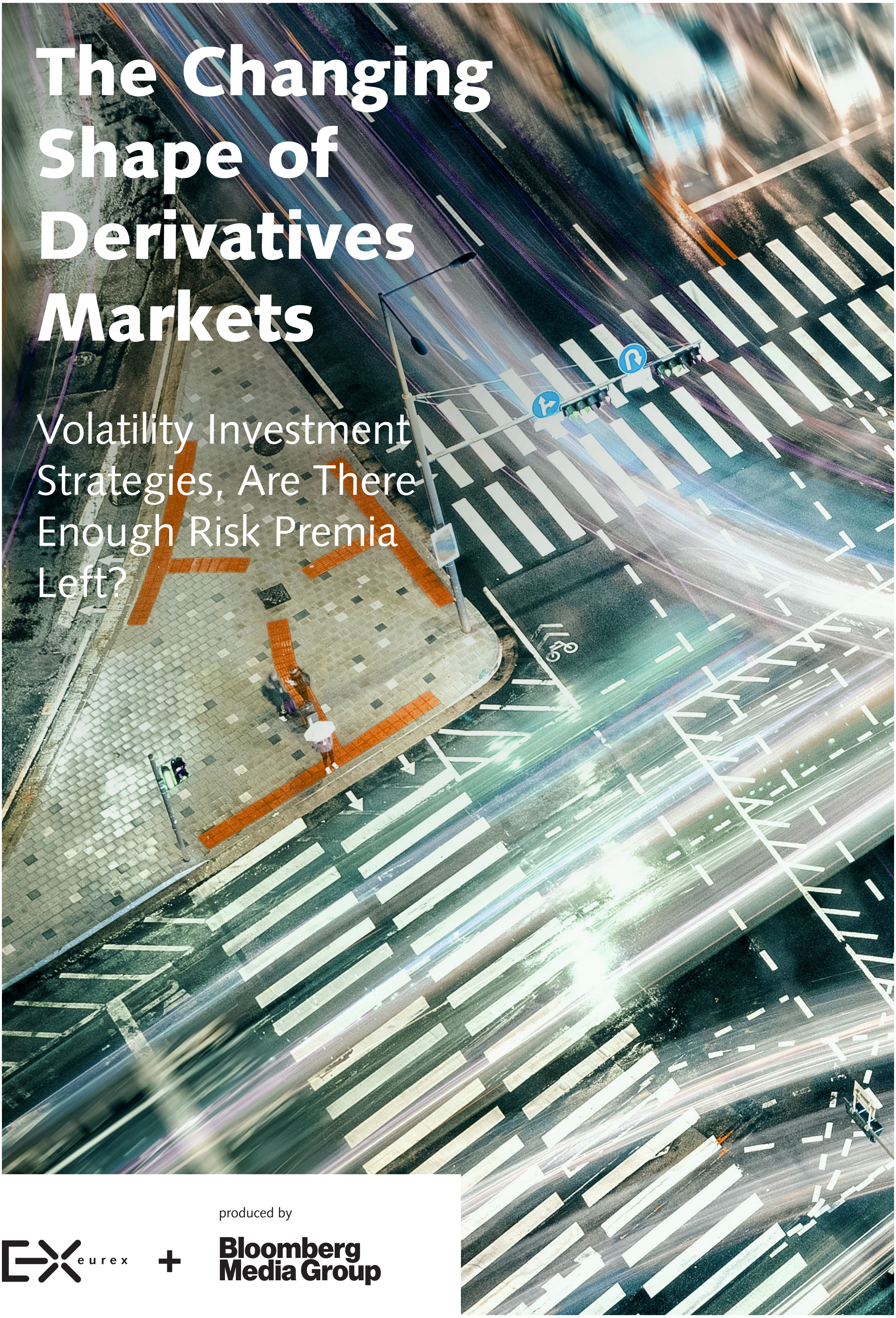
The Changing Shape of Derivatives Markets

Volatility Investment Strategies, Are There Enough Risk Premia Left?



eurex +

produced by

Bloomberg Media Group

4

Volatility Investment Strategies, are There Enough Risk Premia Left?

More than a decade since the nadir of the global financial crisis, we are no closer to a rising interest rate environment.

$17 trillion

Market value of negative-yielding fixed income assets.

Source: Bloomberg, 2019

If September's move by the Federal Reserve—cutting its base rate for the first time in 10 years—appears to be a contrary indicator. Yields remain benign, with the amount of negative-yielding fixed income assets at their highest-ever levels, according to Bloomberg. A 10-year bull run coupled with a rapidly rising technology sector have seen developed-market equities either overvalued or plagued with risk, forcing investors in search of returns to cast their eyes further afield.

Alternative asset classes and investment strategies are therefore more relevant than ever before—and no longer solely as a diversification play—as correlations between traditional asset classes tighten. Enter the role of volatility.

According to data provider Preqin, last year, 42% of hedge fund investors believed stock market volatility would be the biggest threat to returns in 2019, and the indiscriminate sell-off witnessed in Q4 2018 probably validated that belief.

