of meme stocks, tightening of monetary policy and increased inflation will all contribute to pressures on both performance. Last but not least, concerns about climate change and social impact will force us all to reprioritise our role in society and possibly sacrifice short term returns for long term sustainability.

The 2022 edition of the Amsterdam Investor Forum will focus on the challenges and the opportunities for alternative investors. We have endeavoured to cover the most important issues shaping the industry, and the key themes for 2022. Throughout the forum, we will discuss a variety of topics including macroeconomic trends from an asset and geographical perspective, investors' attitudes towards hedge funds, volatility, crypto, the opportunities and headwinds in energy markets and the longer effects of the covid crisis.

It is a great honour for me to host the 10th Amsterdam Investor Forum. I hope you will find this 10th edition of the conference valuable and will appreciate the impressive line-up of industry experts. I sincerely thank you all for your participation, your on-going support since 2011 and your generous contribution to the Khazana Foundation. This is what makes the Amsterdam Investor Forum a success every year.

Yours sincerely,

Delphine Amzallag
Global Director Prime
ABN AMRO Clearing

Agenda

The Amsterdam Investor Forum

20 September 2022

12.30 pm		Registration & Lunch	Ground floor
1.45 pm		**Opening Remarks**	Auditorium
2.00 pm		**Roundtables and Knowledge Session 1**	
	Roundtables:	Investor: a discussion with **Union Bancaire Privée** Capturing Alpha created by the Sustainability Revolution, **Lombard Odier Investment Managers** Digital Assets: Everyone is Talking Crypto, **AltAlpha Digital** Cyber Security: Are you Comfortable your Firm is Protected?, **RFA**	Conference room 1&2
	Knowledge Session:	On the Shared Economy, Fractional Ownership and NFTs - Hype or Not?, **Mintus Capital**	Auditorium
2.45 pm		**Roundtables and Knowledge Session 2**	
	Roundtables:	Carbon: The Good, Bad and Ugly Carbon Investments, **Fortinbras Asset Management** Investor: a discussion with **Capula Investment Management** Cap Intro: Technology Disruptors to Traditional Cap Intro, **EdgeFolio** Digital Assets: Decrypting Crypto Derivatives, **D2X**	Conference room 1&2
	Knowledge Session:	ESG Due Dilligence: Looking beyond the SFDR's ESG Labels, **Laven Partners**	Auditorium
3.30 pm		Coffee break	Ground floor
4.00 pm		**Roundtables and Knowledge Session 3**	
	Roundtables:	The Future of Operations, **Protiviti** Investor: an ODD discussion with **RIT Capital Partners PLC** Prop to Fund: The Long Jump from Prop to Fund, **Agga Capital** Consultant: a discussion with **Aksia**	Conference room 1&2
	Knowledge Session:	Commodities & Carbon: Volatility and the changing marketplace, **CME**	Auditorium
6.30 pm		Cocktail Reception	Amsterdam Tower

21 September 2022

8.00 am		Registration	Ground floor
8.45 am		**Welcome and opening** Delphine Amzallag, Global Director Prime, **ABN AMRO Clearing**	Auditorium
9.00 am		**Panel 1: Global economic outlook: is there a light at the end of the tunnel?**	Auditorium
	Moderator:	Thomas Roderick, Portfolio Manager, **Trium Investment Management**	
	Panellists:	Erik Norland, Executive Director & Senior Economist, **CME Group** Guy Verberne, **Chief Economis, PGGM** Mark Painting, Chief Executive Officer & Chief Information Officer, **Salt Rock Capital Partners LLP**	
9.45 am		**Panel 2: Changing markets: a new bubble or here to stay?**	Auditorium
	Moderator:	Lucy Balicki, Business Development Director, **Copper.co**	
	Panellists:	Yorick Naeff, Chief Executive Officer, **BUX B.V.** Sjoerd Rietberg, Advisor, **Agga Capital** Petra Bakosova, Chief Executive Officer, **Hull Tactical**	

10.30 am		Coffee break	Ground floor
11.00 am		**Panel 3: The Covid crisis**	Auditorium
	Moderator:	Catherine Franckx, Portfolio Manager, **Multifund**	
	Panellists:	Tal Teperberg, Chief Executive Officer, **Lumos Fund**	
		Tommaso Mancuso, Co-Founder & Chief Information Officer, **Shikuma Capital**	
		Steven Moyer, Portfolio Manager, **Eckhardt Trading Company**	
		Jacqueline Wilton-D'Elfant, Investor Relations Manager, Strategy Specialist, **Transtrend**	
11.45 am		Keynote: Mandy Hickson, Fighter pilot - Royal Air Force	Auditorium
12.30 pm		AIF Factor	Auditorium
1.15 pm		Lunch break	1st floor
2.00 pm		**Panel 4: Opportunities in energy markets**	Auditorium
	Moderator:	Hans van Cleef, Senior Energy Economist, **ABN AMRO Bank N.V.**	
	Panellists:	Ashley Barlow, Fuel Oil Trader, **Arion Investment Management Limited**	
		Kfir Caspi, Head of Trading and Operations & Director, **Meteo-Logic Ltd.**	
		Alex Child, Head of Research, **Carbon Cap Management LLP**	
2.45 pm		**Panel 5: Investor attitudes towards hedge funds**	Auditorium
	Moderator:	Louise Liu-Schröder, Sales and Investor Relations Director, **36 South Capital Advisors**	
	Panellists:	Gary Selz, Chief Information Officer & Co-Portfolio Manager, **Zero Delta Funds**	
		Gary Chan, Executive Director Investment Management, **Morgan Stanley Investment Management**	
		Piotr Misztal, Head of Investments, **Falcon Money Management**	
		Simon Garfield, **Managing Director & Portfolio Advisory, Aksia**	
3.30 pm		Coffee break	Ground floor
4.00 pm		Fireside chat: Eric Peters, One River Asset Management and Michael Oliver Weinberg, CMT Portfolio Advisors & Adjunct Professor Columbia Business School	Auditorium
4.45 pm		**Panel 6: Volatility in asset classes and volatility as an asset class?**	
	Moderator:	Claudia Quintela, Managing Director, **Vibe Advisors Ltd**	
	Panellists:	Wilrik Sinia, Founding Partner & Director, **Mint Tower Capital Management**	
		Bas Emmerig, Managing Partner & Founder, **Savin Investment Partners**	
		Jack de la Fargue, Portfolio Manager, **36 South Capital Advisors**	
		Tobias Hekster, Executive Director & Co-Chief Information Officer, **True Partner Capital**	
5.30 pm		**Closing Remarks:** Delphine Amzallag, Global Director Prime, **ABN AMRO Clearing**	Auditorium
5.45 pm		Cocktail reception & networking	1st floor

Please visit our website for further information.

ABN AMRO Headquarters

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The Netherlands

AIF Factor 2022:
6 Funds to Compete for First Prize

World Carbon Fund wins AIF Factor 2020

What are today's most-compelling, persuasive, provocative and entrepreneurial investment approaches? The AIF Factor invites alternative asset managers to pitch their propositions. Now it's up to you to pick the winner from among these six shortlisted funds – published in their original, unedited form to ensure submission integrity.

