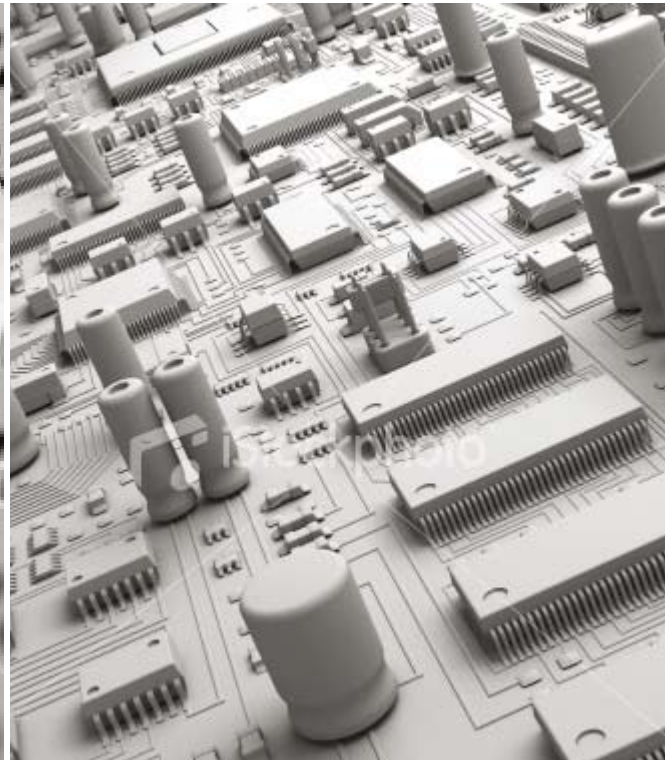


# OTC Derivative Clearing

*Giving you  
a head start*





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# Introduction

There are so many changes underway – from a regulatory, process and collateral standpoint – that we felt compelled to provide some clarity for the benefit of our clients and partners. We've received multiple requests for detailed information about the Central Counterparty (CCP) space and our value proposition; and rather than share this information only on request, we wanted to make it more widely available. This booklet gives you an overview of our capabilities and answers the key questions you're likely to have about the issues ahead.

We hope you find it helpful.

We're ready and happy to address your specific questions or requirements too, so please let us know if we can be of further help.

“If you are finding the changing OTC landscape is making it difficult to plan ahead, you are not alone – *we're ready to help.*”

The driving theme of our long-term strategy is to reduce complexity and provide you with efficient STP clearing solutions.

## UBS offering and business strategy

### *Your 'one-stop-shop' for efficient STP solutions*

**We understand, in an already challenging economic environment, the requirement for stability, simplicity and clarity is especially important to you – our partners and clients.**

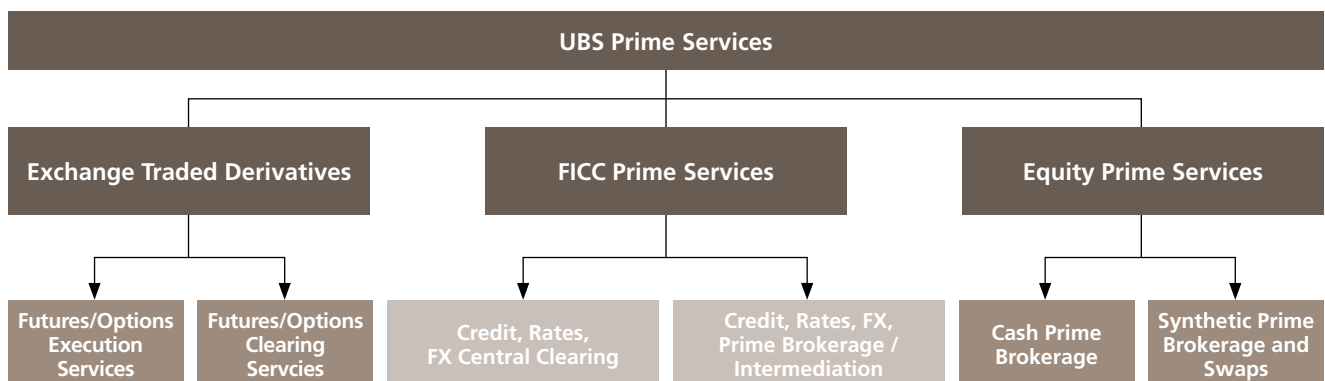
Changes to the regulatory and legislative environment have caused a paradigm shift in the market, which we expect to intensify over the next 18 to 24 months.

