

ECB Foreign Exchange Contact Group Best Execution and Transaction Cost Analysis

Frankfurt am Main, 18 June 2019, Christoph Hock, Head of Multi Asset Trading

Best execution is an integral part of the strategic goal of our multi-asset trading desk

The central multi-asset trading desk of Union Investment delivers as a team best-in class execution and market intelligence to our portfolio managers as our internal clients.

We generate additional alpha across all asset classes and minimise execution costs by using sophisticated trading strategies, which are constantly optimised through continuous transaction cost analysis in general and in comparison with respective peer groups.

We also offer additional services, which create added value for our portfolio managers, hence for our private clients, institutional clients and Union Investment.

Our multi-asset expertise helps us to interpret tactical market information and provides our portfolio managers with market intelligence that supports them in making their bottom-up and top-down investment decisions.



Evolution in market structure and trading environment with big impact on how to deliver best-in-class execution to clients

Regulation

- MiFID II / MiFIR (ESMA)
- Basel III
- Dodd-Frank (Volcker Rule)

- Liquidity bottleneck
- Strong electronic trading in equity market, increasing role of electronic trading in the bond and FX market
- Market structure and new venues

Union Investment

- Strategic importance of multi asset
- Minimising operational risks
- Institutional client international strategy

Clients and portfolio manager

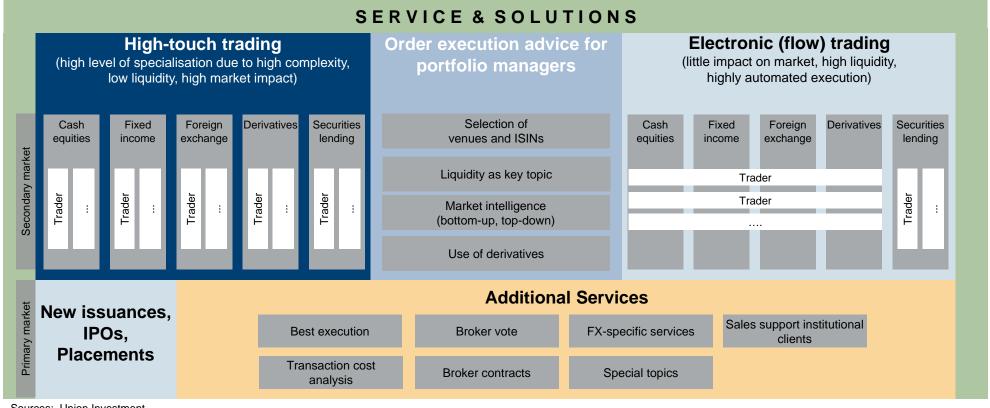
- "Best-in-class"-service for investors and portfolio managers
- Transparency and best execution
- minimisation of transaction costs and reduction of execution risks (market impact)
- Comprehensive cross asset-class market intelligence
- Industry consolidation
- · Focus on profitability
- · Key account management and process consolidation

Brokers and competitors

Capital market and technology

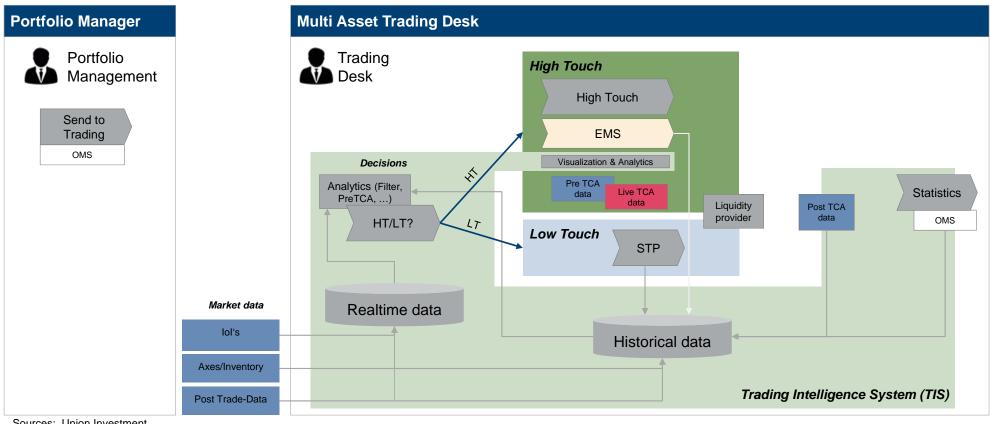


Trading desk as "service & solutions desk" reflects the increasing market requirements for best execution





Investment in trading intelligence as a key requirement: data, EMS, high touch/low touch, pre-, live- and post-trade TCA, statistics



Sources: Union Investment

Iol's: Indications of Interest HT: High Touch LT: Low Touch

TCA: Trading Cost Analysis OMS: Order Management System EMS: Execution Management System

STP: Straight Through Processing TIS: Trade Information System



Best execution is a process - it is not only about achieving the best price in a single transaction