Pitch 1:
AlphaBee Commodity Arbitrage

AlphaBee ASSET MANAGEMENT

AlphaBee Commodity Arbitrage (ACA) has been managed as an internal portfolio since 2019 and as a stand-alone fund since 2021, with realized net returns of 21% p.a., and a controlled standard deviation of 5.8%, in line with its goals of standard deviation between 5% and 10% p.a. ACA actively manages a portfolio of arbitrage and relative value strategies on energy, metals, and agricultural commodities, thereby giving well-informed investors access to global commodities in a liquid, diversified and non-directional way. ACA sources, analyzes and invests into the most promising global commodity strategies, uncorrelated to financial markets and among themselves, including systematic strategies and those profiting from higher levels of volatility on commodity markets. Both bottom-up and top-down analysis are done both quantitatively and qualitatively with the goal to optimize the diversification of the portfolio and avoid important drawdowns. Analyzed are also niche strategies and launches with emerging commodity managers.

Pitch 2:
AP Capital Absolute Return Fund

AP CAPITAL

A brief history of the fund, we have been focusing on market neutral strategies since 2014, which is 8 years ago when the fund was launched, we started by doing traditional delta one strategies, like index arbitrage, ETF MM, etc. from 2018, we started our crypto trading, so we run both traditional and crypto strategies from 2018-2020, starting from last year we converted the fund from a hybrid into a pure crypto fund.

The fund has a well-diversified portfolio, and our principal objective is to consistently achieve net positive return with little directional exposure and low correlation to the markets. As a market neutral fund, we are essentially being rewarded by bringing price efficiencies to the market. And we are the ones who are bridging the gaps, by narrowing the price gaps, we are eventually helping to reflect a more accurate and efficient market price of the cryptocurrencies that we are trading.

We have extensive trading experience in both traditional asset classes and in crypto, we are bringing the best of both worlds and we can conduct crypto trading on an institutional grade. We also have strong market accesses and powerful localization ability across different regions. And thanks to our global offices set up, we have 24/7 trading and operational coverage on the daily trading activities.

Pitch 3:
Cambridge Machines Constellation Fund Limited

Cambridge Machines was launched in 2017 and comprises 16 people including leading academics from Cambridge University's Cavendish Astrophysics Group and experienced market professionals with backgrounds in portfolio management, trading and asset raising. We believe the powerful statistical methods we have developed through our cutting-edge astrophysical and mathematical research allow us to model the structure of complex and noisy datasets and provide strong risk-adjusted returns to investors through robust and scalable systematic trading solutions with low correlation to global markets and other strategies.

Since our launch nearly 5 years ago, we have built a pioneering research, development and execution platform to maximise the value of our unique and proven IP.

We have performed extensive testing of platform live with proprietary and client assets for the last two years which gives high confidence in our simulation methodology and we launched our flagship "Constellation" strategy in September 2022.

Constellation is a quantitative multi-strategy programme that initially comprises four machine-learning based quantitative strategies (quant directional equities, momentum/trend, intra-day futures mean-reversion, and equity market neutral), with a further proprietary machine learning strategy to dynamically allocate risk between the sub-strategies.

Pitch 4:
Galena Multistrategy Fund

The Galena Multistrategy Fund expresses commodity views across asset classes. We are the wholly owned entity of a major independent commodity trading house active in energy, metals and mining. As such we benefit from a unique angle in analysing the world from a commodity perspective. This is a particularly supportive environment for our strategy as issues such as logistical chain fragility, inflation and supply contractions are shaping prices like we haven't seen for decades. This in turn has an impact on monetary and fiscal policies around the world that create opportunities to leverage inefficiencies and harvest risk premias.

Pitch 5:
Lumos Fund - 4Cast SP

The 4Cast strategy is a quantitative mid-frequency intraday momentum strategy, trading futures on leading equity indices in the US, EU, and APAC. With intraday leverage that can reach up to x4.5 (although usually much lower) and with no overnight exposure, the strategy achieved since its inception in April 2019 significant returns.

4Cast is a mid-frequency strategy with no sensitivity to latency, taking positions and trying to predict the momentum for the next few hours, until the end of the day.

The trading is fully automated with no human intervention, covered by strict risk management and extensive experience of Lumos team and investment advisor- FinYX Quants.

The strategy has minimal correlation to the S&P500, taking both long and short positions, with no bias to any of the sides, currently managing $150m AUM in the fund and SMAs.

Pitch 6:
Savin Multi-Strategy Arbitrage Fund

Savin was founded in Amsterdam to provide fund form access to arbitrage and volatility strategies normally found behind partnership walls. Our edge is in navigating and exploiting volatility while rigorously focusing on downside protection and capital preservation. Savin is wholly owned by 4 partners and the team consists of 8 FTEs.

Aim: Strong absolute uncorrelated returns.

Investment process deploying mix of fundamental analysis and quant research, combined with proprietary trading, risk and screening models. Systemic and heavily quant based.

We deploy 3 main strategies: Volatility arbitrage. Equity relative value. Permanent tail risk strategy.

Positional arbitrages (not High Freq/Low latency) typically running from several days to 12 months. Averaging at 5 to 6 months.

The permanent tail risk strategy is designed to protect against extremely rare adverse events. The 'pay-out' from these highly convex tail-strategies will allow the fund to exploit the massive dislocations arising from these events.

Our edge is not only in valuing complex derivatives strategies, in constructing screening models, pricing volatility or running a portfolio; first and foremost our edge is the experienced team behind executing our strategies and running the portfolio.

We believe that in uncertain times and volatile market conditions, investors will benefit from non-directional trading strategies and strategies that exploit volatility for strong returns.

A rapid energy transition and cheap gasoline. **Can it be done?**

Recently, due to high energy prices, we have seen initiatives from national and European leaders to promote the energy transition. Hans van Cleef thinks these are laudable ambitions and acceleration is now actually visible. However, it sometimes happens so fast that it is technically impossible to keep up. It also leads to the realisation that we cannot do without fossil fuels for the time being. In fact, the Western policy of pushing Russia off the world market, combined with the insufficient investment in energy transition (too little in sustainable energy and/or too little in fossil fuels), are leading to a serious disruption of global supply and demand, resulting in higher prices.

A rapid energy transition and cheap gasoline. Can it be done?

Last week President Biden sent a letter to the largest American oil and gas companies. In this letter, Biden admitted that the tight supplies resulting from Russian aggression are leading to high prices. But Biden also accused these oil and gas companies of making too much profit at the expense of Americans. He also called for more production of oil products such as gasoline and diesel. The industry association, The American Petroleum Institute, responded by referring to the policies of recent years that were aimed precisely at reducing American oil and gas production. Older refineries were closed because investing in sustainability would not pay off, and other refining capacity has already been converted so that it is now suitable for the production of, for example, biodiesel. This was at the expense of capacity for the production of traditional fossil fuels such as gasoline and diesel.

From worries over output to worries over capacity

Although most of the tightness is currently in the downstream activities and less in the upstream for the time being, we are also seeing more anxiety emerging in that area. After the last OPEC+ meeting, in which higher crude production was announced, the reaction in the oil price remained very limited. The announced increase in production for July and August was mainly a bringing forward of an already planned increase in September. It also appears that OPEC+ is less and less able to actually increase production by the amounts announced. But the main reason for the lack of market reaction was a shift in focus. Whereas previously the focus was on production levels, it has since shifted to spare capacity. In other words, the diminishing spare production capacity that can be used at short notice during a new market calamity.

Traditionally, this spare capacity was around 2-2.5 million barrels per day, largely held by Saudi Arabia. Spare production capacity is again approaching this level, but the extent to which it can be deployed is uncertain. Large reserves lie with Iran (but is not available due to sanctions), Libya (unreliable due to local unrest), Iraq (potentially deployable), and the two major OPEC producers the United Arab Emirates and Saudi Arabia. These two countries did continue to invest substantially during the pandemic, and the spare capacity of these two countries is currently about 2.2 million barrels per day. But these two countries also work closely with Russia in the OPEC+ coalition. The US has also sometimes been labelled a swing producer, or a producer that increases production when market conditions are right. This was already debatable in the past. But US oil companies are currently primarily looking at the profitability of production and not just focusing on growth, in addition to other problems such as labour shortages, and can therefore not be considered a swing producer anymore.

