GFM ASSET MANAGEMENT

Exchange Partner EUREX

VSTOXX 101

Profiting from “Europe’s VIX” Fear Index

by Tariq Dennison, +852 9476 2868

© 2020 GFM Group Limited, https://gfmasset.com

Image credit: by Unknown Author is licensed under CC BY-NC

Disclaimer

This presentation is for educational and discussion purposes only. **Nothing in this presentation is to be taken as investment advice**, nor as any recommendation to buy or sell any security or investment property or product. Please consult with GFM or your own investment advisors 1-on-1 before making any investment decisions.

GFM does NOT provide any tax or legal advice. Tax strategies in this presentation are based on our experience and believed to be current, but please consult with your own tax advisor for tax advice specific to your situation. GFM Group Limited is an SFC Type 9 Licensed Asset Management firm and is not affiliated with any exchange, brokerage firm, or custodian, including the co-presenters of this seminar. GFM Asset Management LLC, an affiliated company, is a US SEC Registered Investment Advisor.

Investing involves risks, including the risk that you may lose some or all the money you invest.

GFM is not affiliated with Interactive Brokers LLC, nor with Eurex, nor any other FINRA broker-dealer

© 2020 GFM Group

Disclaimer by Eurex

© Eurex 2020

Deutsche Börse AG (DBAG), Clearstream Banking AG (Clearstream), Eurex Frankfurt AG, Eurex Clearing AG (Eurex Clearing) and Eurex Repo GmbH (Eurex Repo) are corporate entities and are registered under German law. Eurex Global Derivatives AG is a corporate entity and is registered under Swiss law. Clearstream Banking S.A. is a corporate entity and is registered under Luxembourg law. Deutsche Boerse Asia Holding Pte. Ltd., Eurex Clearing Asia Pte. Ltd. and Eurex Exchange Asia Pte. Ltd are corporate entities and are registered under Singapore law. Eurex Frankfurt AG (Eurex) is the administrating and operating institution of Eurex Deutschland. Eurex Deutschland is in the following referred to as the “Eurex Exchange”.

All intellectual property, proprietary and other rights and interests in this publication and the subject matter hereof (other than certain trademarks and service marks listed below) are owned by DBAG and its affiliates and subsidiaries including, without limitation, all patent, registered design, copyright, trademark and service mark rights. While reasonable care has been taken in the preparation of this publication to provide details that are accurate and not misleading at the time of publication DBAG, Clearstream, Eurex, Eurex Clearing, Eurex Repo as well as the Eurex Exchange and their respective servants and agents (a) do not make any representations or warranties regarding the information contained herein, whether express or implied, including without limitation any implied warranty of merchantability or fitness for a particular purpose or any warranty with respect to the accuracy, correctness, quality, completeness or timeliness of such information, and (b) shall not be responsible or liable for any third party’s use of any information contained herein under any circumstances, including, without limitation, in connection with actual trading or otherwise or for any errors or omissions contained in this publication.

This publication is published for information purposes only and shall not constitute investment advice respectively does not constitute an offer, solicitation or recommendation to acquire or dispose of any investment or to engage in any other transaction. This publication is not intended for solicitation purposes but only for use as general information.
All descriptions, examples and calculations contained in this publication are for illustrative purposes only.

Eurex and Eurex Clearing offer services directly to members of the Eurex Exchange respectively to clearing members of Eurex Clearing. Those who desire to trade any products available on the Eurex market or who desire to offer and sell any such products to others or who desire to possess a clearing license of Eurex Clearing in order to participate in the clearing process provided by Eurex Clearing, should consider legal and regulatory requirements of those jurisdictions relevant to them, as well as the risks associated with such products, before doing so.

Only Eurex derivatives that are CFTC-approved may be traded via direct access in the United States or by United States persons. A complete, up-to-date list of Eurex derivatives that are CFTC-approved is available at: http://www.eurexchange.com/exchange-en/products/eurex-derivatives-us. In addition, Eurex representatives and participants may familiarise U.S. Qualified Institutional Buyers (QIBs) and broker-dealers with certain eligible Eurex

equity options and equity index options pursuant to the terms of the SEC’s July 1, 2013 Class No-Action Relief. A complete, up-to-date list of Eurex options that are eligible under the SEC Class No-Action Relief is available at: http://www.eurexchange.com/exchange-en/products/eurex-derivatives-us/eurex-options-in-the-us-for-eligible-customers... Lastly, U.S. QIBs and broker-dealers trading on behalf of QIBs may trade certain single-security futures and narrow-based security index futures subject to terms and conditions of the SEC’s Exchange Act Release No. 60,194 (June 30, 2009), 74 Fed. Reg. 32,200 (July 7, 2009) and the CFTC’s Division of Clearing and Intermediary Oversight Advisory Concerning the Offer and Sale of Foreign Security Futures Products to Customers Located in the United States (June 8, 2010).

Trademarks and Service Marks

Buxl®, DAX®, DivDAX®, eb.rexx®, Eurex®, Eurex Repo®, Eurex Strategy WizardSM, Euro GC Pooling®, FDAX®, FWB®, GC Pooling®,,GCPI®, MDAX®, ODAX®, SDAX®, TecDAX®, USD GC Pooling®, VDAX®, VDAX-NEW® and Xetra® are registered trademarks of DBAG. All MSCI indexes are service marks and the exclusive property of MSCI Barra. ATX®, ATX® five, CECE® and RDX® are registered trademarks of Vienna Stock Exchange AG. IPD® UK Quarterly Indexes are registered trademarks of Investment Property Databank Ltd. IPD and have been licensed for the use by Eurex for derivatives. SLI®, SMI® and SMIM® are registered trademarks of SIX Swiss Exchange AG. The STOXX® indexes, the data included therein and the trademarks used in the index names are the intellectual property of STOXX Limited and/or its licensors Eurex derivatives based on the STOXX® indexes are in no way sponsored, endorsed, sold or promoted by STOXX and its licensors and neither STOXX nor its licensors shall have any liability with respect thereto. Bloomberg Commodity IndexSM and any related sub-indexes are service marks of Bloomberg L.P. PCS® and Property Claim Services® are registered trademarks of ISO Services, Inc. Korea Exchange, KRX, KOSPI and KOSPI 200 are registered trademarks of Korea Exchange Inc. BSE and SENSEX are trademarks/service marks of Bombay Stock Exchange (BSE) and all rights accruing from the same, statutory or otherwise, wholly vest with BSE. Any violation of the above would constitute an offence under the laws of India and international treaties governing the same.
The names of other companies and third party products may be trademarks or service marks of their respective owners.

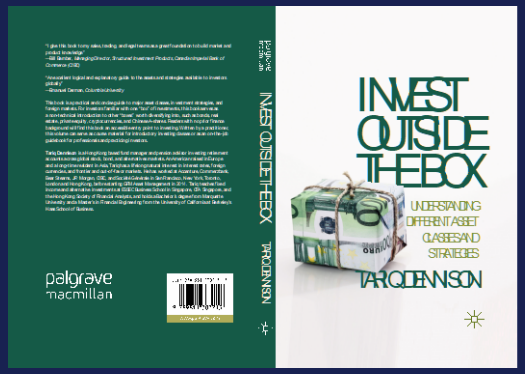
Eurex Deutschland qualifies as manufacturer of packaged retail and insurance-based investment products (PRIIPs) under Regulation (EU) No 1286/2014 on key information documents for packaged retail and insurance-based investment products (PRIIPs Regulation), and provides key information documents (KIDs) covering PRIIPs traded on Eurex Deutschland on its website under the following link: http://www.eurexchange.com/exchange-en/resources/regulations/eu-regulations/priips-kids.

In addition, according to Art. 14(1) PRIIPs Regulation the person advising on, or selling, a PRIIP shall provide the KID to retail investors free of charge.

Eurex is not affiliated with Interactive Brokers LLC, or any other FINRA broker-dealer.

About Tariq Dennison TEP CFP^{CM}

- Hong Kong & US Advisor Managing Accounts on the IBKR platform
  - US Advisor: GFM Asset Management LLC
  - HK Advisor: GFM Group Limited
- In the market since 1998
  - Commerzbank (NY, London, Frankfurt)
  - Bear Stearns (NY)
  - J.P. Morgan (NY)
  - Canadian Imperial Bank of Commerce
  - Societe Generale (HK)
- Masters in Financial Engineering
  - University of California at Berkeley
- Lecturer at ESSEC Singapore
  - Fixed Income
  - Alternative Assets
- Focus on US-Asia corridor
- Author “Invest Outside the Box”