Our response has been to accelerate our efforts to provide a 'one-stop-shop' for clearing and execution services. The way in which our business is now organized, as one Prime Services group, is set to deliver a number of benefits to you. The driving theme of our long-term strategy is to reduce complexity in the face of market fragmentation and provide you with efficient straight-through-processing (STP) clearing solutions.

Within UBS Prime services we are in a position to offer you all the benefits of prime brokerage – operational efficiency, risk and collateral management expertise, consolidated reporting – together with your choice of a clearing and settlement solution. Pre-trade, our infrastructure enables us to affirm trades executed across the range of affirmation platforms; post-trade, we leverage our existing infrastructure to provide statement and reporting for OTC cleared contracts. Importantly, we remain committed to providing you with the highest levels of service and support through the trade lifecycle.

We will continue to play a leading role in shaping the future of the industry through our full and active participation in the ongoing regulatory debate, and remain committed to sharing this intelligence with you.

### Our global cross-product model: your requirements – covered



The UBS OTC Clearing offering sits within our Prime Services business.

## Products and services

# Prime broker, agent clearer, consolidator? *'Live' and ready to meet all your needs.*

**Whatever kind of support you are looking for, we are up and running with all current solutions giving you the freedom to choose your preferred clearing venue. We offer the widest possible product scope as well as collateral transformation services in line with clearing house rules.**

Simplicity is key: in addition to the benefits of consolidated reporting via a single proprietary platform, we are leading the way in minimizing operational complexity resulting from market fragmentation. Clear, simple and efficient, our offering is backed by financial stability and robust technology.

### Service and support

At UBS, client service is all about flexibility and our client service model is designed to deliver just that. A dedicated Account Manager covers your day-to-day needs and you can choose either single generalist coverage or multiple product specialist coverage, whichever best suits your requirements. A Client Relationship Manager would oversee your account and would be your point of escalation.

Providing superior service is our top priority and our service model, staffing levels, and client focus are unmatched. Account Managers are located in all regions so that we can provide 'follow the sun' coverage. Support is available 24 hours a day, five days a week and back-up coverage ensures that you are never without a point of contact or access to senior staff.

Substantial investment in our OTC Clearing capabilities has been made in recent months and will continue over the next several years, in line with our long-term strategic plan. In response to your needs, we will further leverage existing platforms and centres of excellence across products as we implement our long-term strategy.

### Products

We offer clearing services for all OTC products supported by the clearing houses. Product specialists across all asset classes are on hand to assist with all your needs. Current product offerings include:

#### Credit Default Swaps

CDX IG Index (Series 8-13)

CDS IG HVOL (Series 8-13)

CDX IG NY (Series 8-11)

#### Interest Rate Swaps

Vanilla IRS across 14 currencies:

GBP, USD, EUR, JPY, CHF, AUD, DKK, CAD, HKD, NOK, NZD, SEK, PLN, ZAR

### Reporting

Reporting is offered via our market leading platform Global Prime Access Reporting. Our reporting services include daily statements, activity reports, position reports, margin reports, cash balances and many more including customized reporting.

Many of our reports are available real time via Global Prime Access and delivery options include: secure FTP, email and online report retrieval via our Global Prime Access web site. Formats include CSV, PDF or online HTML.

#### Third party copies

We routinely provide fund administrators access to online systems for report retrieval or distribute these reports via the above services (which would always be subject to your prior approval).

#### Customized reports

We understand that clients have unique reporting requirements. In order to best help you meet your needs, we have a dedicated client solutions team that will work with you to understand your specific requirements and assist with customised reports where appropriate.

### **Risk profiling and due diligence**

We understand risk management is a key priority for you. It is also a top priority for us.

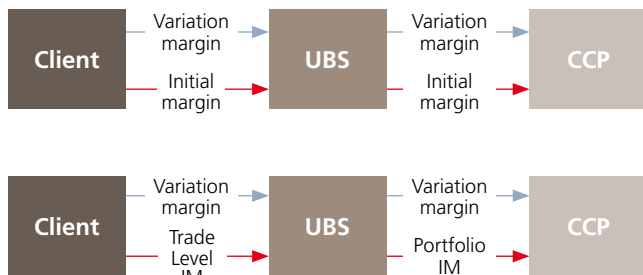
Our comprehensive due diligence process assigns internal limits and establishes a credit profile on all active counterparties. This drives the internal credit rating and credit limits and helps guide risk appetite decisions in relation to exposure taking and margin determination. The framework is applied globally to our entire client base to ensure best risk management practices are applied within our business. We have a comprehensive, independent internal risk management framework to calculate daily risk exposure on our client portfolios and to monitor the differential between our internal calculation and the clearing house calculation.