From the investment phase to the substitution phase

Anyone who has taken economics classes at university is familiar with the concept of the 'pork cycle'. This is a cycle in which investments are made to increase supply when prices are high, and inventories or production capacity is actually reduced when prices are low. In oil and gas markets, this is no different. In the period 1990-2000, we experienced relatively low oil prices. There was sufficient supply and the market was reasonably balanced. The average price was between USD 15-20 per barrel. Between 2000 and 2010 prices rose sharply. This was partly because financial products were developed that made the markets accessible to every investor, but also because stocks became tighter. So there was a need to invest heavily in new sources. And yes, the prices shot through to a record of over USD 149/barrel in 2008 before plummeting during the financial crisis. But even if you leave out these large movements, you could see that the average price had risen from USD 15-20/barrel to USD 80/barrel. It turned out to be a good breeding ground for the development of shale oil. The beauty of shale oil was that the lead time of projects was not the usual 8-12 years, but only 1-3 years before an oil well could be brought into production. It pushed US production up, and thus resulted in lower oil prices.

Meanwhile, prices are back well above USD 100/barrel due to scarcity. Accelerated partly by the sanctions against Russia, and partly by OPEC(+)'s inability to further increase production. International oil companies are already investing less in oil exploration under pressure from shareholders and policymakers. As a result, 90% of the world's oil reserves are now in the hands of national oil companies. Normally, the current high prices would lead to another investment phase, as we saw so often in the past. This time it is different. We have entered the 'oil substitution' phase. Or rather, we hope we have entered a substitution phase. A phase in which it would no longer be necessary to invest in new oil sources, as we slowly but surely shift to other energy sources in industry, transportation and chemicals. The fact is, however, that our consumption behaviour has not yet entered this phase – a development that increases the tightness in the market.

High prices lead to an accelerated energy transition, don't they?

It is often said that the energy transition is accelerated when there is a price incentive. Well, one thing is certain – that incentive will increase significantly in the coming period. I don't see the resulting tightness in the market disappearing any time soon and it will keep prices high for a longer period of time. How high will depend on how quickly the demand for oil and gas will decline. And there too we are seeing the first signs. Recently we have seen initiatives from national and European leaders to promote the energy transition. Commendable ambitions and accelerations are now making sure that acceleration is actually visible. However, things are sometimes moving so fast that it is technically impossible to keep up.
A shortage of materials, manpower and insufficient infrastructure sometimes hinders further acceleration (see previous column). It also leads to the realisation that we cannot do without fossil fuels for the time being. On top of that, many emerging countries are striving to achieve similar levels of prosperity to ours, and this is accompanied by rising global energy demand, both in the form of renewable energy and fossil fuels.

Disruption of supply and demand

Tightness in the oil and gas markets is leading to very high energy prices. Europe, and the Netherlands in the lead, is stirring in the global markets to get enough gas in the form of LNG our way so as not to run out in the coming winter. We, as wealthy countries, can afford this. But in countries like Pakistan and Sri Lanka, the problems of shortages are already emerging. Their economies are grinding to a halt, with power outages more the rule than the exception. Food and fuel shortages are keeping tourism away and poverty is on the rise. And further price increases or supply shortages cannot be ruled out. The Western policy of pushing Russia out of the world market, combined with the insufficient investment in the energy transition (too little in renewable energy and/or too little in fossil fuels), are primarily leading to a serious disruption of global supply and demand, resulting in higher prices.

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Could **VIX-Yield Curve cycle** predict next Recession?

All examples in this report are hypothetical interpretations of situations and are used for explanation purposes only. The views in this report reflect solely those of the author and not necessarily those of CME Group or its affiliated institutions. This report and the information herein should not be considered investment advice or the results of actual market experience.

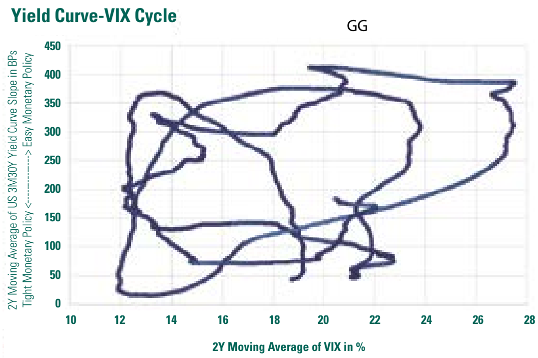
It's been five years since we published the first article on the "weirdest chart ever," which shows the cyclical relationship between implied volatility on equity index options (represented by the VIX index) and the yield curve. Now, Anne Lundgaard Hansen of the Federal Reserve Bank of Richmond has published the first ever academic study on the VIX-yield curve cycle concluding the following:

"The proposed indicator significantly outperforms the yield-curve spread in predicting U.S. recessions from 1990–2021 both in- and out- of-sample using both static and dynamic probit models. VIX-yield-curve cycles also contain predictive power above and beyond other leading economic indicators." Here's the link to her paper.

If it is a good economic indicator, what is it telling us now?

At first glance the relationship between the VIX index and the yield curve is not obvious. A two-year moving average of the two indicators charted since 1990 looks like this (Figure 1):

Figure 1: Is this weird chart the most powerful indicator of economic downturns?



Source: Bloomberg Professional (GB3, USGG30YR and VIX), CME Economic Research Calculations

However, when broken down into three bite-size pieces and color-coded by year to get a sense of movement and direction, a distinct repeating pattern immediately jumps out (Figures 2, 3 and 4).

Figure 2: The first cycle lasted from the 1990-91 recession to the expansion peak in 1999-2000

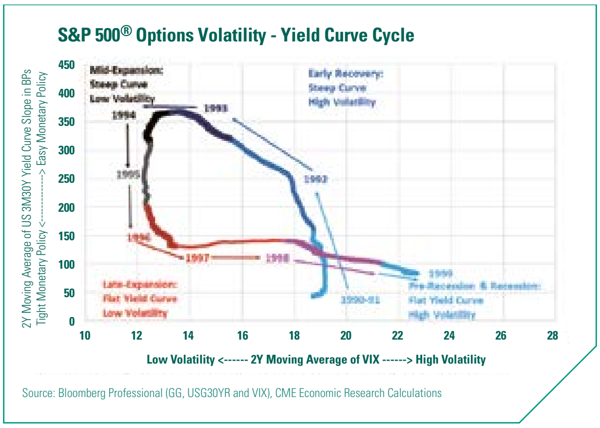


Figure 3: The second cycle lasted from the 2001 tech wreck until the global financial crisis

