The Role of Credit in FX Markets
Trends & Solutions: Futurization, Clearing, Credit Proxies

Frankfurt, 6 September 2018

Evolving Market Structure in the FX Industry

Drivers of change: The FX industry is evolving driven by significant changes in credit, regulation, risk taking as well as ways of trading (OTC vs. listed FX) …

Basel III / CRD IV

Volcker Rule

SNB, Jan 15th

Technological progress

Quantitative easing / central bank action

Dodd Franck, EMIR, MIFID 2

FX scandals

… leading to higher capital / credit costs, lower risk appetite, changing market structure (e.g. NBLPs) and new regulatory requirements

Credit Models in FX

Existing credit models are highly influenced by such drivers of change – affecting both the OTC as well as the listed / ETD world …

Credit models

Prime Brokerage	Bilateral Credit	FX Clearing – ETD and OTC

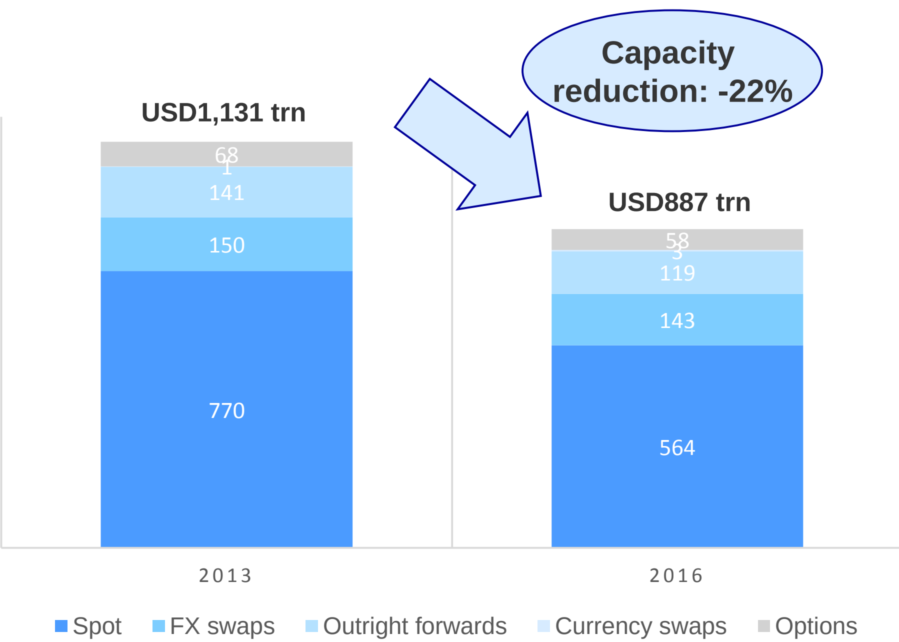
Target clients

Hedge Funds	Corporates	Asset Managers
CTAs	Asset Managers	Hedge Funds
NBLPs	Banks	Banks
…	…	…

Credit Availability and Pricing

… post the SNB event and in light of the recent changes in the market, availability and pricing of credit (PB and else) has changed significantly

Prime-brokered turnover by instrument



Source: BIS

A number of effects at work ….

Credit capacity: ↓

Credit costs: ↑

Market participants: ↓

Market liquidity: ↓

Absorption capability: ↓

Credit risk concentration: ↑

FX Credit Landscape – Outlook

While the trading layer is rather globalizing, credit is localizing … and ultimately stays with banks. Will this be the future model, too?

Future developments …	driven by…	… leading to
Concentration	Driven by capital / regulatory requirements, diminishing revenues, return-on-equity targets and costs	**Credit model changes**
Competing for Profitable Clients	Tier 1 FXPBs to compete for highly profitable clients, while continuing to shed less profitable clients	**Alternative business solutions required to ensure FX market access for all clients**
Costs	Driven by current and future regulatory developments	**Making way for new technology and proliferation of prime-of-prime brokers**
Revenues	Revenues shrink due to non-banks entering the market as LPs and requirement to unbundle fees	**Futurization and clearing of OTC FX transactions as seen as major innovation**