If there is any stress loss taking on the portfolio, depending on the credit profile, transparency provided and portfolio dynamics, additional collateral requirement may be requested to mitigate counterparty risk exposure on the portfolio.

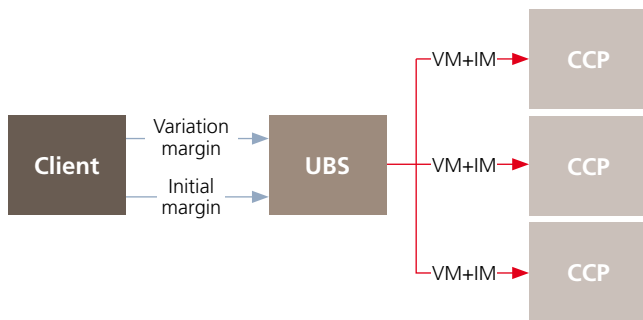
Using multiple CCPs will increase your collateral requirements and erode the netting benefit achieved through having all your positions and their associated hedges with a single counterparty. Return on cash collateral offered by CCPs may be less than is currently received through your existing trading relationship.



# Risk Profiling and Due Diligence



We are required to call margin subject to regulatory and clearing house requirements. Currently, there are collateral asset-type restrictions set by the clearing house. Should you wish to deliver assets outside the eligible scope, we would try to provide solutions that would allow assets to be transformed into eligible collateral, to cover initial margin requirements. A Collateral Transformation service would be supported by our internal infrastructure and financing processes, e.g. Collateral Swap from Corporate/Supra Debt to G7 Sovereign Debt.



Below is a high level summary of the potential options for margin netting during the course of normal business. During legal negotiation and onboarding, UBS would explore with you which options available to you in light of the regulatory and CCP rules.

## Margin Methodologies

	PS (Prime Services)					OTC					ETD		Repo	PS
	Equity	Equity Swaps	Equity OTC Options	Bonds	Converts	CB Strips	CDS	Vanilla IR OTC	FX	Other OTC	Equity ETD	FI ETD	Repo	SBL
Single Product Margining	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cross Netting	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Cross Margining	✓	✓	✓	✓	✓	✓	✓		✓		✓		✓	
OCM Stress Based Margining	✓	✓	✓								✓			
HVDMA Stress Based Margining	✓	✓									✓			
VaR Margining								✓	✓				✓	

### Definitions

- Cross Netting – products are margined on an aggregate basis.
- Cross Margining – products are dynamically margined, taking into account hedges which may result in margin relief.

### Key Considerations

- There has been little (if any) legal precedent for netting across legal entities.
- Netting across legal agreements is subject to ensuring a favourable legal opinion for enforceability in the event of default.
- The legal position for netting across CCPs has yet to be clarified.



## Segregation

Segregation and portability represent the cornerstone of each of the clearing house solutions.

UBS conforms to the clearing house rules to ensure the segregation and portability framework is passed on to your advantage.

## Onboarding

### *Satisfaction and planning go hand in hand*

We assign a dedicated transition manager to oversee the onboarding process until the launch date. The process begins with an introductory call to review the onboarding steps. You will receive a Client Integration Pack which includes plans for an Implementation Workshop and Project Plan. The Implementation Workshop is used to discuss, capture and document all your service requirements. The Project Plan is used as a roadmap for the implementation with detailed information about all aspects of the integration, such as credit, legal, technology, risk management and operations. As the process proceeds you will receive regular updates on the implementation progress from your transition manager. The onboarding process takes approx 6-8 weeks to complete.

Credit	Legal	Commercial	Trading	Operational	Static	Interfaces
Provide list of underlying counterparties and type of entity	Establish UBS contracting entity	Agree commissions	Agree executing brokers and clarify affirmation process	Agree funding procedures	Provide standard settlement instructions	Set up intra-day trade confirmation feed
Confirm domicile of each underlying counterparty	Client to complete legal documentation	Negotiate interest terms	If applicable, client to provide UBS with exchange account number	Understand account structure requirements	Confirm client settlement instructions	Define Trade date +1 reconciliation process
Confirm investment manager (full legal entity name)	Client to confirm if using 3rd party brokers	Agree collateral fees	UBS to provide trading contact and middle office contacts	Confirm operational contacts	Set up account static	Agree file and report distribution method

# Why UBS?

UBS Prime Services is an established and highly regarded global Prime Brokerage and Clearing business. We are well positioned to handle your front-to-back needs across all products. More than this, we want all our clients and partners to benefit from our commitment to reduce complexity in the challenging months ahead.