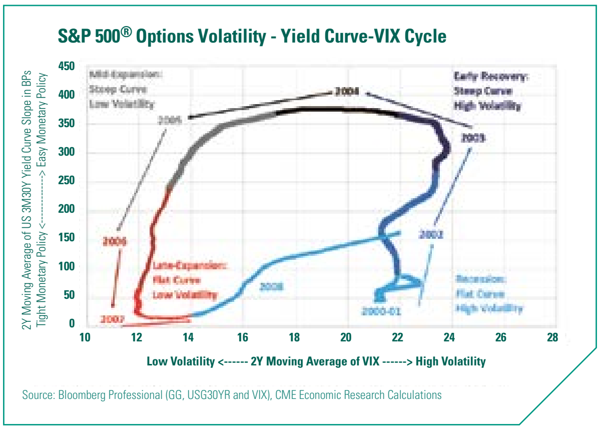
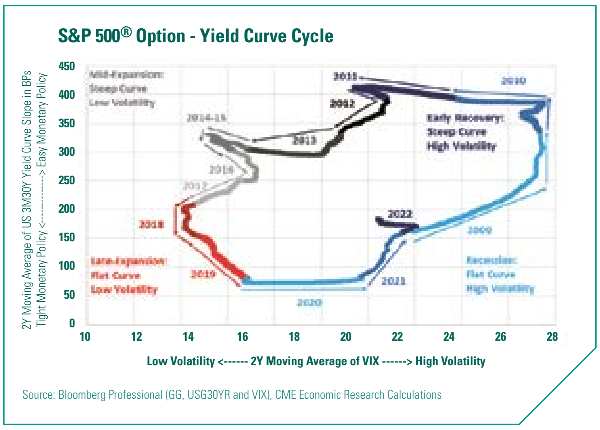


Figure 4: The 3rd cycle began in 2009 but has taken an unprecedented turn in recent months



The cycle works in four phases. As in any cycle, where it begins and ends is a bit arbitrary but we present it here from early recovery to recession:

Early Recovery: Economic recoveries begin with easy monetary policy but still feature high volatility lingering from a recent economic downturn. Easy monetary policy usually means low short-term interest rates and therefore a steep yield curve. Over time, easy monetary policy tends to calm market volatility. As the central bank injects liquidity, the economy typically recovers, reducing investor uncertainty. Also, additional liquidity in markets makes it easier for buyers to find sellers and sellers to find buyers, so large market orders can be executed without prices having to move as far into order books to get filled. As such, as the recovery matures volatility begins to subside.

Mid-expansion: the middle part of economic expansions is usually characterized by falling implied volatility in markets and yield curves that remain steep. At some point, with calm markets and falling unemployment, the central bank concludes that it is an opportune time to begin policy tightening. Policy tightening begins the process of flattening the yield curve as short-term rates rise towards long-term rates.

Late-expansion: Policy tightening does not immediately produce a recession. In fact, recessions don't usually occur until six months to two years after a tightening cycle is complete. Thus, the late expansion stage usually begins with a flat yield curve and still low volatility. However, as the central bank's tight monetary policy eventually tightens credit conditions and reduces market depth. In this context, filling large market orders sometimes involves risking larger prices moves. Volatility begins to rise in line with decreasing market depth and increasing economic risks.

Eventually high volatility and a tight monetary policy, characterized by a flat yield curve, produce an economic downturn. High short-term rates make lending and borrowing uneconomic while high volatility makes it more difficult for private sector entities to raise capital from equity and bond markets. The economy falls into a recession and the central bank eases monetary policy, lowering short-term rates and steepening the yield curve.

Wash. Rinse. Repeat. At Least Up Until Now

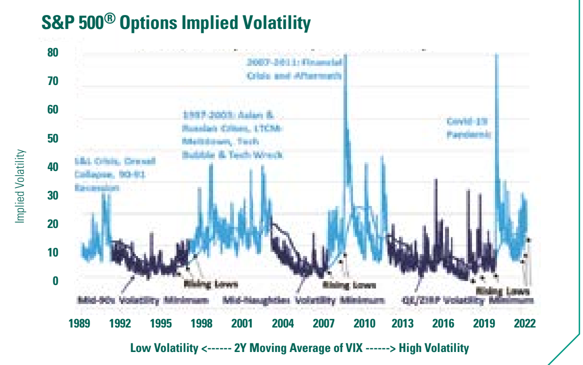
The cycle played out three times from 1990 to 2021. However, the pandemic and its aftermath have left it in a strange place. Most of the observed cycle, from 1992 to early 2021, took place in the context of low, stable rates of inflation. Inflation is no longer low or stable. Moreover, the 2020 recession, though not a surprise in the context of the cycle, happened largely as a result of exogenous factors (pandemic and lockdowns) and not for endogenous reasons such as credit problems in the private sector, the usual proximate cause of downturns.

In this case, the Fed cut rates to near zero and engaged in quantitative easing, as it had done from 2009 to 2014. However, this most recent cycle was also accompanied by an unprecedented fiscal expansion which took Federal spending from 21% to 35% of GDP while the Federal budget deficit grew from 5% to nearly 20% of GDP. In this context, the labor market recovered very quickly with unemployment falling from 14% to below 4% in about two years as inflation surged from its pre-pandemic 2% to around 9.1%.

Now the Fed is rapidly tightening policy. It's already raised rates by 150bps and, judging from the public statements of FOMC members, it intends to raise rates another 50-75bps at each of its next two meetings. Unless there is a sharp rise in long-term bond yields, the yield curve appears set to flatten much earlier than it has in the past few cycles. This could take us down towards the bottom of the chart.

The next question would be: what happens to volatility? Volatility subsided after the tremendous volatility spike in March 2020, which recently rolled off the two-year rolling window, but volatility is not particularly low (Figure 5). Indeed, there are multiple reasons to be concerned:

Figure 5: Is volatility about to rise sharply again?



Source: Quickstrike (ES_30), pre-2007: Bloomberg Professional (VIX and, pre-1993, VXO)

1. Tighter Fed monetary policy often pushes volatility higher.
2. Volatility has been trending higher for a year now, since hitting bottom on June 30, 2021.
3. Equities could still be overvalued compared to investor expectations for future dividends and the current level of long-term rates (our article here).

In some ways the current situation is vaguely reminiscent of the situation in 1999-2001 at the peak of the 1990s economic expansion. Then the VIX-yield curve cycle did a series of loop-tee-loops (scientific expression) in the far lower right-hand corner of the chart. Then, as now, the Fed had cut rates to deal with an emergency (Russian debt default and now defunct hedge fund Long-Term Capital Management) and then had to conduct a second tightening cycle in 1999 and 2000. Then, as now, technology stocks peaked and began falling. Eventually this translated into a recession in 2001 and 2002.

What was missing then was high inflation. By 2000 inflation had perked up to around 3.3%, high by the standards of the period from 1990 to 2020 but not high by historical standards nor by today's standards. The slight bump in inflation in 2000 was enough to prompt the Fed to raise rates to 6.5%, which was enough to invert the yield curve and send the economy into a recession.

Currently, inflation is at 9.1% headline and around 6% core. Fed Funds are still at 1.625% as of this writing. It could be that the VIX-yield curve cycle spends considerable time in the lower right-hand portion of the chart until the Fed is able to bring down inflation and begin easing monetary policy, which could be a year or more in the future. It remains to be seen whether, as Hansen's analysis suggests, the VIX-yield curve cycle will be successful at predicting the next economic downturn. That said, if it does return to the lower right-hand corner, it would be blinking red and warning of a possible economic downturn.

Author

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ABN AMRO Clearing prime services

- A truly trusted partner
- Global reach
- Global execution services
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- Securities borrowing & lending
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What we **do**

Clearing

Global product coverage:

- Equities & ETFs, warrants, FI, FX, Synthetics, CFDs, IRS, ETD, OTC derivatives, energy & commodities derivatives
- Supporting 160+ exchanges, MTFs, dark pools, ECNs & FX platforms (including single banks)
- Acting as a custodian with multiple direct connections to central securities depositories (CSDs) & sub-custodians

Financing

Exchange margin & leverage financing:

- Acting as the guarantor of its clients' obligations towards the market infrastructure, ABN AMRO Clearing pre-funds exchange margins on behalf of its clients
- Leverage financing

GES (Global Execution services)

Direct electronic access on 55+ exchanges:

- DMA via terminal based trading & FIX
- Sponsored access
- Co-location & proximity
- Member hosting
- Advanced execution services

Allocation

Executing brokers take-ups:

- Automatic take-up in Seals (for ETD)
- Allocation files which are automatically matched with the markets

Client Portal

Single gateway to all your data input & output:

- Client instructing interface for payments, corporate actions, trades, FX and give ups
- Real-time & interactive
- Intraday positions & historical post-trade data
- Standard reports & customized reports
- CSV and/or PDF format.