© 2020 GFM Group

Fundamentals & Futures

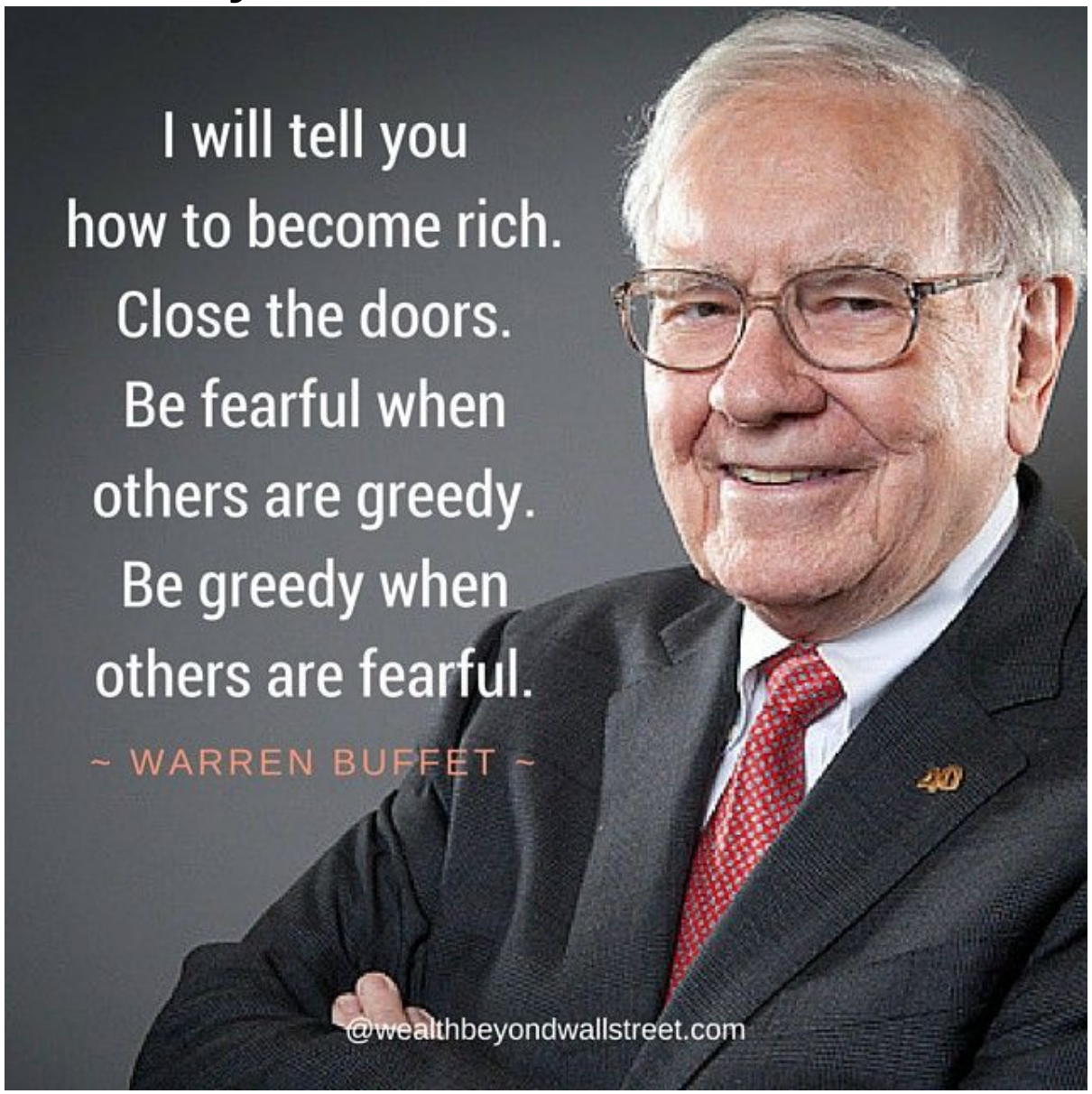
- Basics of Options & Vol
- What is the VSTOXX
- History of the Index vs Futures
- Short term tactical vs long term premium strategies

Futures and Strategies

- Sample VSTOXX Index Futures trade
- Note on margin limits
- Yes, there are options
- 20h/day trading and other news

© 2020 GFM Group

Long term history of the VIX index…



Source: https://www.pinterest.com/pin/511088257691497216/

© 2020 GFM Group

So How Do You Know When Others Are Fearful?

© 2020 GFM Group

Fortunately, there’s a market for fear vs greed…

ESTX50 INDEX Calls and Puts — 3445.82 +17.62 (+0.51%)

NOV 20 '20 (7 DAYS) | DEC 18 '20 (35 DAYS) | JAN 15 '21 (63 DAYS) | FEB 19 '21 (98 DAYS) | MORE

TABBED VIEW | 3.5 SD | DTB | OESX | 10 | IV: 19.8%

CALLS							STRIKE	PUTS						
OPTN ...	VOLUME	BID S...	BID x ASK	DELTA	IMPLD...	ASK S...		OPTN ...	VOLUME	BID S...	BID x ASK	DELTA	IMPLD...	ASK S...
153K		250	356.20 x 360.80	0.896	27.6%	250	3100	234K	12	1,176	15.70 x 16.30	-0.104	28%	1,651
3.45K	43	250	333.10 x 337.60	0.884	27%	250	3125	29.2K	43	608	17.60 x 18.10	-0.116	27.3%	425
66.9K		250	310.40 x 314.60	0.869	26.4%	250	3150	215K	231	19	19.80 x 20.40	-0.131	26.6%	1,093
7.90K		250	288.00 x 292.00	0.854	25.7%	250	3175	37.0K	418	575	22.20 x 22.80	-0.146	26%	578
266K	100	250	265.90 x 269.80	0.836	25%	250	3200	334K	56	373	25.10 x 25.70	-0.164	25.6%	822
8.52K		451	244.30 x 247.90	0.816	24.3%	451	3225	36.9K	155	1,295	28.30 x 29.00	-0.184	24.8%	1,167
146K	20	451	223.10 x 226.70	0.793	23.9%	250	3250	141K	1.21K	740	32.00 x 32.70	-0.207	24.2%	1,117
25.3K		450	203.20 x 206.00	0.768	23.2%	250	3275	15.9K	249	1,025	36.20 x 36.80	-0.232	23.6%	18
319K	5	451	182.90 x 185.20	0.740	22.7%	451	3300	217K	1.02K	300	41.10 x 41.90	-0.260	23.2%	923
28.8K	100	450	163.50 x 165.60	0.708	22%	451	3325	13.4K	77	300	46.60 x 47.30	-0.292	22.5%	15
112K		451	144.50 x 147.00	0.674	21.5%	451	3350	81.7K	63	740	52.80 x 53.60	-0.326	22%	25
13.3K		451	126.90 x 129.30	0.636	21.1%	451	3375	7.24K		502	59.90 x 60.90	-0.364	21.3%	451
317K	21	451	110.40 x 112.00	0.595	20.5%	250	3400	254K	1.29K	250	68.10 x 69.10	-0.405	20.7%	250
21.5K	361	250	94.60 x 96.10	0.551	20%	451	3425	5.50K	10	500	77.20 x 78.40	-0.449	20.2%	452
91.9K	117	259	80.10 x 81.40	0.504	19.5%	450	3450	74.8K	1	500	87.50 x 89.00	-0.496	19.7%	450
29.0K	11	253	66.80 x 68.10	0.455	18.9%	451	3475	989	5	250	99.40 x 100.70	-0.545	19.3%	250
206K	1.09K	250	55.10 x 56.10	0.405	18.7%	470	3500	128K		406	112.00 x 114.20	-0.595	19.1%	451
27.5K	568	451	44.80 x 45.70	0.355	18.2%	250	3525	163		451	126.80 x 128.80	-0.645	18.5%	450
133K	221	715	35.90 x 36.80	0.307	18%	1,022	3550	64.2K		451	142.70 x 144.80	-0.693	18.2%	250
10.2K	73	451	28.50 x 29.20	0.261	17.8%	1,042	3575	77		451	160.00 x 163.20	-0.739	18.1%	451
344K	546	950	22.30 x 23.00	0.218	17.5%	558	3600	209K		250	178.10 x 182.20	-0.782	17.8%	250
12.0K	546	767	17.30 x 17.90	0.180	17.3%	574	3625	20		250	198.20 x 201.90	-0.820	17.6%	250
89.8K	708	38	13.40 x 13.90	0.147	17.2%	645	3650	31.3K		250	219.20 x 223.70	-0.853	17.8%	250
4.66K	116	1,150	10.30 x 10.80	0.119	17.2%	815	3675	20		250	240.90 x 246.00	-0.881	17.9%	250
151K	648	1,424	7.90 x 8.30	0.096	17.2%	362	3700	143K		250	263.30 x 267.80	-0.904	18%	250
26.3K	15	166	6.20 x 6.50	0.077	17.3%	774	3725	40		250	286.60 x 291.10	-0.923	18.2%	250
69.6K	61	176	4.80 x 5.10	0.062	17.3%	727	3750	31.2K		250	310.20 x 314.70	-0.938	18.5%	250
5.12K	10	1,556	3.70 x 4.00	0.050	17.6%	545	3775	5		250	334.10 x 338.70	-0.950	18.7%	250
145K	753	58	3.00 x 3.20	0.041	17.9%	150	3800	87.3K		250	358.10 x 363.00	-0.959	19.2%	250
2.42K		818	2.30 x 2.60	0.033	18%	598	3825			250	382.50 x 387.40	-0.967	19.6%	250

Source: Quandl

© 2020 GFM Group

Options in a nutshell:

Call options give you all the upside above the strike for a fixed premium.

Put options pay you point for point for declines below the strike, again, for a fixed premium.