FX Clearing as a Way Forward in Credit

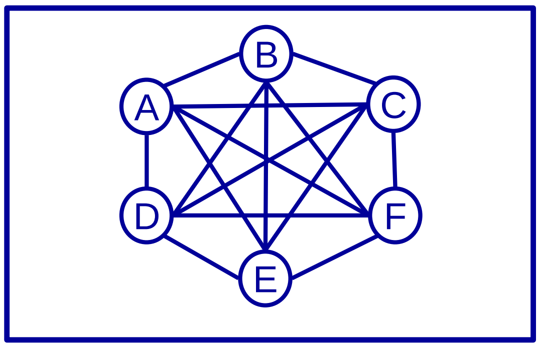
Although FX is currently exempt from clearing obligations, new capital and margin rules are changing economics of bilateral models

Regulation		Impact on FX dervatives
EMIR/ Dodd-Frank clearing obligation	**Obligation to clear standardised OTC derivatives** ▪ Reporting of all derivatives to TRs ▪ Improved risk management	n/a (FX derivatives exempted from clearing obligation)
EMIR/ BCBS-IOSCO margin obligation	**Initial/variation margin requirements for non-centrally cleared OTC derivatives** (included in EMIR in Europe) ▪ Margin calculation and segregation ▪ Subject to exposure thresholds	Initial Margin required for XCCY swaps (except 'FX leg') & FX options **Exemptions from margin obligation** ▪ Physically settled FX fwds & swaps ▪ FX leg of XCCY swaps
Basel III (CRD IV / CRR I) capital requirements	**Improved coverage of counterparty credit risk** ▪ Introduction of CVA for OTC transactions ▪ Refined treatment of CCP exposures ▪ Introduction of leverage ratio	Increased capital requirements for non-cleared/non-collateralised FX derivatives ⇩ **Incentives for voluntary clearing**

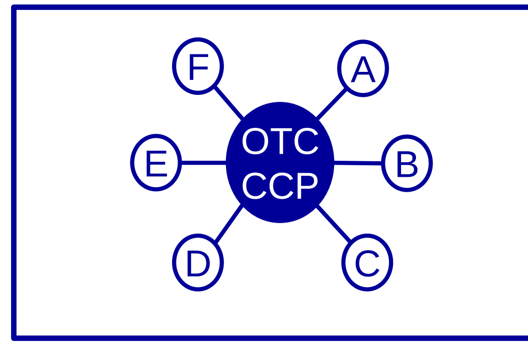
FX Clearing to be Introduced at Eurex Clearing

Next to economic efficiencies, moving the bilateral market to a multilateral cleared solution increases safety

Bilateral trading & clearing
1:1 relationship between market participants



Bilateral trading & multilateral clearing
1:n relationship



Safety

- **Risk management** structure **& independent position valuation** by neutral institution
- **Superior client asset protection** models
- **Robust default management process**
- **Central bank access** for investment and liquidity

Efficiency

- **Capital efficiency:**
  - Single legal cross product netting set
  - Reduced balance sheet exposure
- **Collateral efficiency:**
  - Largest spectrum of available collateral
- **Margin efficiency:**
  - Eurex clearing Prisma allowing portfolio and x-margining with multilateral netting

FX Clearing – When Does it Make Sense?

Cost efficiency of the cleared model depends on key drivers such as collateral availability, netting efficiency and credit quality of counterparty ….

Key driver	High level impact	Strongest case for central clearing, in case of …
Availability of collateral / funding costs	▪ Driving costs for posting initial margin (dependent on collateral availability) ▪ Indirect impact on Leverage Ratio (additional balance sheet exposure)	**… good collateral availability / low funding costs**
CCP (multilateral) netting advantage	▪ Multilateral netting reduces overall risk exposure, lowering initial margin and capital requirements	**… high CCP netting advantage**
Credit rating of counterparty/ risk weight	▪ Driving risk weight, thus with direct impact on RWA and CVA ▪ CCP always at 2% risk weight	**… low credit quality/rating (i.e. high risk weight) of bilateral counterparty**

… hence, economics of clearing need to be analysed on a client by client basis

DBG has a Holistic Strategy to Deliver a Hybrid OTC and Exchange-Based FX Market Proposition serving Global Markets