Risk Management

Proprietary and market leading correlation haircut model:

- Dynamic & real-time risk management
- PCA based (Principal Component Analysis)
- Sophisticated correlation across asset classes and markets, optimizing client capital efficiency

Khazana Foundation
Empower children

The Khazana Foundation is an independent organization in the Netherlands founded in 2015 by three female executives in Financial Services. It contributes to three United Nations SDGs, which are intertwined and related in their resolutions.

A vast majority of children and young adults are not exposed to the conversation about money and by proxy must rely on others. These children cannot break from their circumstances unless they become educated. Without exposure to money, banking systems and financing practices it is impossible for them to find a way to be included. Particularly those who live in poverty are affected disproportionally.

Khazana is building a collective platform with partners across the globe and supports initiatives that contribute to financial inclusion, through basic financial skills, access to financial savings and primary social skills. Education empowers, and having access to financial practices is key to building a better life. Engaging in conversation and developing opportunities for education reinforces social inclusion and enhances economic growth especially for those who are most vulnerable.

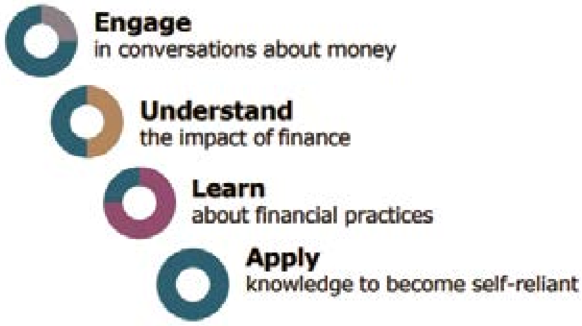
Khazana's flagship initiative is CDK: the Children's Development Khazana. The unique concept of the CDK program combines education with financial access and life skills, putting children on the path to becoming full economic citizens, as per the model of the Child and Youth Finance organisation.

Once children join CDK they also commit to going to school. Teaching these children how to manage money, make decisions, accept responsibility as well as understand what their rights are, empowers them to stand up for themselves and to start making their own choices. Our CDK Mumbai chapter works in the slums of Mumbai, currently in five

active locations, supporting 450+ children between the ages of 9 - 18 years. The CDK provides the children with a savings account, teaches them about longer-term goals, provides education about the banking system and how money works. Through a number of 'bank branches' children can manage their accounts and save small quantities of cash. At the ages 16 - 18 years, support is provided for entrepreneurial skills or vocational skills.

At 18 years old the CDK program stops for most of the children, however students that can showcase the obtained knowledge by presenting a successful business case for an enterprise qualify for the Khazana Advanced Program. After a pitch and objective selection, students are awarded a one time only sum of money to help them on their way.

The Khazana foundation is expanding its projects to students who need support for a project, education or course which is related to the principles of financial inclusion as part of its new Scholar Support Program. Students will be asked to submit a request for support, which will be evaluated by the Khazana Foundation board.



Want to know more? Find more information and support us on khazanafoundation.org

Updates from **our Business**

Fractional **shares**

AACB now offers a new service to retail, wealth management and saving platforms under its Prime offering. AACB'S Retail One Stop Shop (ROSS) project went live at the beginning of 2022 with fractional shares on both US and European equities.

Our fraction engine creates the ability to trade in a proportion of one share and allows clients to transact in nominal values as opposed to in whole share increments. This enables clients of retail platforms to invest what they can afford, in terms they understand. It is estimated that on some platforms in the US, 95% of volume has a fractional component and AACB anticipates this trend taking off in Europe. Using a simple FIX API for access to our Smart Order Routing capabilities, we are able to ensure that clients still benefit from transparent execution and can now offer a format that not only helps our partners expand their user base but also one that suits their existing clients' wishes.

AACB's fractional shares complements its existing retail focused global execution and "Banking as a Service" products.

For more information on our service, please contact:

Martin Frewer
Global Commercial Director
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Retail One Stop Shop **('ROSS')**

Retail One Stop Shop ('ROSS') enables clients to access financial markets via AACB using our execution, clearing house, settlement agent and custodian capabilities. Separate to this, AACB can also offer (retail) cash accounts via our Banking as a Service solution. This provides clients with a professional wholesale environment with a single point of technical access.

Execution capabilities stretch from primary and secondary markets to systemic internalisers and AACB are currently finalising development for fractional investing. This will allow clients to reduce costs and avoid difficult admission processes by using AACB licences; they can also terminate their own memberships to exchanges, CCP's and CSD's.

For more information on our service, please contact:

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EU Head of Prime
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APAC: **The gift that keeps on giving**

The dynamic of the Asian Hedge Fund landscape has shifted drastically as macro funds, multi strategy firms & family offices look to countries like Singapore where multiple asset classes are easily tradeable with a growing mandate in digital assets. Whilst long short equity funds remain prominent in Hong Kong, the ease of QFI regulations and onshore China access has continued to be a focus of Hong Kong and Mainland based firms for northbound and southbound trading.

Asia remains a top growth region for investments. The different offering and wide range of products offered within the region is certainly diverse and creates opportunities for strategies to thrive. ABN AMRO Clearing has been well positioned as a partner and gateway for our clients to access listed markets such as Hong Kong, Japan, South Korea, Taiwan, Singapore and Australia. We also have a growing presence in our offerings to the China Internationalized Exchanges across the APAC region and are leaders in providing clearing, financing and risk management in listed and cleared futures, options, cash equities, ETFs and FX.

Let ABN AMRO Clearing become your partner in your growth journey within the APAC Markets.

For more information on our service offering in APAC, please contact:

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Asia-Pacific Head of Sales & Relationship Management
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ABN AMRO Clearing in **Brazil**

ABN Amro Clearing provides clearing services for Non Resident Clients of the B3 exchange, with trades executed via local broker/dealers. All Brazilian trades are cleared from Banco ABN Amro S.A. in real time to the clients AACB European statements and risked within AACB's Correlation Haircut model allowing for offsets (where applicable) against products traded in other markets.

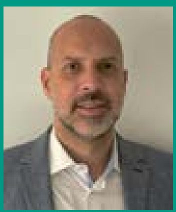
AACB currently clears the following products:

- Cash equities and equity and index options
- FX/IR//DI 1 Single Stock and Index Futures
- Commodity Futures
- Crypto ETF's

AACB will further look to enhance our offering by providing execution services to Brazil and have applied for a local Broker Dealer Licence. Setup is due to be in place by Q4 2022. Clients will be able to execute via AACB Front End or through a Sponsored Access setup.