Option Price = f(Price , Strike, Tenor, Rates, Volatility)

Source: Quandl

© 2020 GFM Group

Three Most Important Option “Greeks” For Us:

Delta: Change in option price vs change in index

Theta: ”Time Decay”, i.e. how much value an option loses each minute the market doesn’t move

Vega: Change in option price vs change in implied volatility

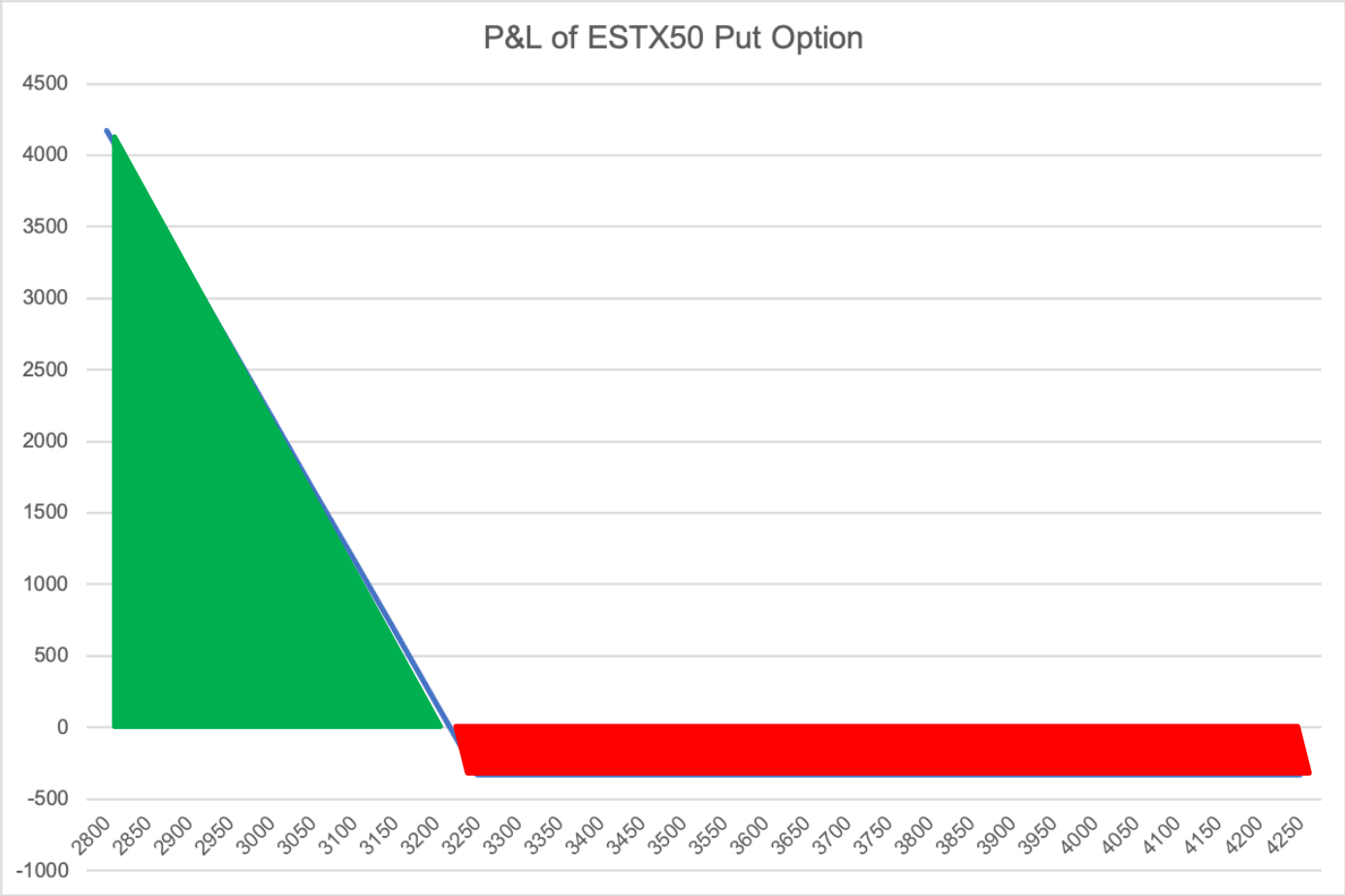
There are dozens of option strategies to enhance yield and manage risk, but here we’ll focus mostly on the volatility component of options…

Source: Quandl

© 2020 GFM Group

Sample numbers for put option:

ESTX50 at 3,445, pay a premium of €327 to receive €10/point if index < 3,250 on December 18th. This was a “20 delta” option priced at “24.2% vol”



A few things to remember about implied volatility:

Implied volatility must match for call and put of the same expiry and strike.

Lower strikes tend to have higher implied volatility than higher strikes. This “skew” reflects fear of crashes.

“Term structure” of volatility is ”normally upward sloping”, but inverts during short-term panics.

Source: Quandl

© 2020 GFM Group

The VSTOXX Index: Weight the options to simulate a “log contract”

Date	Index ISIN	Index na	Strike	Maturity	Weight	Option ty
11.11.2020	DE000A0C3QF1	VSTOXX	3375	20.11.2020	0.36%	PUT
11.11.2020	DE000A0C3QF1	VSTOXX	3400	20.11.2020	0.46%	PUT
11.11.2020	DE000A0C3QF1	VSTOXX	3425	20.11.2020	0.59%	PUT
11.11.2020	DE000A0C3QF1	VSTOXX	3450	20.11.2020	1.03%	CALL/PUT
11.11.2020	DE000A0C3QF1	VSTOXX	3475	20.11.2020	0.94%	CALL
11.11.2020	DE000A0C3QF1	VSTOXX	3500	20.11.2020	0.66%	CALL
11.11.2020	DE000A0C3QF1	VSTOXX	3525	20.11.2020	0.45%	CALL
11.11.2020	DE000A0C3QF1	VSTOXX	3550	20.11.2020	0.30%	CALL
11.11.2020	DE000A0C3QF1	VSTOXX	2600	18.12.2020	0.32%	PUT
11.11.2020	DE000A0C3QF1	VSTOXX	2625	18.12.2020	0.34%	PUT
11.11.2020	DE000A0C3QF1	VSTOXX	2650	18.12.2020	0.36%	PUT
11.11.2020	DE000A0C3QF1	VSTOXX	2675	18.12.2020	0.37%	PUT
11.11.2020	DE000A0C3QF1	VSTOXX	2700	18.12.2020	0.42%	PUT
11.11.2020	DE000A0C3QF1	VSTOXX	2725	18.12.2020	0.45%	PUT
11.11.2020	DE000A0C3QF1	VSTOXX	2750	18.12.2020	0.49%	PUT
11.11.2020	DE000A0C3QF1	VSTOXX	2775	18.12.2020	0.52%	PUT
11.11.2020	DE000A0C3QF1	VSTOXX	2800	18.12.2020	0.57%	PUT
11.11.2020	DE000A0C3QF1	VSTOXX	2825	18.12.2020	0.60%	PUT
11.11.2020	DE000A0C3QF1	VSTOXX	2850	18.12.2020	0.64%	PUT
11.11.2020	DE000A0C3QF1	VSTOXX	2875	18.12.2020	0.69%	PUT
11.11.2020	DE000A0C3QF1	VSTOXX	2900	18.12.2020	0.74%	PUT
11.11.2020	DE000A0C3QF1	VSTOXX	2925	18.12.2020	0.79%	PUT
11.11.2020	DE000A0C3QF1	VSTOXX	2950	18.12.2020	0.85%	PUT
11.11.2020	DE000A0C3QF1	VSTOXX	2975	18.12.2020	0.92%	PUT
11.11.2020	DE000A0C3QF1	VSTOXX	3000	18.12.2020	1.00%	PUT
11.11.2020	DE000A0C3QF1	VSTOXX	3025	18.12.2020	1.06%	PUT
11.11.2020	DE000A0C3QF1	VSTOXX	3050	18.12.2020	1.15%	PUT
11.11.2020	DE000A0C3QF1	VSTOXX	3075	18.12.2020	1.25%	PUT
11.11.2020	DE000A0C3QF1	VSTOXX	3100	18.12.2020	1.37%	PUT
11.11.2020	DE000A0C3QF1	VSTOXX	3125	18.12.2020	1.49%	PUT
11.11.2020	DE000A0C3QF1	VSTOXX	3150	18.12.2020	1.62%	PUT
11.11.2020	DE000A0C3QF1	VSTOXX	3175	18.12.2020	1.78%	PUT
11.11.2020	DE000A0C3QF1	VSTOXX	3200	18.12.2020	1.97%	PUT
11.11.2020	DE000A0C3QF1	VSTOXX	3225	18.12.2020	2.17%	PUT
11.11.2020	DE000A0C3QF1	VSTOXX	3250	18.12.2020	2.39%	PUT
11.11.2020	DE000A0C3QF1	VSTOXX	3275	18.12.2020	2.65%	PUT
11.11.2020	DE000A0C3QF1	VSTOXX	3300	18.12.2020	2.96%	PUT
11.11.2020	DE000A0C3QF1	VSTOXX	3325	18.12.2020	3.29%	PUT
11.11.2020	DE000A0C3QF1	VSTOXX	3350	18.12.2020	3.67%	PUT
11.11.2020	DE000A0C3QF1	VSTOXX	3375	18.12.2020	4.08%	PUT
11.11.2020	DE000A0C3QF1	VSTOXX	3400	18.12.2020	4.59%	PUT
11.11.2020	DE000A0C3QF1	VSTOXX	3425	18.12.2020	5.09%	PUT
11.11.2020	DE000A0C3QF1	VSTOXX	3450	18.12.2020	6.36%	CALL/PUT
11.11.2020	DE000A0C3QF1	VSTOXX	3475	18.12.2020	5.90%	CALL
11.11.2020	DE000A0C3QF1	VSTOXX	3500	18.12.2020	4.90%	CALL
11.11.2020	DE000A0C3QF1	VSTOXX	3525	18.12.2020	4.02%	CALL
11.11.2020	DE000A0C3QF1	VSTOXX	3550	18.12.2020	3.26%	CALL
11.11.2020	DE000A0C3QF1	VSTOXX	3575	18.12.2020	2.60%	CALL
11.11.2020	DE000A0C3QF1	VSTOXX	3600	18.12.2020	2.08%	CALL
11.11.2020	DE000A0C3QF1	VSTOXX	3625	18.12.2020	1.63%	CALL
11.11.2020	DE000A0C3QF1	VSTOXX	3650	18.12.2020	1.29%	CALL
11.11.2020	DE000A0C3QF1	VSTOXX	3675	18.12.2020	1.01%	CALL
11.11.2020	DE000A0C3QF1	VSTOXX	3700	18.12.2020	0.79%	CALL
11.11.2020	DE000A0C3QF1	VSTOXX	3725	18.12.2020	0.62%	CALL
11.11.2020	DE000A0C3QF1	VSTOXX	3750	18.12.2020	0.49%	CALL
11.11.2020	DE000A0C3QF1	VSTOXX	3775	18.12.2020	0.39%	CALL
11.11.2020	DE000A0C3QF1	VSTOXX	3800	18.12.2020	0.31%	CALL

Source: https://emanuelderman.com/more-than-you-ever-wanted-to-know-about-volatility-swaps-the-journal-of-der/

© 2020 GFM Group

More from that 1999 paper: Vega of an option portfolio

Consider a portfolio of standard options

$$\Pi(S) = \int_0^\infty \rho(K)\, O(S, K, v)\, dK \qquad \text{(A 1)}$$

where $O(S,K,v)$ represents a standard Black-Scholes option of strike K and total variance $v = \sigma^2\tau$ when the stock price is S.