## **Strong client franchise**

With over 1,600 clients in Prime Services alone, we understand our clients and their needs. Our capabilities are backed by the strength of our client testimonials. Contact us to learn more about our exceptional level of service from those who have experience partnering with us.

## **Investment in technology**

Over the past 10 years we have spent over USD 1 billion in building market leading client technology ensuring we deliver STP solutions for our clients by removing much of the operational burden. We will continue to invest heavily in our technology and are committed to providing clients with solutions no matter where the market goes.

*In short, we've  
done this before...  
hundreds of times.  
Client clearing is  
not a new business.  
It is an extension  
of capabilities in  
a business where  
we have a clear  
leadership position  
in the industry.*

# Regulation

**The political agenda is driving market developments around the world with the shift to central clearing having far-reaching implications in terms of compliance, risk management and profitability.**

## What are the implications for you?

This section outlines the principal regulatory developments in the US, EMEA, Asia, Japan and Australia and what they mean for you.

The key matters currently under review are: mandatory central counterparty (CCP) clearing, mandatory exchange trading of cleared swaps, end-user exemptions, major swap participants and reporting.

## Mandatory CCP clearing

### US

- Clearing will be required for all standardized swaps – determination of standardized swaps to be made by CFTC, SEC and clearing houses
- Available exemptions will include:
  - End users hedging commercial risk
  - No clearing house will accept a swap
- Clearing requirement will be prospective only; it will not apply retroactively to existing swaps

### EUROPE

- European Commission (EC)
  - Wants to mandate CCP-clearing for all 'clearing eligible' products
  - Legislation proposal will become clear later this year
  - Clearing houses and regulators to have a joint role in determining which products are 'clearing eligible'

- European Parliament

- There is broad agreement to keep mandatory clearing to contracts which can be standardized, and are traded between financial institutions, including standardized derivatives which cannot be traded on-exchange
- Rapporteur Langen, who tabled some further amendments to his own report, also calls for making trades of non-financial companies subject to mandatory clearing if the trading volume exceeds certain thresholds.

- FSA

- In general the UK FSA agenda "...recognizes that new standards will...be set at EU or wider international level."

### APAC

- Japan

- Certain categories of OTC derivative products traded between financial institutions regulated in Japan are required to be cleared through a CCP
- Likely that (a) plain vanilla interest rates swaps and (b) credit default swaps (CDS) referencing iTraxx Japan will become subject to the mandatory clearing requirement



## Mandatory exchange trading of cleared swaps

### USA

- The exchange-trading requirement will apply to all swaps that are cleared
- Clearing exceptions will thus flow through as exceptions to exchange-trading exceptions
  - End users hedging commercial risk
  - No clearing house will accept a swap
- Additional exemption where no exchange makes the swap available to trade.

### EUROPE

- European Commission
  - Cleared products to trade on organised trading venues as defined by the Markets in Financial Instruments Directive (MiFID), proposal expected end-2010
- European Parliament
  - Supports European Commission view
- FSA
  - Against mandatory exchange trading (provided other reforms are implemented).

## End-user exemptions

### USA

- The House bill only defines major swap participants and to the extent that a commercial end user is not a major swap participant, it is exempt from clearing and exchange-trading requirements
- The Senate bill contains a more targeted and defined commercial end user exemption:
  - 'Commercial end user' means any person other than a financial entity who, as its primary business activity owns, uses, produces, processes, manufactures, distributes, merchandises, or markets goods, services or commodities
  - Certain affiliates, including captive finance affiliates, can also avail themselves of the exemptions.

### Europe

- European Commission
  - End-user exemptions are highly likely, although only in kind
  - Complete exemptions are unlikely
  - Currently reviewing sections of MiFID concerning commercial exemptions (to finalise in end-2010)
- European Parliament
  - For exemptions and lighter regulation of small and medium-sized enterprises (SMEs)

### APAC

- Japan
  - The Japanese FSA has indicated that one of the expected exemptions will be those CDS transactions which reference US entities and are mandatorily cleared through a US CCP under US regulations.

## Major swap participants (US only)

- Definition of a major swap participant will cover non-dealers:
  - That maintain a substantial net position in outstanding swaps, excluding positions held primarily for hedging, reducing, or mitigating commercial risk; or
  - Whose outstanding swaps create substantial net counterparty exposure that could have serious adverse effects on the financial stability of the United States banking system or financial markets
- Major swap participants will also be required to register with the Commodity Futures Trading Commission (CFTC) and Securities & Exchange Commission (SEC) and will be subject to a wide variety of new reporting, disclosure and business conduct requirements.