Bovespa (Equities)
#1 clearer in **Brazil**
10% of Market Share

BM & F (Derivatives)
#2 clearer in Brazil
14% of Market Share
(YTD April 2022)



For more information on our service, please contact:

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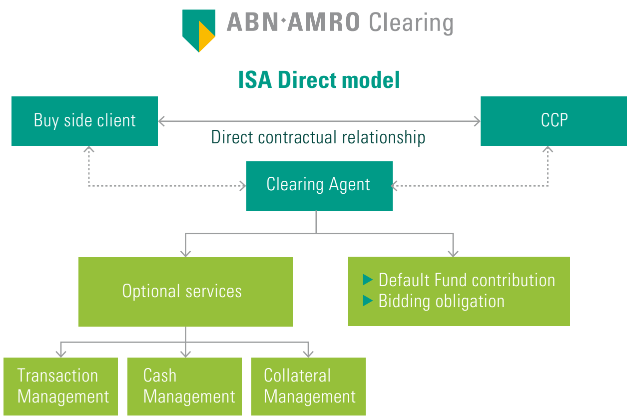
IRS:
A Hybrid Set-up with Cost Savings and Lower Counterparty Exposure

ABN AMRO Clearing is a market leader in implementing innovative clearing solutions. We offer a full IRS clearing service on SwapClear, and we are one of a few clearing members to offer the ISA Direct Service on Eurex.

Benefits for both the buy-side client and ABN AMRO Clearing when subscribing to the ISA Direct model are inter alia:

- Collateral efficiencies, including direct access to repo clearing
- Margin funding cost reduction, as the buy-side client can fund margin calls themselves
- Better asset protection, with enhanced segregation and portability of collateral
- Capital efficiencies, reduction of capital requirement (RWA)

For buy-side investors the ISA Direct clearing relationship reduces dependency on clearing brokers as well as the risk of porting open trades in case a clearing broker defaults. In its role of Clearing Agent, ABN AMRO Clearing retains full responsibility for contributing to the default fund and participating in any default management auctions.



For more information on our IRS clearing services, please contact:

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United States

Stay globally competitive by trading some of the world's largest markets in the U.S.

Clearing listed U.S. futures, equities and equity options has long been in the DNA of ABN AMRO Clearing. In the United States, ABN AMRO maintains a large market share on the major exchanges providing clearing, stock loan, back-office support and risk-management on listed futures, equities and equity options. White glove service, deep industry expertise and our agency only clearing model provides ABN AMRO clients comfort that our focus remains on their business success. The United States has often been considered one of the largest capital markets in the world. If adding U.S. products and services to your portfolio is in your growth plans, please let us know how we can help design a road map for product expansion.

Disclaimer: Not all products are available in every region. US Products are cleared by ABN AMRO Clearing Chicago LLC, MEMBER: FINRA, NFA, and SIPC.

For more information on our service, please contact:

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Digital assets sector can learn and grow from **tough lessons of 2022**

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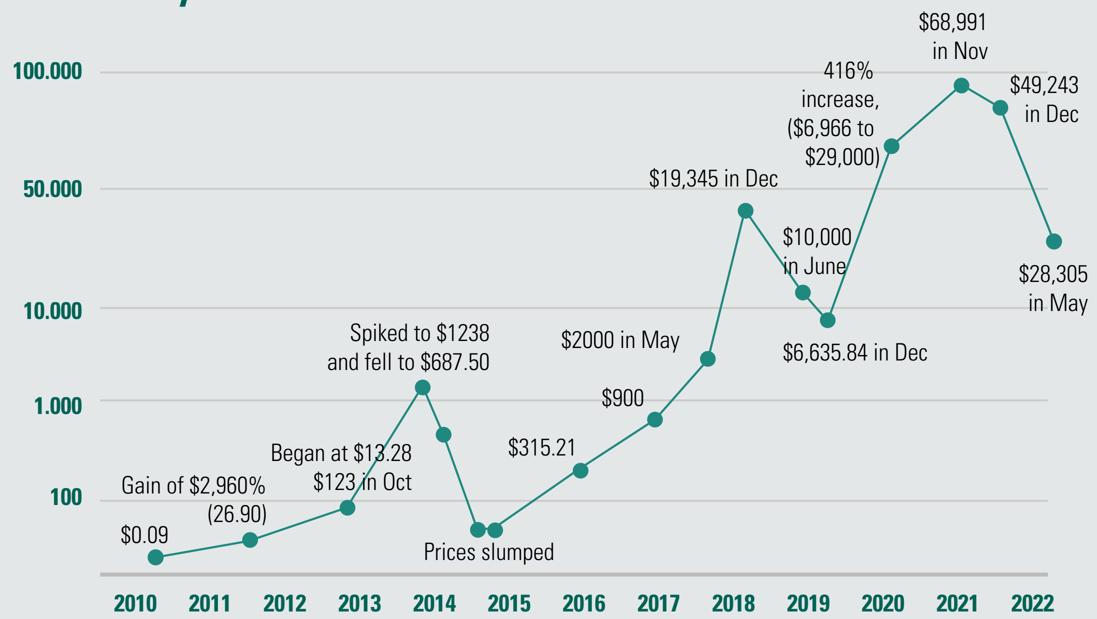
The burgeoning digital assets industry has had quite the year. In 2021 valuations of several major cryptocurrencies hit record highs, buoyed by increased institutional adoption and a retail investor market flush with cash following wage subsidy schemes and the easing of Covid restrictions. It was also the year people went ape for NFTs and virtual real estate in the metaverse was selling for seven-figure sums. Everything was going up or so it seemed.

The commonly offered theory that digital assets, particularly cryptocurrencies, provide returns that are uncorrelated to mainstream or traditional markets ('TradFi', if you speak the lingo) and offer a way to protect wealth during economic downturns have been undermined by events so far this year. After a decade of ultra-loose monetary policy and central banks pumping cheap (or even free) cash into the economy to keep businesses afloat during the worst of the COVID crisis, the pendulum has strongly swung the other way. Inflation rates in the US and the UK are now at 40-year highs and are expected to reach double digits by the end of the year. The Eurozone is not far behind. Interest rates are expected to rise above 2% in the near term, all of which provide the perfect stress test for digital assets.

So far, Bitcoin is down from an all-time high of around $69,000 in November 2021 to near $23,000 at the time of writing – having recovered from lows of around $18,000 in June 2022. Other popular coins and tokens are witnessing similar volatility. Many high-profile NFTs are trading at a fraction of their 2021 prices and stories of celebrities touting their metaverse projects have gone very quiet, for now. The enigmatic CEO of Tesla Elon Musk — who proved able to move crypto markets with a single tweet — announced a large holding of Bitcoin in 2021 before voicing concerns about its environmental impact. Tesla recently revealed it sold about 75% of its Bitcoin holding to maximise its cash because of COVID-related uncertainty. Musk stated that the sale should not be seen as "a verdict on Bitcoin".

Meanwhile, earlier in the year the stablecoin known as TerraUSD lost its $1 peg, leading to the coin and its associated cryptocurrency Luna entering a downward spiral that wiped out $60 billion of combined market value. By June 2022, the collapse generated a contagion effect as crypto firms that had pursued highly leveraged strategies attempted to bolster their balance sheet.

Price History of Bitcoin



Source: Investopedia

Several failed

Despite these challenges, many digital assets market participants remain bullish in the longer term and view the recent summer of turmoil as an opportunity for self-reflection and the market to mature, while also underscoring the need for enhancing due diligence and risk management practices. Moreover, at the heart of the current conversation going on in all corners of the market is the need for greater education of investors. It is from this position that AIMA approaches the market. As the global representative for the alternative investment management industry, AIMA's engagement with the digital assets market reflects the growing interest of our investment manager members in entering it or at least learning more about this evolving asset class.

In 2017, AIMA set up a Digital Assets and Blockchain Group, which went on to merge with another industry group to become the association's Digital Assets Working Group (AIMA DAWG). The group had 14 members in its first year and has now grown to boast more than 325 members today representing a cross-section of senior industry experts including investment managers, allocators, custodians, exchanges, lawyers, consultants, and other digital assets service providers.