Vega, the sensitivity to the total variance of an individual option O in this portfolio, is given by

$$V_O = \tau \frac{\partial}{\partial v}(O) = \tau S f\left(\frac{K}{S}, v\right)$$

where

$$f(S, K, v) = \frac{1}{2\sqrt{v}} \frac{\exp(-d_1^2/2)}{\sqrt{2\pi}}$$

and

$$d_1 = \frac{\ln(S/K) + v/2}{\sqrt{v}}.$$

The variance sensitivity of the whole portfolio is therefore

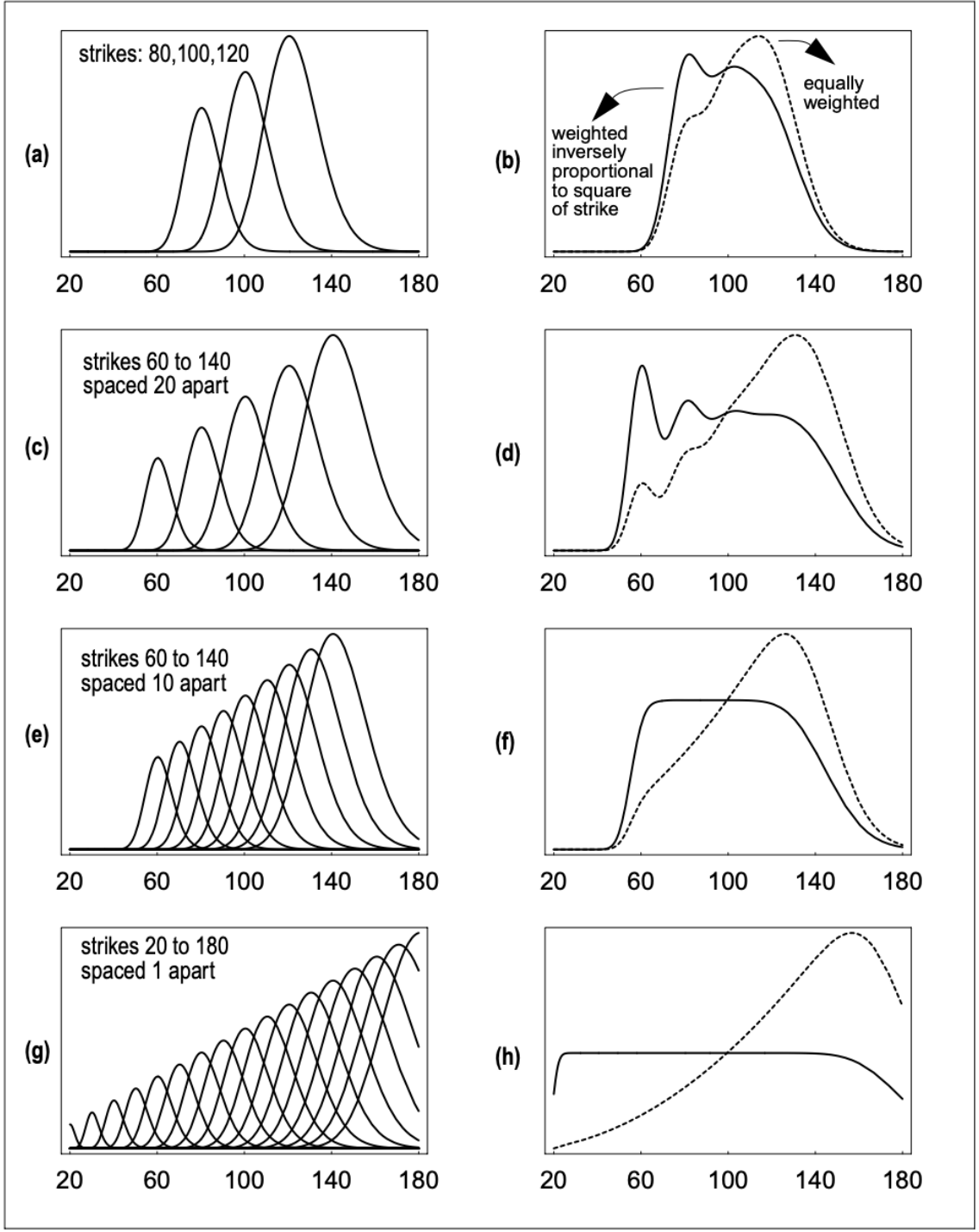
$$V_\Pi(S) = \tau \int_0^\infty \rho(K) S f\left(\frac{K}{S}, v\right) dK \qquad \text{(A 2)}$$

The sensitivity of vega to S is

$$\frac{\partial V_\Pi}{\partial S} = \tau \int_0^\infty \frac{\partial}{\partial S}[S^2 \rho(xS)]\, f(x, v)\, dx$$

$$= \tau \int_0^\infty S[2\rho(xS) + xS\rho'(xS)]\, f(x, v)\, dx$$

Source: https://emanuelderman.com/more-than-you-ever-wanted-to-know-about-volatility-swaps-the-journal-of-der/



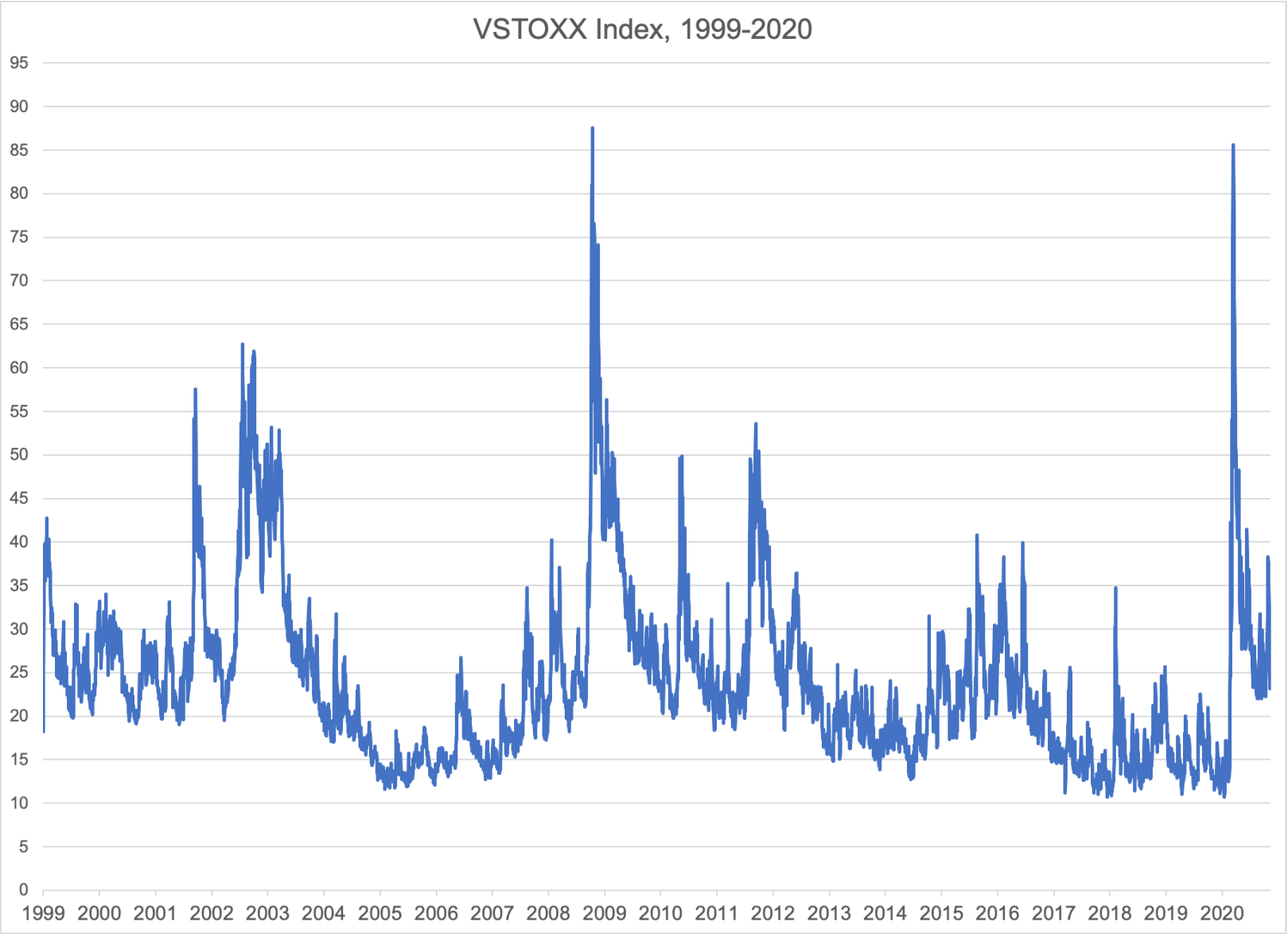
A quick snapshot of VSTOXX futures vs ESTX50