## Reporting

### USA

- Swaps that are not cleared shall either be reported to a swap repository or the CFTC/ SEC
  - For cleared/exchange-traded swaps, this requirement will be met through the clearing house/exchange
- Only one counterparty is required to report (the swap dealer in transactions with clients)
- Existing swaps (entered into before the bill is enacted) are required to be reported to a swap repository, so the reporting requirements are retroactive.

### Europe

- European Commission
  - Mandatory reporting of swaps trades to regulated trade repositories
  - Expected to make a proposal by mid-2010
  - Also amending MiFID to require transaction and position reporting to be developed alongside CCPs and trade repositories
- MiFID proposals are scheduled for end-2010

- European Parliament
- The amendment's provisions for reporting/post-trade transparency requirements largely foresee mandatory transaction and position reporting for non-CCP cleared trades only

#### APAC

- Japan
- A CCP licensed in Japan and any financial institution in Japan which is subject to the mandatory clearing requirement will be required to report details of its OTC derivative trades to the regulator
- A financial institution can choose (i) to make a report itself to the regulator or (ii) to request trade repositories to make a report on its behalf.

#### In brief

Reform in the US has four key goals: to reduce systemic risk, improve transparency and market efficiency, maintain market integrity, and ensure client suitability for OTC derivatives.

In Europe, the EC has identified four complementary measures to increase financial stability: increase product standardisation, utilise trade warehouses for increased market transparency, strengthen the use of central counterparty clearing houses, and increase the use of organised trading venues.

Japan and Australia have released regulatory guidance on their approach to the licensing and regulation of clearing and settlement (CS) facilities.

*UBS is actively engaged with regulators. We are ready for the future.*



# Front-to-Back Processes

**Substantial investment in our OTC Clearing capabilities has been made in recent months and will continue over the next two years, in line with our long-term strategic plan.**

In response to your needs, we will further leverage existing platforms and centres of excellence across products as we implement our long-term strategy.




**Supporting you at-trade, post-trade – wherever in the world you do business**

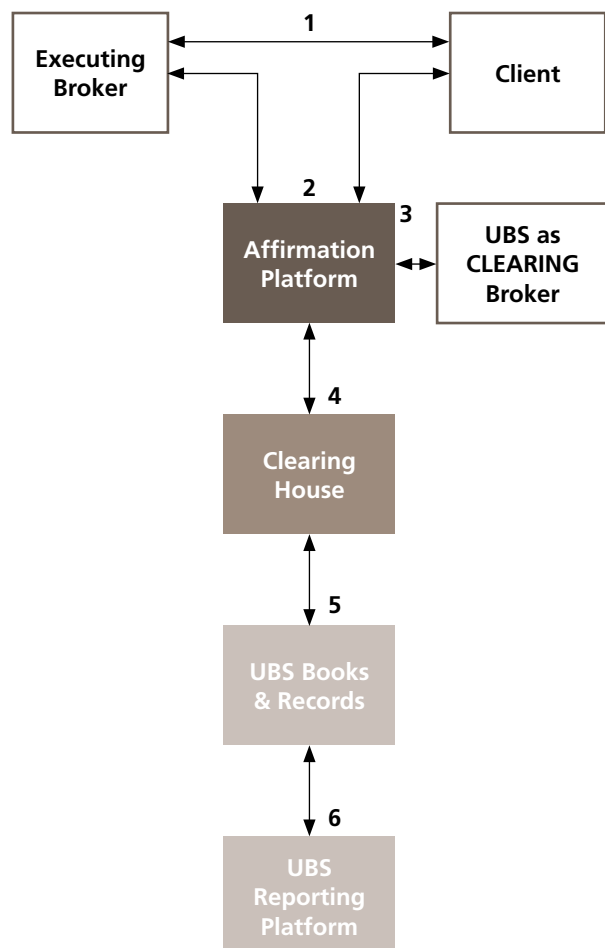
In this section we take you through the at-trade and post-trade processes for OTC clearing and provide information about the clearing house margin models and segregation policies.

## Generic Trade Flow

1. Trades executed bilaterally via voice.
2. Execution broker posts trade to affirmation platform; client confirms trade and provides allocation.
3. Trades are matched and sent to clearing broker for acceptance.
4. Matched trades accepted by clearing broker are registered at the clearing house.
5. UBS books cleared trade to the client account based on allocation information provided in the affirmation tool.
6. Reports and statements available through Global Prime Access or SwisKey clearing (CDS on CME only).