AIMA DAWG is focused specifically on the intersection of digital assets and institutional buy side asset management. The group is tasked with driving AIMA's regulatory engagement, thought-leadership initiatives, and operational guidance in the area of digital assets and the association has also set up digital assets sub-groups on regulation and tax, operational due diligence and cybersecurity.

AIMA is now setting up a new manager-only digital assets advisory committee, as well as a new Asia-Pacific digital assets sub-group, in response to increasing demand from its members. This year AIMA will also host conferences in New York and Zürich for audiences across the legacy alternative investments and digital assets industries to focus on 'the how' of allocating to digital assets.

Through these industry group formations and events, AIMA aims to create avenues for valuable peer-to-peer discussions and mutual learnings in a neutral environment to enhance understanding of the digital assets ecosystem as it develops and evolves.

AIMA DAWG has also been the driving force behind the publication of several insightful industry guides and research pieces that provide further operational guidance and transparency to the market for institutional investors. These include the new Industry Guide on Digital Asset Custody. AIMA has twice contributed a chapter to PwC's Global Crypto Hedge Fund Report, which examines the extent to which 'traditional' hedge funds are entering the digital assets market. The latest report, published in June

2022, revealed that approximately one in three hedge funds surveyed are currently investing in digital assets, compared to one in five when we surveyed last year. Among the most popular hedge fund strategies that are investing in digital assets (in order of popularity) include multi-strategy, macro, equity, and systematic. The average allocation to digital assets by these funds is 4%, a slight increase from 3% last year. Regulatory and tax uncertainty continues to be the greatest barrier to investing (cited by 83% of respondents).

The picture this data paints is one of hedge funds cautiously exploring the digital assets sector to identify ways to capture returns for their investors, while also respecting the fact the market has some way to go in terms of regulatory clarity and market infrastructure improvements.

As the market continues to find its feet in the new macro-economic environment we find ourselves in, it's difficult to predict the evolution of the digital assets sector in the medium- to long-term, as it seeks to scale back up to last year's high while also contending with intensifying regulatory scrutiny. Arguably, more institutional adoption will only come with the emergence of regulatory frameworks.

AIMA, for its part, will continue in its role to facilitate knowledge-sharing across the alternative investment industry and support our members looking to invest in this asset class.

Jack Inglis

Jack Inglis is the Chief Executive Officer of the Alternative Investment Management Association (AIMA). He has been in the financial services industry and closely involved with hedge funds for over 30 years. Jack has held senior management positions at both Morgan Stanley, where he served for 16 years, and Barclays, where he was prior to joining AIMA. From 2007 to 2010 he was CEO of London based hedge fund manager, Ferox Capital Management. He served as a non-executive director of London Capital Group plc from 2007 to 2010 and currently sits on the board of the Chartered Alternative Investment Analyst Association (CAIA). He began his career in 1983 at UK stockbrokers James Capel (which was subsequently acquired by HSBC) and has extensive experience in origination, distribution, financing and trading across the fixed income and equity capital markets. Jack holds a Master of Arts in Economics from Cambridge University. Jack is also Chair of the charity HFC Help for Children UK Affiliate Board and took up this role in January 2020.

Author

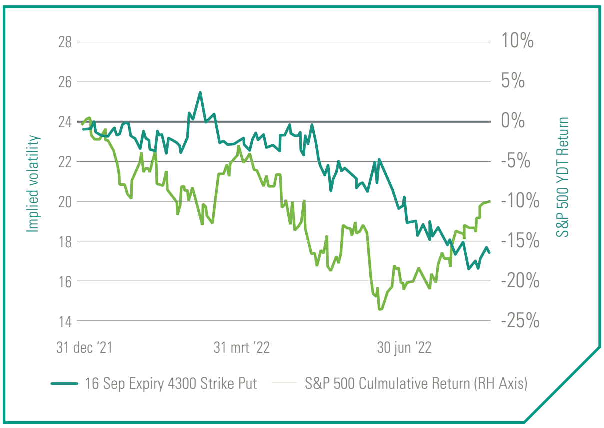
Jack Inglis
Chief Executive Officer of the Alternative Investment Management Association (AIMA)

If the market ain't broken, **Vix it before it will**

So far, 2022 has served a rather unappetizing stew of continued supply chain issues, war in continental Europe, crypto distress and continued inflationary readings feeding into rapidly rising bond yields. Against this backdrop, in June, the S&P 500 and Euro Stoxx 50 indices flirted with a bear market (down around 20% year-to-date) as the post-Covid optimism of 2021, which lifted the S&P 500 an impressive 27% last year, appeared to have faded. Since mid-June, markets have rallied in the optimistic expectation that the current path of moderate rate hikes will contain inflation, while allowing for the gentlest of soft landings.

But amid the negative headlines and storm clouds, one surprise has been the muted response of equity index volatility. One common indicator is the VIX index, which measures 30-day S&P 500 implied volatility. Despite the S&P 500 being down close to 10% year-to-date at the time of writing, the VIX is little changed year-to-date at 19.7 vs 17.2 at year-end 2021[1]. The VIX September future (the current front-month contract) is down year-to-date, declining from 26.3 at the end of 2021 to 23.4 as of 16 August 2022. It peaked at just over 30 in mid-June, when the S&P 500 was down 22% YTD. In contrast during the equity drawdown in early 2020 the VIX jumped from 14 to over 80 in around four weeks.

When looking at the VIX, it is important to recall that the VIX is primarily based on taking a snapshot of at-the-money implied volatility. When the underlying equity market falls, the reference strikes used to calculate the VIX change, moving lower. These lower strikes typically trade at a premium to at-the-money options. Thus, changes in the VIX are driven both by changes in the reference strike as well as changes in 'per-strike' implied volatility, i.e. the volatility of individual options. Therefore, when the market declines and the VIX remains unchanged or even falls (which we have seen in several weeks this year) that typically means 'per strike' volatility has declined quite meaningfully. Thus, it is also useful to look at the volatility of individual options. The below chart shows the volatility of the current at-the-money contract (the S&P 500 September 4300 Put) as well as the underlying index year-to-date. Notably, the implied volatility of this contract has decreased from 24% to approximately 18% despite the market's decline.[2]



1 As of 16 August 2022
2 Data as of 16 August 2022 unless stated. LH axes show implied volatility at mid prices.
Nothing herein constitutes an offer or a solicitation of an offer to purchase a security. Past performance does not guarantee or indicate future results. Sources: True Partner, Bloomberg.

This development was not limited to the US, but also occurred in several others, including the Euro Stoxx 50 and Korea's Kospi 200 (both of which are down around 10% or more year-to-date). As a result, despite the equity declines, equity index implied volatilities are currently generally only around their long-term averages, with some Asian markets below.[3] This is a contrast to implied volatility behaviour in some other asset classes: for example, the MOVE Index of US Treasury implied volatility is substantially above its long-term average.[4]

But not only at-the-money volatilities have compressed. In early 2022, it was notable that downside skew (the degree to which market participants are prepared to pay more for downside protective strikes) was relatively expensive, which we saw as indicative of end-users holding hedges. Monetization of these hedges appeared to be one factor in the muted responsiveness of volatility in earlier market troughs. But for those who were waiting for bigger moves, holding volatility hedges has been a surprising 'pain trade' this year. Now the pendulum appears to have swung to the other side, as the current volatility structure appears to indicate less hedges held by end-users: dealer positioning on the downside is light and skews, if anything, are depressed historically. In other words, likely more investors are now 'swimming naked'.

Interestingly, the developments in volatility and skew make now a more favourable entry point for any protective strategies applying volatility hedges, not least as one aspect of lower volatilities and skews is that the bar for a severe market surprise is lowered. In the current volatility landscape, a 3.5% decline in the S&P 500 would already constitute a three-sigma event, which would likely stir options markets to a larger extent than what we've seen earlier this year.