Best execution approach and execution factors

The obligation to execute a client's orders on terms most favorable to the client. Current best execution evaluation was commonly based on the trades price, but best execution is broader than just "best price"

Formal Order Execution Policy (OEP) detailing, amongst other things, the venues available for execution of orders, various controls and behaviors the client should expect. Also:

- Price of financial instrument what is the best price?
- Cost of order execution what is cumulative cheapest cost?
- Speed of order execution what execution time constraints apply/how can they be minimized vs urgency?
- Likelihood of execution and settlement where will we get a fill?
- Order size how does size impact the best execution strategy?
- Type of trade what is the underlying purpose for the trade, and does this impact our choices?
- Any other relevant metrics e.g. market conditions

Top 5 Reporting: Complete reporting relating to Top 5 venues/counterparties (i.e. execution platforms including SI) where orders are executed. To be produced annually.

Thematically linked to unbundling of research – execution has to be independent.

Client can still give specific instructions on execution that may or may not be fully consistent with the concept of "best execution".

Genesianishaftiche FinanzGrup

Best Execution Policy

Union Investment Privatfonds GmbH Union Investment Institutional GmbH Union Investment Luxembourg S. A. Union Investment Real Estate GmbH Union Investment Institutional Property GmbH **Best Execution Policy**

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- 3.1. Selecting brokers
- 3.2. Selecting execution venues

4. Principles for order placement on a case-by-case basis

4.1. Priority of client instructions

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5. Execution of client orders

- 5.1. Aggregation and allocation of orders
- 5.7. Cross trades
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- 5.4. Automated Order Routing
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6. Review of Best Execution

6.1. Review of the Best Execution Policy

6.2. Qualitative review of intermediaries used

Annex - List of key intermediaries for the execution of trades



Pre & Post Trade Reval Milliseconds (MKI

Pre-Trade Information in combination with post-trade analysis is key to deliver best-in-class execution to clients

BestX® Best Execution Analytics – Pre Trade Screens

BestX® Best Execution Analytics – Post Trade Screens







Sources: BestX



An innovative quantitative solution supports best execution and market microstructure analysis



- realtime market liquidity forecaster
- realtime transaction cost estimator

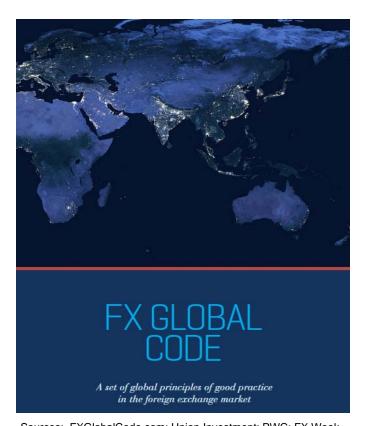
- realtime market liquidity forecaster
- realtime transaction cost estimator



Sources: Morgan Stanley



Best execution is not only about quantitative measurement – the FX Global Code enables asset managers to deliver highest standards



Statement of Commitment

STATEMENT OF COMMITMENT TO THE FX GLOBAL CODE

Union Investment Privatfonds GmbH

the content of the FX Global Code ("Code") and acknowledges that the Code

represents a set of principles generally recognised as good practice in the wholesale foreign exchange market ("FX Market"). The Institution confirms that it acts as a Market Participant as defined by the Code, and is committed to conducting its FX Market activities ("Activities") in a manner consistent with the principles of the Code. To this end, the Institution has taken appropriate steps, based on the size and complexity of its Activities, and the nature of its engagement in the FX Market, to align its Activities with the principles of the Code.

Union Investment Privatfonds Gmbl

Date: 2018/11/27

Review of the FX GLOBAL CODE -**Documentation Union Investment**

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	Principles relevant to Union Investment (to be assessed on a case-by-case basis)

3.2.2 Principles that may not be relevant for Union Investment (to be assessed on a case-by-case basis)

FX Buy-Side Europe 2019



Mövenpick Hotel Amsterdam City Centre, 12 & 13 June 2019

Fostering best practices in the FX market

- · Why should the buy-side sign up to the Code?
- . How do firms go about in signing up to the Code?
- . How can we make it easier for the Buy Side to sign up? What about a section specifically for Asset.
- . How can the buy-side get a voice in the future evolution of the FX market?
- Will there he measures to confirm adherence for adonters?
- . Was there enough input from the buy side into the FX Code of Conduct as we have it today?

Moderator: Julian Gladwin, Co-Founder, Axiom Global Advisors Limited Tobias Helmersson, Chair of the GFXC's working group on buy-side outreach, ECB Darryl Hooker, CEO, Harperdan Consulting Ltd and Executive Committee Member, ACI UK Christoph Hock, Global Head of Trading, Union Investments Alexandre Dube, Head of Financial Markets Trading, Total SA

Sources: FXGlobalCode.com; Union Investment; PWC; FX Week



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