## Key

-  3rd Party Affirmation Platform
-  Clearing House
-  UBS Application



## At trade

- A. Affirmation**
- B. Tracking trades**
- C. Transaction types**

### A. Affirmation

You can affirm trades on the individual platforms offered by each clearing house as detailed below.

CME Affirmation Tools	ICE Trust	LCH.SwapClear
Clearport	ICELink	MarkitWire
Bloomberg VCON	Bloomberg VCON	

CDS on ICE Trust transactions can be affirmed via our Global Prime Access portal as well.

### B. Tracking trades

You can track trades in a report or a system as they pass through the clearing system; please note that mechanisms for this vary by clearing house:

- **CME**

Transactions can be tracked through SwisKey Transactions Reporting functionality. Trade exceptions will be raised by your Account Manager.

- **ICE Trust**

Intra-day clearing status is available via the ICE-Link tool used to affirm trades. This includes Depository Trust & Clearing Corporation (DTCC) confirmation status.

- **LCH. SwapClear (LCH)**

Transactions can be tracked through the affirmation platform, MarkitWire. Trades move from pending state to cleared state at point of LCH acceptance.

### C. Transaction types

Cleared transactions can behave in a different manner to OTC trades. The following paragraphs outline how partial/full unwinds, novations and backloading are offered under OTC Clearing.

#### Partial/full unwinds

- **CME**

There is no specific unwind process on the CME; you can reduce/close out positions by posting offsetting trades. The CME automatically manages position offsetting/aggregation as per the futures process.

- **ICE Trust**

As all cleared trades are only 'new buy' or 'sell' trades for ICE, any trades that you wish to partially or fully unwind can be done by placing an equal and opposite trade. Then, once the second trade is completed, netting of the two trades into one position to partially or fully unwind your position will take place. This brings about the same result as completing a partial or full unwind.

- **LCH. SwapClear (LCH)**

Full unwind/novation

1. You select the existing trade in MarkitWire and send it to the Incoming Party and the existing Clearing Member (CM) (UBS).
2. The Incoming Party and the existing CM (UBS) both affirm the novation.
3. LCH is notified of your novation request (de-clear).
4. LCH completes the de-clear. You and the CM (UBS) are notified.
5. Novation is now complete.

#### Partial novation

1. You select the existing trade in MarkitWire and partial novation. You then select the new reduced notional amount and send the trade to the Incoming Party and the existing DCM (UBS).
2. The Incoming Party and the existing DCM (UBS) both affirm the partial novation.
3. LCH is notified of your partial novation request (de-clear and subsequent re-clear).
4. LCH completes the de-clear; you and the DCM (UBS) are notified.
5. LCH completes the re-clear of the new reduced notional trade. You and the DCM (UBS) are notified.

#### Back-loading eligible trades

- **CME**

**PLEASE NOTE:** this is not yet supported in the market. It is likely that back-loading will be offered to clients after the official launch.

The CME has developed a tool for managing the back-loading process. This allows all counterparties and clearing members to affirm the trade details, establish positions in the CME clearing system, and manage updates/reconciliation to the Trade Information Warehouse (TIW):

1. The participant declares intent to migrate and confirms status and permission with the CME. The DTCC position file is then requested and uploaded by the participants in preparation for migration.
2. The participant identifies the set of contracts to be migrated to standardised contracts and agrees with the counterparties which ones will be migrated for clearing.
3. The participant can then run their file through the Eligibility, Margin and Results process, to test the portfolio's eligibility and view what the margin requirements will be post migration to the CME.
4. The file is submitted to migration. The Migration Match-Off process collects all data submitted, matches both sides of contracts and evaluates for exceptions.
5. The CME then executes standard contract processing.

- **ICE Trust**

You identify a batch of trades for clearing with ICE. The ICE process is a weekly cycle:

1. Trades are identified by you and submitted to ICELink by Wednesday mornings. As part of this process, your clearing broker will affirm their acceptance of the trades.
2. On the next Friday morning, UBS will call you for margin, and it will be settled to the clearing house by 13:00hrs local time.
3. Novation legally occurs at midnight on Friday, moving the risk across to the clearing broker and clearing house.

- **LCH. SwapClear (LCH)**

Non-contingent back-loading

1. You and your nominated DCM agree the population of eligible trades for back-loading to LCH.
2. You subsequently contact the relevant Executing Brokers to agree population and to back-load any paper confirmations to MarkitWire.
3. Master Give Up Agreements are then signed by all Executing Brokers.
4. You, the DCM and the Executing Broker agree a back-load date.
5. The Executing Broker is then required to convert the bilateral trades to client clearing trades while selecting the nominated DCM.
6. You and the DCM both need to affirm the trades to be back loaded to LCH.
7. Once affirmed by both parties, trades are sent to LCH for acceptance.