	LAST	VLM	CHANGE	
ESTX50 INDEX	3447.73		+19.53	0.57%
ESTX50 ∞ Dec18'20 ...	3445.00	184K	+13.00	0.38%
V2TX INDEX	23.14		-0.16	-0.69%
V2TX Dec16'20 @DTB	22.35	4.64K	+0.30	1.36%
V2TX Jan20'21 @DTB	22.85	1.16K	+0.15	0.66%
V2TX Feb17'21 @DTB	22.85	43	+0.35	1.56%
V2TX Mar17'21 @DTB	c22.10			
V2TX Apr21'21 @DTB	c22.20			
V2TX May19'21 @DTB	c22.30			
V2TX Jun16'21 @DTB	c22.25			

Source: Quandl

© 2020 GFM Group

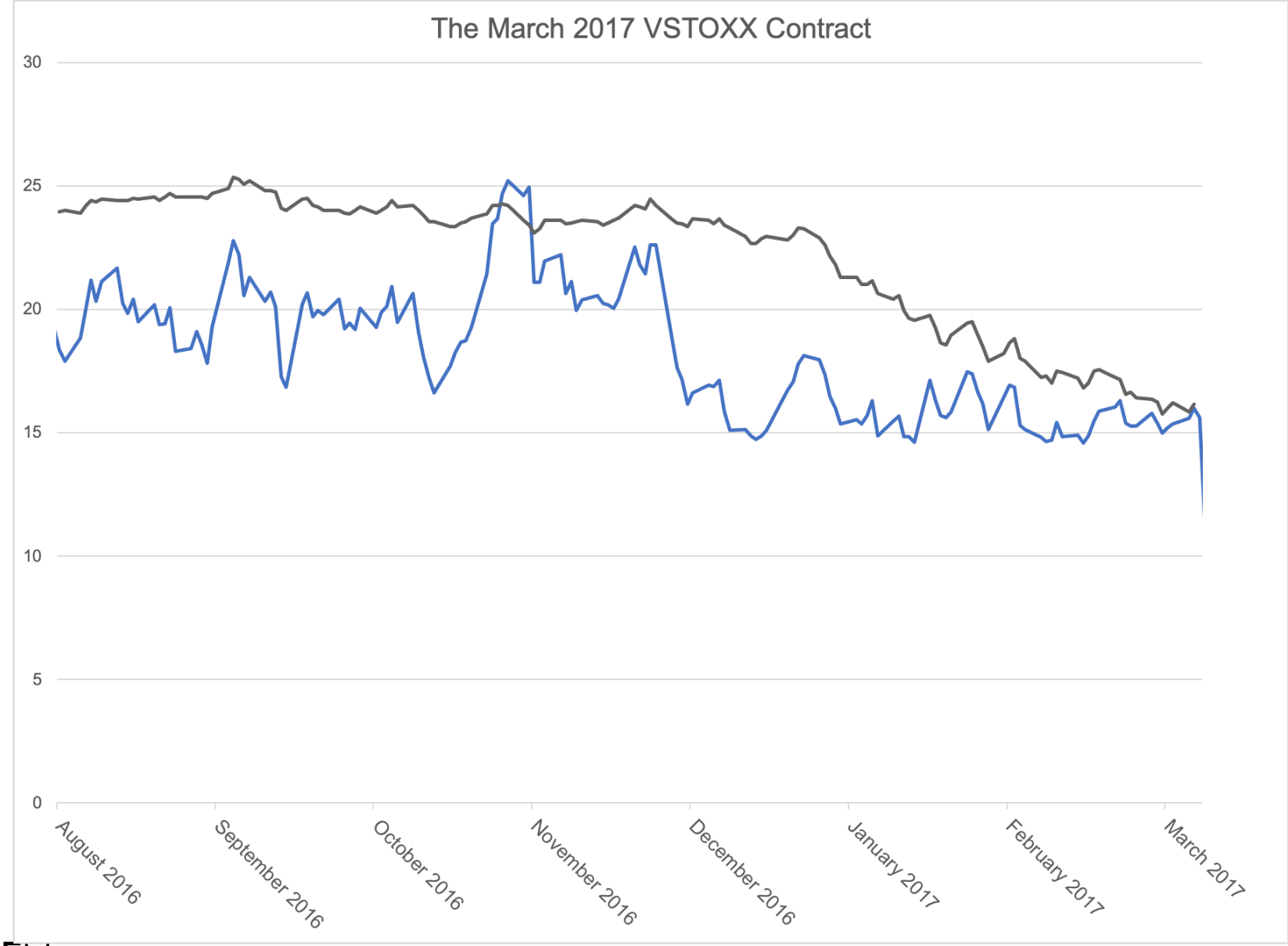
Long term history of the VSTOXX index…



Source: Quandl

© 2020 GFM Group

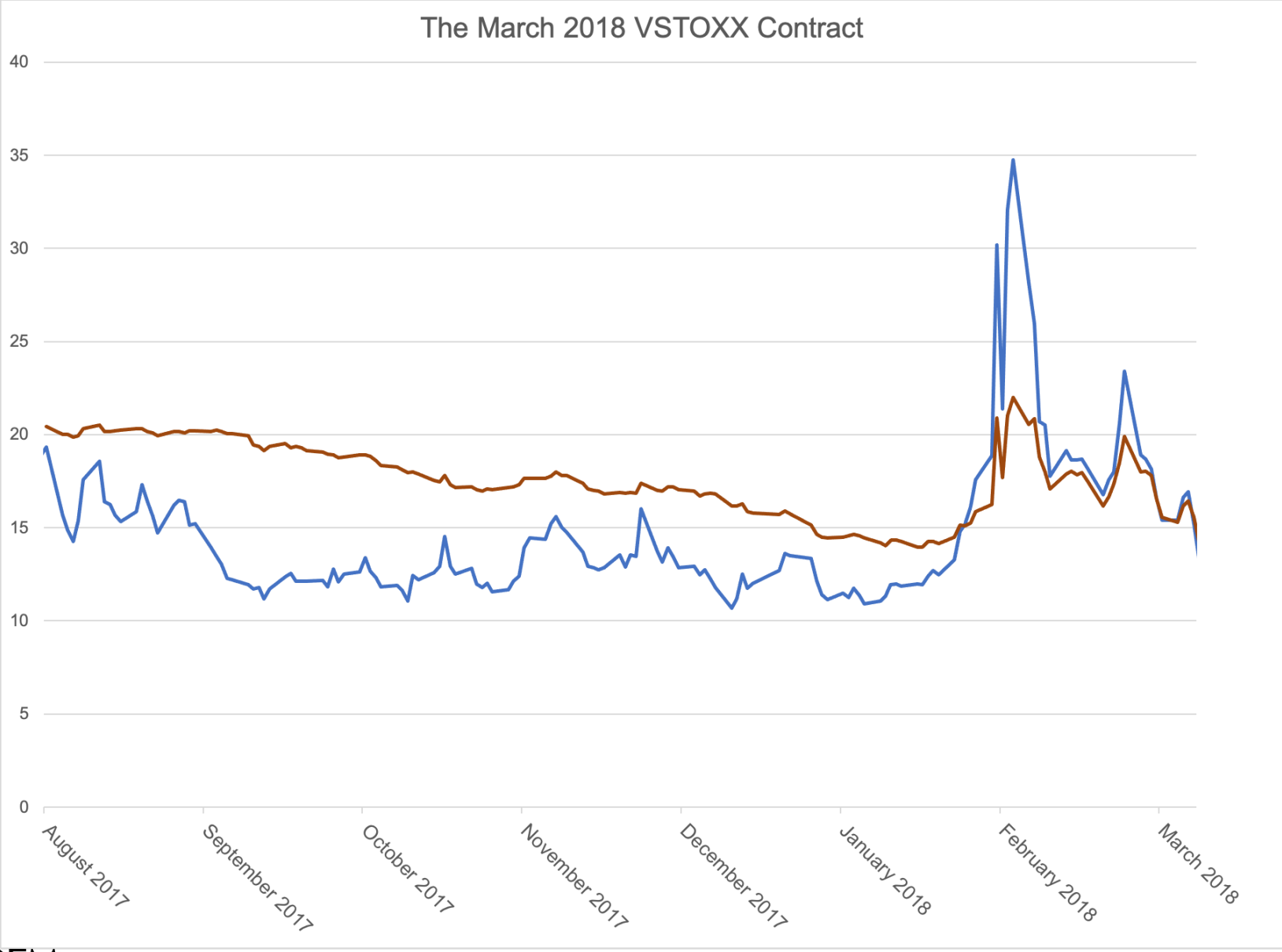
Zooming in on 2016, the VSTOXX sellers' dream…