For the next volatile phase of the market cycle, derivative strategies that capture return premiums are likely to face greater demand, to compensate for the risk of losses during sharp increases in market volatility.

The volatility risk premium exists because implied volatility is typically higher than realized volatility, and therefore investors averse to the common swings in equity markets will often pay a premium for the insurance effect of placing options on that volatility.

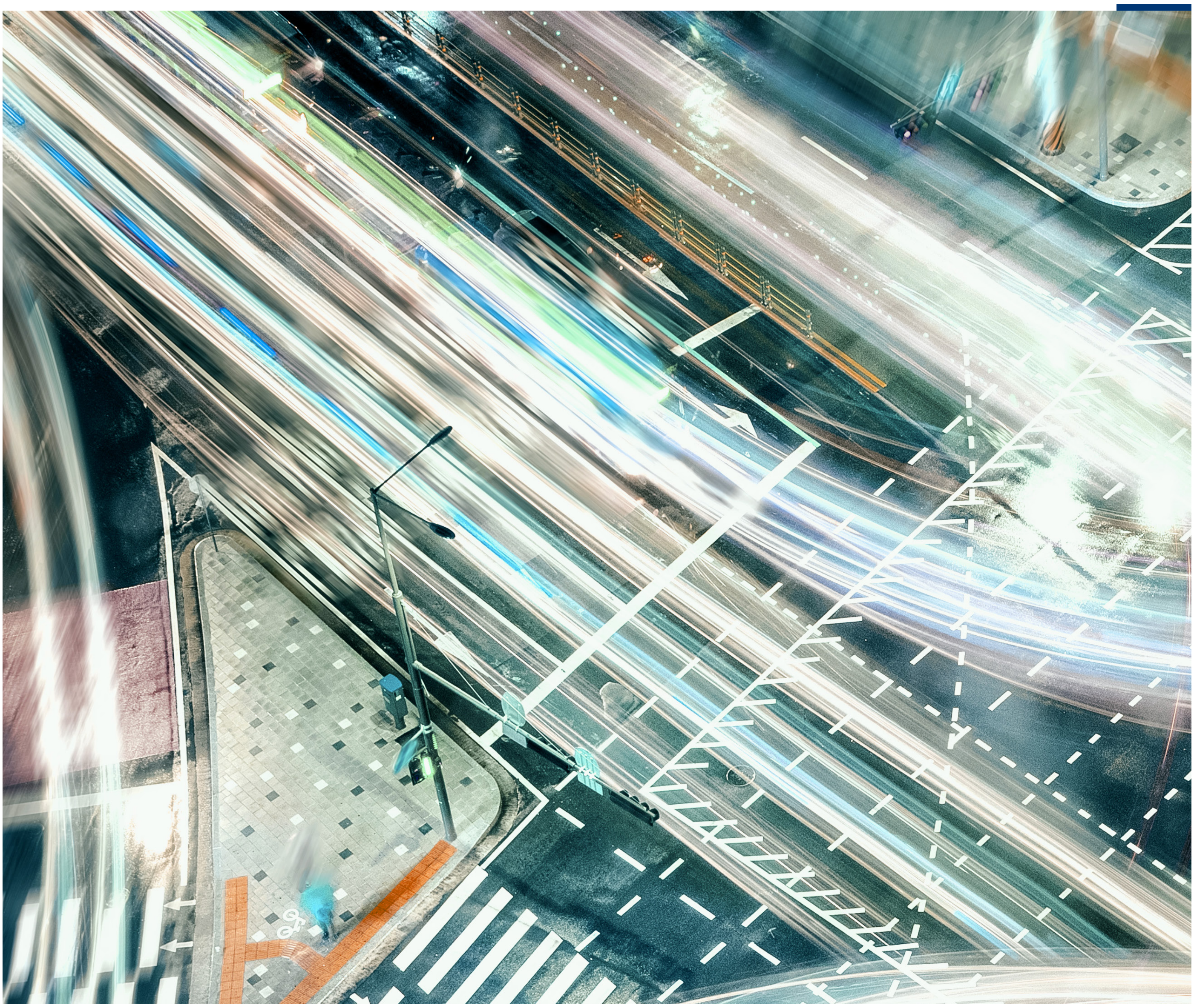
For instance, many large pension funds cannot expose their members to bouts of equity market volatility, so they buy put options on their equities to help meet regulatory requirements or debt requirements, and they often carry a risk premium. With a volatility instrument—a swap, future, option or variance swap—that premium gets exploited and that "insurance" is effectively sold back into the market.

Arguably, if volatility is meeting twin objectives—dampening downside in times of market stress and generating additional alpha when traditional asset classes look challenged or expensive—it might lead to crowding.

"Given the fact all risk premia are already suppressed, we are seeing some crowding [in volatility derivatives], depending on what trade we are looking at specifically," says Andreas Schmidt, Equity Derivatives Specialist at Bloomberg. "Clearly, the market has increasingly targeted the less classical investment strategies."