**PLEASE NOTE:** Back-loading is a non-contingent process, i.e. once the DCM accepts the trades; you hold the risk with the DCM and not the Executing Broker, until the LCH accepts the trade.

- **Contingent back-loading**

Discussions are in progress to enable a contingent back-loading process. Initial analysis shows that this would require significant LCH and MarkitWire development, with timelines

yet to be discussed and agreed. A bulk action tool is also under development. This would enable you to bulk affirm your portfolio of trades as opposed to affirming each trade individually. Again, timelines for delivery of this tool are still under discussion.

## Post Trade

### A. Clearing Process

### B. Trade acceptance/rejection

### C. Settlement amounts, interest payments and termination fees

### D. Credit event processing

### E. Reporting

#### A. Inputting/reporting cleared trades

Procedures vary across clearing solutions but a high level summary of the three principal procedures is outlined below.

- **CDS on CME**

The executing broker has 30 minutes from the point of execution to allege the trade on the affirmation platform. If you are directly affirming the trade, you have two hours to affirm and allocate from point of allege receipt on the affirmation platform. Block trades need to be allocated prior to clearing. Partial clearing of a trade will be facilitated but will depend on the chosen affirmation tool.

Clearing members have 60 minutes to accept or reject a trade once it has been affirmed, allocated and submitted to CME Clearing. Matched trades of contracts approved for clearing that are within the set credit limit shall be accepted into clearing. Trades can be rejected by a clearing broker.

If the trade is not registered in the approved time frame as set by CME, the trade could be rejected. If the trade has not been accepted after three-and-a-half hours, the executing broker can evoke the fall back procedure. Fall-back procedures include reverting to a bilateral trade or you choosing a new clearing broker.

All trades intended to clear current day and settle T+1 should be affirmed and submitted to clearing before 18:00hrs.

Any trades affirmed and submitted to CME Clearing between 18:00hrs and 23:59hrs will be assigned a current day execution date, next day clear date and, once accepted in clearing by the clearing firm, a T+2 settle date.

All trades affirmed and submitted to CME Clearing before 18:00hrs can remain pending in the CME Clearing system until 18:00hrs the next day. Trades not claimed by 18:00hrs the next day will be removed from the CME Clearing system and subject to give-up principles for trades rejected from clearing.



• **CDS on ICE Trust**

The executing broker has 30 minutes in order to allege the trade in ICE Link after the trade agreement.

You have two hours to affirm the trade, designate a clearing broker and provide the clearing allocation. You can affirm transactions directly through ICE Link or via Global Prime Access.

The clearing broker then has from point of trade until T+1 at 17:00hrs to accept the trade for clearing. Trades can be rejected by the clearing broker. Trades not claimed by 17:00hrs the next day will be removed from ICE Link and subject to fall back principles.

All trades intended to clear current day and to settle up the front fee on T+3 should be affirmed and submitted to clearing by 17:00hrs. 18:00hrs is the cut off for the clearing firm to accept all current day trades submitted for settlement on T+3.

The executing broker has the right to invoke fall-back procedures from three hours after the trade has been alleged until T+1 at 17:00hrs. Fall-back options include reverting to a bilateral trade, the client choosing a new clearing broker or terminating trade at mark-to-market in line with International Swaps and Derivatives Association (ISDA) rules.

The Clearing House will not accept trades from the clearing broker if they are unconfirmed at 17:00hrs on T+1.

• **IRS on LCH. SwapClear (LCH)**

LCH.SwapClear adopts a more lenient approach and rather than imposing a rigid set of deadlines which must be met, establishes 'best practice' guidelines, which it would like clients and dealers to abide by.

The executing broker has 30 minutes (best practice) from point of execution to allege trade in MarkitWire, the trade-book software. Block trades need to be allocated prior to clearing.

The 'best practice' approach is for you to affirm and allocate two hours after the trade has been alleged in MarkitWire.

Clearing members have four hours to accept or reject a trade once it has been affirmed, allocated, and submitted to LCH. SwapClear for clearing. After four hours, the trade is sent to the executing broker as a bilateral trade or you can nominate a new clearing broker.

The clearing house is open from 08:30hrs to 18:00hrs London time.