Source: Quandl

© 2020 GFM Group

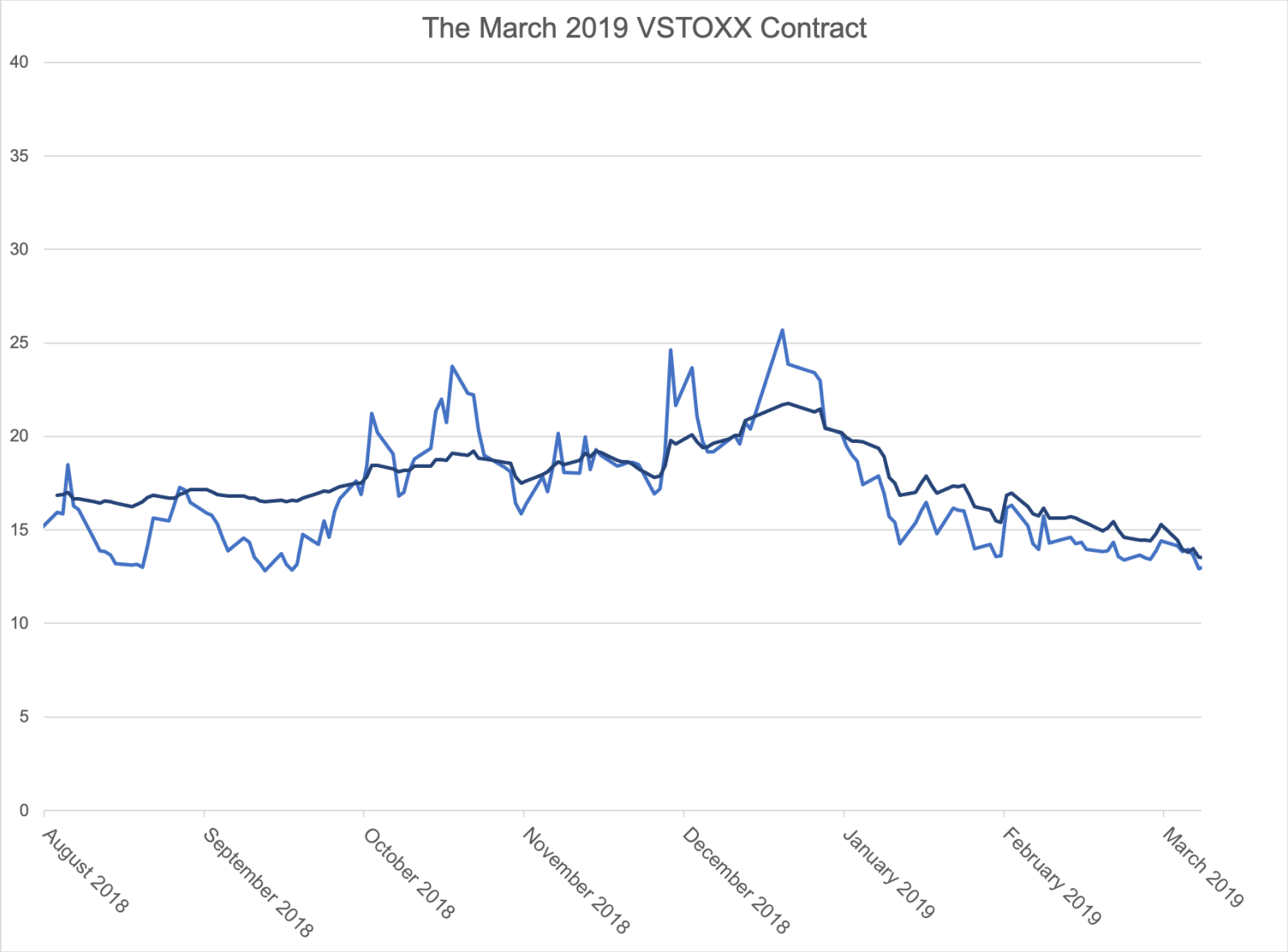
Feb 2018: “Volmageddon” spike…



Source: Quandl

© 2020 GFM Group

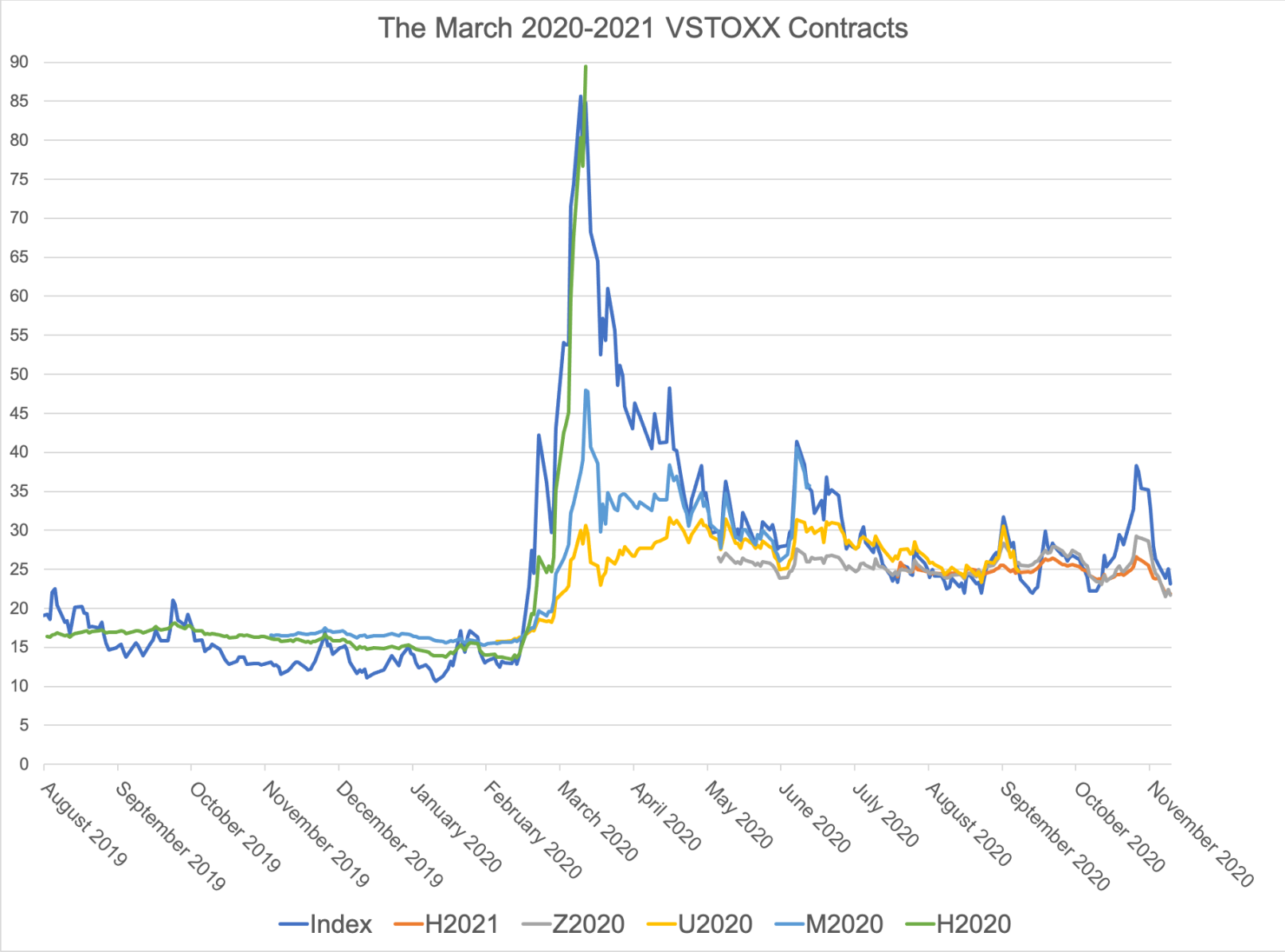
2018-2019: An “unsatisfying time” to trade VSTOXX…



Source: Quandl

© 2020 GFM Group

2020: A “textbook” year for VSTOXX traders…



Source: Quandl

© 2020 GFM Group

Yes, there are also options on this index of options…

United Kingdom ▾ Institutional Investor ▾ English ▾

iPath

BARCLAYS

Products Investor Materials Educational About us

Product Listing > iPath® VSTOXX® Short-Term Futures™ ETN

Quick links ▾

Product Search Enter Search Term

Product Summary

iPath® VSTOXX® Short-Term Futures™ ETN

Details Chart

Time Period

All 1 Year 6 months 3 months 1 month

Name	Price	Performance
iPath VSTOXX Futures ETN	0.53	-98.42%▼
EURO STOXX 50 Volatility Short-Term Futures Total Return Index	2,972.01	-98.31%▼

Performance Calculation Date: 9 Oct 2017

Price Data

Source: https://ipath.barcap.com/GB/16/en/details.app?instrumentId=60586

© 2020 GFM Group

Sample Buy vs Sell Trades → Note Margin Impact

Order Confirmation

VSTOXX Volatility Index

Financial Instrument	Bid	Ask	Last
V2TX Jan20'21 @DTB	22.90	23.00	22.85

Order Description

BUY 1

Order Type LMT | Routing DTB | Time in Force DAY | Allocation U8192292

Limit Price 22.50 | Clearing IB

Messages

You are trying to submit an order without having market data for this instrument.
IB strongly recommends against this kind of blind trading which may result in erroneous or unexpected trades.

Amount

Amount	2,250 EUR
Commission (est.)	1.11 EUR
Total	2,251.11 EUR

Margin Impact (in USD)

	Current	Change	Post-trade*
Equity with Loan	141,419	-1	141,418
Initial Margin	47,011	1,023	48,034
Maintenance Margin	39,034	819	39,853
Position	0	1	1

*This is a current projection and is subject to change.

Don't display this message again.