That brings us to what to expect for the coming months. In our view, unabating inflation and the increasingly hawkish central bank responses remain the markets' key focus. While the Federal Reserve has commenced its tightening cycle, as recently as late March the median of the FOMC participants' projections suggested the Fed Funds rate would peak below 3%. Since then, inflation data has mostly continued to surprise on the upside. But the current expected peak of just over 3.5% would still be low by historical standards. While inflationary pressures have generally been low since the 2008 Global Financial Crisis until recently, prior real rates were more significantly positive and tightening cycles usually ended with notably higher real interest rates. Thus, the risk of central banks still being behind the curve is tangible. In Europe, the ECB has a particularly tough job, with high inflation, growth concerns and the risk of fragmentation limiting the ECB's ability to raise rates, while even the ECB staff union has been complaining that pay is not sufficiently protected against inflation.[5]

While markets price a velvet-like soft landing, doubts also remain on the economy itself. Inflationary data has been interspersed with recessionary signals, including the whopping miss of US GDP and deterioration of the US housing markets (itself somewhat of a deja-vu from the late 2000's). Furthermore, the main gist of the second quarter earnings season 'not being as bad as feared' does not inspire confidence for the upcoming quarter. Besides all this, there is the unfortunate prospect of severe energy shortages across Europe in the coming winter season. With inflation still looming large, the traditional role of government bonds as a 'safe-haven' still seems challenged, despite already substantial losses for bonds YTD.[6]

In these times of uncertainty volatility can be a useful component to any investment portfolio. Volatility strategies can be both a source of return and a diversifier. The asymmetric pay-off patterns of options allows for inefficiencies to exist in volatility markets, as market participants can trade the same option with different

3 Uses 30-day at-the-money implied. Long-term averages use data from January 2006 to 16 August 2022. Data as of 16 August 2022 unless stated. Sources: True Partner, Bloomberg.
4 Using the same period of Jan 2006 to 16 August 2022
5 'Lagarde spurns ECB staff plea for pay rises linked to prices', Bloomberg News, 9 May 2022 https://www.bloomberg.com/news/articles/2022-05-09/lagarde-spurns-ecb-staff-plea-for-pay-rises-linked-to-inflation; see also 'ECB Staff Union Demands More Pay to Guard Against Inflation', Bloomberg News, 24 Nov 2021 https://www.bloomberg.com/news/articles/2021-11-24/ecb-staff-union-demands-more-pay-to-guard-against-inflation
6 For example, the Bloomberg US Treasury: Long index of 10Y+ maturity government bonds is down -20% YTD as of 16 August 2022

objectives, but also because of the complexities involved: relative value volatility analysis can require large volumes of data and an understanding of individual market nuances, flows and liquidity dynamics.

An additional benefit of options is the ability to customize a strategy and portfolio to the objectives of the investor, for a more tailor-made solution. Where managers have the right capabilities, customization can enable volatility strategies to be tailored and combined to meet specific portfolio objectives, such as protecting against tail risks. This can further enhance diversification benefits and potentially achieve better overall portfolio outcomes.

Net, as we approach a still uncertain market environment, there is a silver lining in the subdued equity index volatility response seen so far in 2022: the current market configuration presents a more attractive entry point for considering equity index volatility strategies, particularly relative to other asset classes. For savvy investors, this could offer the potential to enhance risk-adjusted returns.

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True Partner Capital

True Partner Capital is a global asset management firm focused on volatility trading. The firm was founded in 2010 by a team of former options market makers with experience trading in senior roles across the major derivatives markets in Europe, the US and Asia.
The firm has an over 10-year track record in its longest running fund, and currently manages USD 1.7 billion in various offerings including both commingled funds and customized solutions.

True Partner Capital

Clearing the way for **sustainability**

We pledge to support our clients and the industry's transition to sustainability by continuously and actively **sensing the financial markets*** across the globe.

ABN AMRO Clearing has a long standing relationship with sustainability. ABN AMRO bank is looking to help clients make their sustainable transition and use its expertise to do so, making a positive impact by doing what ABN AMRO does best: banking. And so we aim to be the best in our business: clearing.

Our sustainable strategy is built on concrete ambitions in the area of climate change, the circular economy and social impact.

The goals most impacted by our activities are SDG 8 (Decent work and economic growth), SDG 9 (Industry, Innovation and Infrastructure), SDG 12 (Responsible consumption and production), SDG 13 (Climate action) and SDG 17 (Partnerships for the Goals).

In an effort to optimally assist our client's transition to sustainability we:

1. Maintain safe markets through stable, reliable, efficient, predictable and secure services.
2. Provide transparency by developing access to markets and information.

Sense and scale

Our global scale puts us in a position to sense what is happening in the nancial markets. We can sense what is facilitated in our industry and what the impact is on ourselves and our clients.

When Clearing utilizes its full power to sense intelligently we will:

1. Increase the effectiveness of the inuence we have in the industry.
2. Help provide information and enable our clients to pinpoint opportunity.
3. Enable and accelerate a greater contribution to safe, transparent and sustainable markets.

* What is market sensing: the ability to recognize emerging market requirements, assess customer responses rapidly, and design rapid market-entry strategies.

Purposeful partners

Sensing drives collective action

The purpose of sensing is to enhance positive impacts and avoid, mitigate, remediate negative economic, social and environmental impacts.

Our dialogue with stakeholders gives us greater visibility into impacts along our value chain and helps identify new partnerships and actions.

With our scale and leading position, we can inuence participants in the full nancial markets infrastructure to become more sustainable.

Helping markets evolve and improve our collective knowledge will build trust in the nancial ecosystem. This is what every stakeholder will be looking for as proof of sustainable diligence.

ABN AMRO Clearing provides access and processes:

> 85 exchanges
> 150 liquidity centers
> 5,8 billion transactions across the globe

Sensing

Transition

Transformation

We have a carbon neutral strategy, diversity and inclusion targets and a strong staff engagement through a participatory reforestation program, information and knowledge sharing initiatives as well as encouraging charitable activities.

Scalable service

How we scale sustainability

What do we do?

Our overall sense of the market and the global regulatory space allows us to recognize emerging sustainability requirements. Through conversations, consultation and analysis we engage and contribute in mapping the approach to scale sustainability in nancial markets.

We assess our clients and suppliers on sustainability values. We engage with our clients on how best to scale their sustainability impact. We review our offerings and set our own internal targets.

What can we offer?

Our clearing experts design market-entry strategies to provide clients access to global power markets. Through the digital client portal we can provide access to reporting, transaction overviews, market access overviews and sustainability rankings.

We actively join clients in panels and publications to support their internal sustainability conversations, as well as participate in knowledge sharing events.

How can we broaden our impact?

Transformative Innovation can start in disparate industries. We have pioneered a project in the energy storage and supply eld by piloting micro-grid platforms.

We are looking into how the renewable energy certicate space can become more efcient, paving the way for transparent pricing and larger markets accessibility.

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FX
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Global coverage
Retail One-Stop-Shop
Professional investors
Proactive Global execution
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Leverage Open architecture
Technology Prime services
Banking as a Service
Sustainable OTC derivatives
Commodities Partnership Passionate
Futures and options
Asset protection ETF
Brokerage as a Service
Transparent Fixed income
Client focused Specialists
Synthetics Secure
Cross assets

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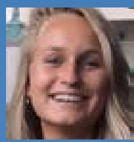

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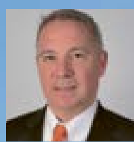

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