While volatility will always offer a premium, its magnitude will depend on the particular market circumstances and number of participants, placing greater importance on the underlying index against which the trade is pegged.

For example, trading volatility of the S&P 500 or the EURO STOXX® 50 is unlikely to introduce issues around liquidity. Huge demand by large institutional clients seeking equity protection on those indexes drives up their risk premia through supply and demand dynamics, whereas for volatility swaps on an emerging-market index, for example, where demand is lower, if that trade gets crowded it would have a more significant impact on prices.



One of the clearest observations in the past 10 years is the rapid pace at which market participants need to act.

As Dr. Bernhard Brunner, Partner at finccam, says, "Trading volatility has changed over the past years, as the characteristics of volatility have changed since the financial crisis."

Moreover, today's wealth of data, the incessant flood of information and increased use of algorithmic strategies have made the trading landscape very different.

"For example, lower volatility regimes have become more important, and you should adopt your volatility trading strategies accordingly," says Brunner. "Moreover, you have to monitor your positions much more intensively than before 2008."

He explains how with volatility events, typically the risk premium is even higher after the event's spike upwards. Not only is the premium more attractive, execution needs to happen faster than in previous years if participants are to access the opportunity.

While the market has become more fast-paced and the associated risk premium more attractive, greater opportunities may exist that can make things more competitive. For example, if a large pension fund is placing a hedge, it might shift volatilities to one side because of its sheer volume, while that risk is subsequently digested.

42% The number of hedge fund investors who believe stock market volatility would be the biggest threat to returns in 2019.

Source: Preqin, 2019

"That clearly opens up an opportunity for another participant. They spot the higher-risk premium available, encouraging them to engage with the trade from the opposite side," says Schmidt. "But on the other hand, if something happens and you need to get out, you also need to be quick before the position explodes on you."

A common investor fear is that in a serious downturn, asset class diversification goes out the window if everything falls together. In such troubled times, it pays to be nimble—deleveraging, exiting positions, unwinding trades—and all trading activity needs to happen quickly.

Schmidt says that exchanges have tried to address the need for fast exits by creating instruments that are centrally cleared versions of OTC products, including variance swaps or dividend derivatives. Some of these products, such as dividend futures, have become market standard. "Others, however, seem to be struggling to convince market players to move from well-established simple OTC workflows to a centrally cleared exchange product," he adds.

One of the clear benefits of including volatility derivatives in an overall investment strategy can be found in the tail risk. For a multitude of reasons, market risks are louder and clearer than they were 10 years ago, and possibly ever. One consequence is shorter periods of volatility (with the exception of the prolonged volatile period between 2000 and 2003), with the swings more rapid.

"Before 2008, we saw scenarios of market volatility having increased sharply, but then very slowly returning to the long-term average," says Brunner. "For example, between 2000 and 2003, we saw regimes of high volatility, which persisted for more than one year. Nowadays, that has changed."

He explained how even larger spikes in the market sometimes take a few days to return to their former level. Whether incited by President Trump throwing out political landmines via Twitter, the latest in the Brexit saga or heightened tensions in Turkey, negative news flow and events often lead to drawdowns. But with volatility, history demonstrates that immediately after such events lies the maximum risk premiums—potentially up to two or three times as much as before the event, according to Brunner, with faster recovery versus equities (and other asset classes). "That is a very attractive feature for many investors."

> Clearly, the market has increasingly targeted the less classical investment strategies."

ANDREAS SCHMIDT
EQUITY DERIVATIVES SPECIALIST, BLOOMBERG

Pure Alpha or Alternative Beta?

A relatively recent development in the world of volatility derivative trading is increased use of dividends, correlation and volatility as sources of alternative beta.

For instance, trading dividend futures and options can meet the hedging requirements of many retail structured products, which require a term structure for long-dated dividends.

Andreas Schmidt, Equity Derivatives Specialist at Bloomberg, explains: “Retail structured product clients often effectively ‘forego’ a forward-looking implied dividend. The further out you look, the higher the risk premium the issuers charge.”

He says that kind of strategy is being effectively mirrored in the many listed dividend futures and options on offer, with specialists now exploring whether additional premiums can be extracted.

Some examples might be the difference between implied and realized volatility on a particular index; looking for spreads between the S&P and the EURO STOXX® indexes; or perhaps bringing in a geographical element and exploring levels of liquidity in Asian or emerging markets.

Dr. Bernhard Brunner, Partner at finccam, points out the shift by many large institutional investors, such as pension funds, to increasingly include alternative asset classes in their strategic asset allocation.

> We are now seeing [alternative] strategies being used more as the core building blocks of an investment portfolio.”
>
> **DR. BERNHARD BRUNNER**
> PARTNER, finccam

“This is a bit unusual, because to date you would really only see traditional asset classes in strategic asset allocation. We are now seeing effectively an absolute return market that includes these kinds of [alternative] strategies being used more as the core building blocks of an investment portfolio.”

The big questions that remain, he says, are around the diversification benefits of adding volatility, correlation and dividend exposure to a portfolio, given their positive correlations.