Override and Transmit | Cancel

DATA POWERED BY GFIS

Order Confirmation

VSTOXX Volatility Index

Financial Instrument	Bid	As
V2TX Jan20'21 @DTB	22.90	

Order Description

SELL 1

Order Type LMT | Routing DTB | Time in Force DAY

Limit Price 23.50 | Clearing IB

Messages

You are trying to submit an order without having market data fo
IB strongly recommends against this kind of blind trading which
erroneous or unexpected trades.

Amount

Amount	2,350 EUR
Commission (est.)	1.11 EUR
Total	2,348.89 EUR

Margin Impact (in USD)

	Current	Change	Post-trade*
Equity with Loan	141,432	-1	141,431
Initial Margin	47,012	1,724	48,736
Maintenance Margin	39,035	1,380	40,415
Position	0	-1	-1

*This is a current projection and is subject to change.

Don't display this message again.

Override and Transmit | Cancel

DATA POWERED BY GFIS

Source: Interactive Brokers

© 2020 GFM Group

Strategy #1: Permanent VSTOXX Seller

Regularly roll short positions to collect the "forward fear" premium

Distantly similar to "rolling down the yield curve" with bond futures.

Decent premium in "most" years, with high blow up risk as we've seen, especially in shorter contracts.

Some may prefer to sell 6mo, buy back at 3mo, and roll that part of the curve

Source: Quandl

© 2020 GFM Group

VSTOXX® Short-Term Futures Inverse Investable

The VSTOXX® Short-Term Futures Inverse Investable Index replicates the performance of a short position in constant-maturity one-month forward, one-month implied volatilities on the underlying EURO STOXX 50® Index. The index continuously rolls over on a daily basis from a short position in the first month VSTOXX Futures contract to a short position in the second month contract while taking into account the bid-ask spread in the roll procedure.

Jun. 04, 2009 | Nov. 23, 2020

*** Chart displays Closing High and Closing Low*

Source: https://www.stoxx.com/index-details?symbol=VST1MISE

© 2020 GFM Group

Strategy #2: The Timely Buyer

Buy 1-3 month futures only around critical events as an alternative to buying puts

Need to have a well-prepared exit strategy in case that spike does happen!

Source: Quandl

© 2020 GFM Group

Strategy #3: The Curve Trader

May try and have a “vega neutral” strategy while instead focusing on changes in term structure

Now that the curve is flat to inverted, 3-6month “steepener” trades may be appealing

Source: Quandl

© 2020 GFM Group

Yes, there are also options on this index of options…

V2TX Jan20'21 @DTB Calls and Puts — 22.85 +0.15 (+0.66%)

NOV / NOV (5 DAYS) | DEC / DEC (33 DAYS) | JAN'21 / JAN'21 (68 DAYS) | FEB'21 / FEB'21 (96 DAYS) | MORE

TABBED VIEW | 3.5 SD | DTB | OVS2 | 100

IV: 80.1%

CALLS									STRIKE	PUTS								
OPTN …	VOLUME	BID SI…	BID x ASK		DELTA	IMPLD…	ASK S…			OPTN …	VOLUME	BID SI…	BID x ASK		DELTA	IMPLD…	ASK S…	
			x		0.986				13.5				x 0.100		-0.013		1,500	
			x		0.978				14				x 0.125		-0.022		1,500	
			x		0.970				14.5				x 0.125		-0.030		1,500	
			x		0.960				15			1,500	0.025 x 0.150		-0.039	58.5%	1,500	
		200	6.750 x 7.400		0.931		200		16			1,500	0.100 x 0.250		-0.069	58.4%	1,500	
		200	5.925 x 6.500		0.890		200		17			1,100	0.275 x 0.425		-0.110	60.2%	1,300	
		401	5.250 x 5.750		0.837		200		18			850	0.525 x 0.675		-0.163	63.5%	1,050	
		401	4.600 x 5.050		0.775		401		19			700	0.875 x 1.025		-0.225	66.9%	200	
		350	4.125 x 4.475		0.713	73.2%	200		20			801	1.300 x 1.475		-0.286	70.5%	200	
		601	3.675 x 4.000		0.654	75.6%	400		21			750	1.825 x 2.025		-0.345	73.1%	200	
		651	3.300 x 3.600		0.600	79.2%	200		22			901	2.425 x 2.650		-0.400	76.7%	401	
		651	2.975 x 3.225		0.552	81.9%	200		23			1,000	3.100 x 3.350		-0.448	80.3%	200	
		701	2.725 x 2.950		0.508	85.6%	200		24			500	3.825 x 4.125		-0.492	83.8%	700	
		901	2.475 x 2.700		0.469	88.6%	401		25			450	4.575 x 4.900		-0.530	85.7%	450	
		901	2.275 x 2.500		0.435	91.1%	401		26			450	5.350 x 5.700		-0.564	88.9%	450	
		901	2.100 x 2.300		0.405	93.9%	401		27			400	6.175 x 6.525		-0.595	90.8%	400	
		901	1.950 x 2.150		0.377	96%	401		28			400	7.000 x 7.350		-0.622	93.4%	400	
		750	1.800 x 2.000		0.353	97.5%	200		29			400	7.850 x 8.200		-0.646	95.6%	400	
		200	1.700 x 1.900		0.332	99.7%	750		30			350	8.725 x 9.075		-0.668	97.9%	350	
	150	50	1.600 x 1.675		0.300	106%	550		32			350	10.500 x 10.875		-0.700	102.5%	350	
		200	1.325 x 1.500		0.263	108.1%	600		34			200	12.000 x 13.150		-0.737	105.7%	200	

Source: Quandl

© 2020 GFM Group

Now, some details from Eurex's Chih-Chao

© 2020 GFM Group

EUREX Architects of trusted markets

VSTOXX 101 Webinar

Understanding and Using Europe's VIX

2nd December 2020

Deutsche Börse Group

Offers trading and clearing of European and international derivatives products

Trading → Clearing

Eurex
Derivatives Exchange
Frankfurt

EEX
European Energy
Exchange Leipzig/
Germany

Eurex Clearing
Clearing House and CCP Frankfurt

Trading & Clearing

More than 2,400 products covering major and alternative asset classes

More than 350 participants and **8,000 traders** in over **30 countries**

No execution risk (CCP) when members enter large volume of off-order book trades through Eurex Trade Entry Services

Marketplace:

- Innovative IT infrastructure
- Heavily traded EUR-denominated equity, equity index and fixed income derivatives

Members:

Direct clearing and trading

- Direct-Clearing Members (DCMs)
- General-Clearing Members (GCMs)

Trading participation

- Direct-Clearing Market Participants (DCMPs)

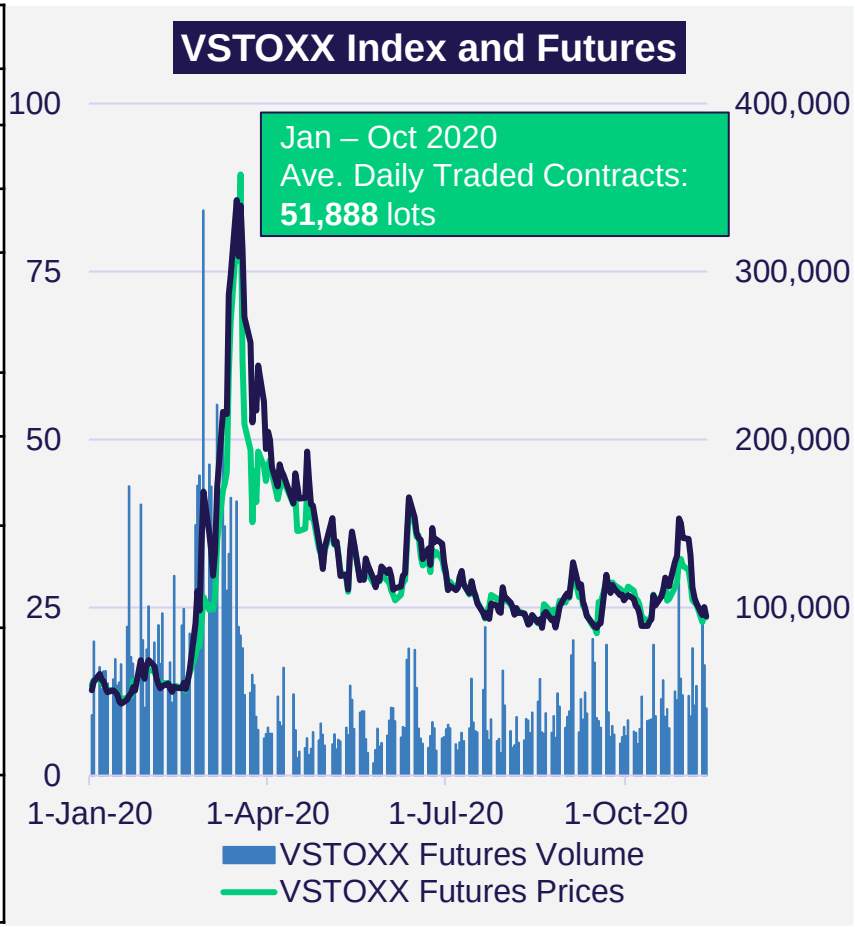
Trading hours:

1am – 10pm Central European Time (CET)*
2am – 10pm Central European Summer Time (CEST)*

* Consists of pre-trading, trading phases

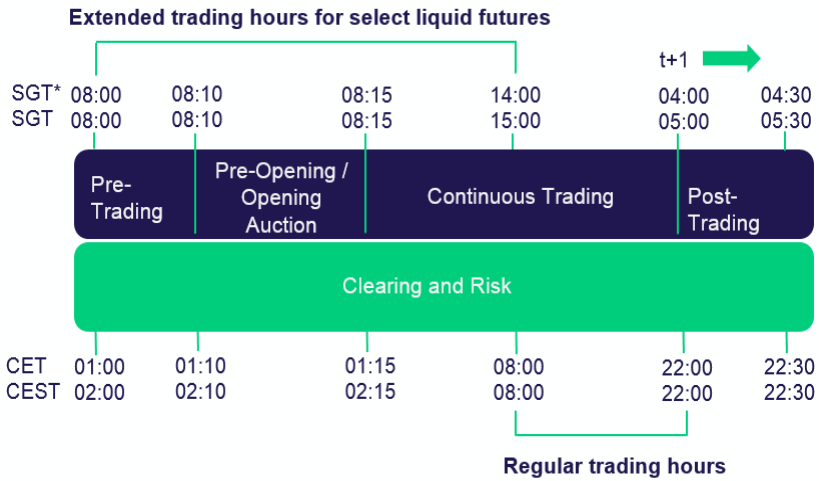
VSTOXX® Futures

Product Name	VSTOXX® Futures
IB Product Code	V2TX
Underlying	VSTOXX® Index
Contract Value	EUR 100 per index point
Minimum Price Change	0.25 points, equivalent to a value of EUR 5
Contract Months	The next eight successive calendar months
Settlement	Cash settlement
Daily Settlement Price	Determined during the closing auction of the respective futures contract
Final Settlement Price	Average of the VSTOXX® values on the Last Trading Day between 11:30 and 12:00 CET
Last Trading Day and Final Settlement Day	30 calendar days prior to the 3rd Friday of the expiration month of the underlying options.



Trading Hours Extension

Extended trading hours. Extended opportunities.



Extended trading hours always commence at 08:00 a.m. Singapore, Hong Kong and China Standard Time: UTC +8h

- Eurex extended its trading hours on 10th December 2018 to provide coverage during the Asian time zones
- Products in Scope: Select liquid benchmark futures and 136 MSCI Index Futures
- Market opening is at 8am SGT; End of trading & clearing day unchanged
- TES entry services (Block-, EFP-, EFS trades) available from 08:15am SGT
- Open GTC/GTD orders in THX relevant Futures can be executed in Asian Hours

*Singapore time during Central European Summer Time. Time difference: SGT/CET + 7h; SGT/CEST: +6h
**To optimize overnight processing, as of 25 Feb 2019, the post-trading phase is reduced from 30 mins to 10 min (22:00 CET to 22:10 CET).
The clearing services are not impacted and will continue to be available until 22:30 CET.

Development of the Trading Hours (1/2)

Eurex Trading Hours Extension offers attractive spreads and liquidity in European Benchmark products during Asian Hours.

Eurex offers attractive spreads during Asian Hours:

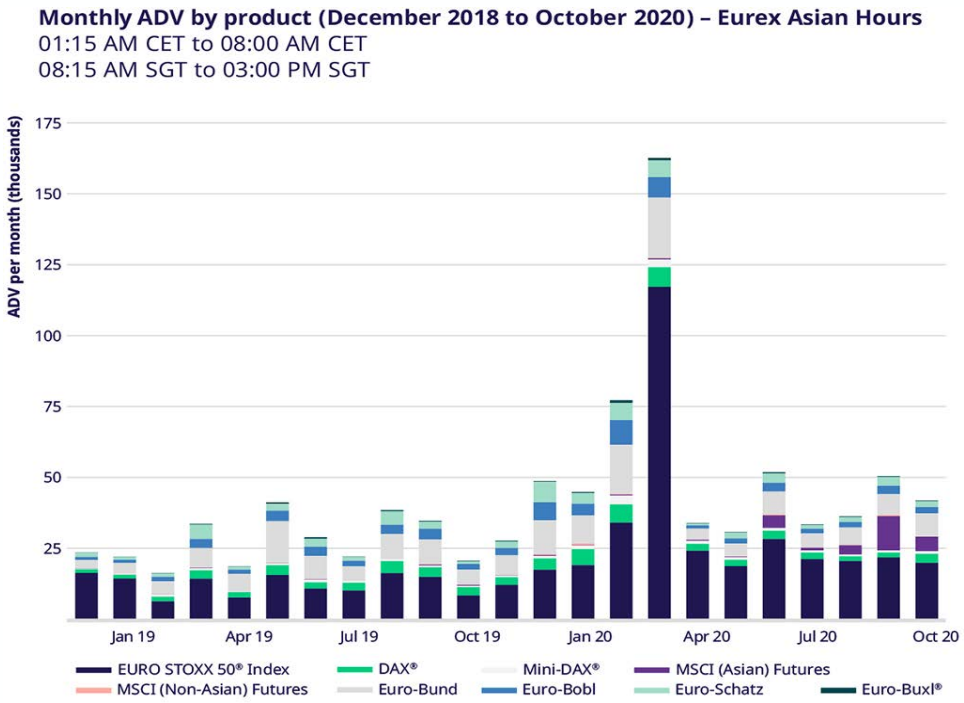
Product	Asian Hours	Core Hours
EURO STOXX 50®	1 tick	1 tick
DAX®	3 ticks	2 ticks
Mini-DAX®	5 ticks	2 ticks
Euro-Bund	1 tick	1 tick
Euro-Bobl	1 tick	1 tick
Euro-Schatz	1 tick	1 tick
Euro-Buxl®	3 ticks	2 ticks

Product	October 2020 Asian Hours Volume	October 2020 Asian Hours ADV	Notional Volume in USD Millions	% Off-book	% Agency	% Asian hours	October 2019 Asian Hours Volume	October 2019 Asian Hours ADV	%YoY ADV Growth	Accumulated Volume 2020
EURO STOXX 50® Index	439,548	19,979	15,450	0.0%	31.9%	2.1%	195,128	8,484	136%	7,013,980
DAX®	70,089	3,186	24,444	0.0%	26.4%	3.7%	67,586	2,939	8%	753,940
Mini-DAX®	19,046	866	1,331	0.0%	31.3%	1.6%	10,512	457	89%	275,898
MSCI (Asian) Futures	114,123	5,187	6,351	99.2%	98.2%	54.3%	8,945	389	1234%	600,921
MSCI EM Asia	63,005	2,864	4,011	99.6%	98.1%	44.5%	7,280	317	805%	293,492
MSCI Japan	2,772	126	234	99.9%	99.9%	44.8%	96	4	2919%	149,226
MSCI China Free	6,001	273	322	90.4%	86.9%	59.8%	1,238	54	407%	35,092
MSCI Australia	12,713	578	475	100.0%	100.0%	100.0%	0	0	-	50,610
Others	29,632	1,347	1,310	99.6%	99.8%	75.4%	331	14	9259%	72,501
MSCI (Non-Asian) Futures	1,391	63	64	3.3%	46.2%	0.5%	1,274	55	14%	47,293
Euro-Bund	177,586	8,072	34,872	0.0%	33.2%	1.4%	121,695	5,291	53%	1,956,515
Euro-Bobl	49,761	2,262	7,554	0.0%	23.3%	0.7%	45,582	1,982	14%	741,429
Euro-Schatz	44,495	2,023	5,601	0.0%	38.0%	0.6%	22,105	961	110%	639,706
Euro-Buxl®	6,205	282	1,568	0.0%	33.3%	0.4%	4,760	207	36%	88,089
Grand Total	922,244	41,920	97,236	12.3%	39.8%	1.7%	477,587	20,765	102%	12,117,771

Data from: 10th December 2018 – 31st October 2020

Development of the Trading Hours (2/2)

Eurex Trading Hours Extension offers attractive spreads and liquidity in European Benchmark products during Asian Hours.



Embarking on Phase II

Extending further products into APAC time zones

- On 7th December 2020, the trading hours for 4 additional Eurex Derivatives are to be extended into the Asian Trading Hours.
  - **VSTOXX® Futures**
    - Eurex / IBKR Code: FVS / V2TX
  - **STOXX® Europe 600 Futures**
    - Eurex / IBKR Code: FXXP / DJ600
  - **EURO STOXX® Banks Futures**
    - Eurex Code: FESB
  - **10-year Euro-OAT Futures**
    - Eurex / IBKR Code: FOAT / OAT

Contacts

Feng Chih-Chao
Vice President,
Sales Asia
Eurex Frankfurt AG
Hong Kong Representative Office
2904-7, 29/F, Man Yee Building
68 Des Voeux Road, Central
Hong Kong
Tel: +852 2530 7802
Fax: +852 2530 7880
chih-chao.feng@eurex.com

Jan Thorwirth
Vice President,
Sales & Market Development APAC
Eurex Frankfurt AG
Hong Kong Representative Office
2904-7, 29/F, Man Yee Building
68 Des Voeux Road, Central
Hong Kong
Tel: +852 2530 7810
Fax: +852 2530 7880
jan.thorwirth@eurex.com

Thank you!

Relevant web pages for additional information:

- VSTOXX: www.eurex.com/vstoxx
- Trading Hours Extension: www.eurex.com/thx

Eurex Contact:

Chih-Chao Feng (馮治超)

P: +852 2530 7082

M: +852 9133 3106

E: chih-chao.feng@eurex.com

WhatsApp: +852 9133 3106

WeChat: chihchaofeng

GFM Contact

Tariq Dennison (德天睿)

https://gfmasset.com

Seeking Alpha: TARIQ DENNISON

TDennison@gfmgrp.com

Twitter: @QuantOfAsia

M +852 9476 2868