**Trades placed in error with the CCP – what if?**

Each trade needs to be confirmed by the execution broker and by you. You therefore have the opportunity to correct any errors input by the clearing broker (along with any allocation of a block traded to individual funds) prior to the trade being cleared. The clearing broker is also obligated to affirm that it is prepared to clear the trade.

**B. Trade acceptance/rejection**

Trades accepted into clearing will be booked to the client account based on the allocation provided.

There are two scenarios for trade rejection:

1. Technical grounds, e.g. incomplete legal documentation, process account opening information or static data.
2. Clearer rejection; current approved documentation stipulates clearers can reject trades for any reason.

UBS's approach in these circumstances is to work with you to ensure that limits are set at a level with which we are both comfortable, thereby safeguarding against fraudulent or error trades. Trades within these limits will be accepted. In all cases, UBS would always revert to you before rejecting any trades.

**C. Settlement amounts, interest payments and termination fees**

• **CME**

All cash flows (settlement amounts, coupons, PAI etc) are calculated by the CME and instructed to the clearing brokers, who then apply them in their back office systems. Clearing brokers reconcile monies to the CME overnight.

• **ICE Trust**

Typically, for ICE-cleared CDS trades, you would run a cash flow report from The Depository Trust & Clearing Corporation (DTCC), which projects expected cash settlements for a forward-looking period that includes upfront fee payments and coupons. Upon your request, an account manager may confirm daily settlement amounts, but usually the net amount is debited/credited directly to the cash clearing account.

Funds may be transferred from other accounts held with UBS or transferred via wire. The same process applies to cash settlement of credit events. You may also settle payments via continuous linked settlement (CLS) using the facility provided by the DTCC Trade Information Warehouse (TIW). In some cases this may already be used to settle OTC trade activity.

**Collateral related settlements**

Interest on collateral would be accrued and paid according to the legal documentation agreed between the parties and is subject to negotiation. Typically, we would apply market standard overnight interest rates and pay interest within five days of the calendar month end for the preceding calendar month. We can provide a breakdown of the interest calculations.

We can also monitor coupons and maturities on physical assets held for purposes of triggering a substitution.

• **LCH. SwapClear (LCH)**

Settlement amounts would continue to be automatically processed by UBS as per existing rates trade settlements. Should you not wish to have automation in place, we would look at offering a manual settlement where reset notifications are sent to you.

#### D. Capturing and processing credit events

This only applies to CDS products.

##### • CME

Bankruptcy and failure to pay: restructuring credit events are not currently included at the CME and are not on the critical path for public launch.

The ISDA Determinations Committee (DC) will confirm a credit event has occurred. On the event determination date, the CME will issue an advisory notice to Clearing Members/ Customers, providing the details of the event.

On the CME's initial processing date, for single name contracts, the contracts are flagged as defaulted at the CME and coupon ceases to accrue beyond the credit event date. A zero coupon recovery swap is created. For index contracts, CME will reversion the index in accordance with the MarkIT published index.

On the CME's final processing date, the CME will process the final cash flows. For index contracts, the CME will transfer positions in the affected index contract to the new version of the index contract.

UBS would adjust your positions and cash balances, reconcile to the CME, and report details of adjustments, positions and balances back to you.

##### • ICE Trust

Bankruptcy and failure to pay: the DC confirms a credit event has occurred and specifies a cash settlement date. Cleared Index trades (ICE vs. DCM leg) housed in DTCC in a confirmed state will have the event and its relevant cash flows processed. The corresponding trades between the DCM vs. you, the client will also be processed in DTCC. Should you and the DCM have a CLS settling relationship, this trade leg will settle via CLS; if not the trade will settle bilaterally.

## Reporting

Reporting is offered via our market leading platform Global Prime Access Reporting and SwisKey Clearing (CME CDS only).

CME cleared CDS  
- CME Daily Statement

ICE Trust and LCH.SwapClear cleared trades  
- Position report: contains CME cleared CDS, ICE cleared CDS and LCH cleared IRS  
- Activity report: contains activity for a selected date range for ICE and LCH cleared CDS and IRS  
- Cash Flow report: contains projections for a selected date range for ICE and LCH cleared CDS and IRS coupon payments and upfront fees.

CDS cleared via the CME have been integrated in the existing SwisKey reporting suite where the following are available:

- Daily Statement
- Intra-day Trades
- Transactions
- Detail and Summary positions
- Cash Movements
- Balances (Cash, IM, VM, etc.)

Batch reports are delivered by 07:00hrs GMT; many of our reports are available real time via Global Prime Access or SwisKey Clearing. Delivery options include: secure FTP, email and online report retrieval via our Global Prime Access website. Formats include CSV, PDF or online HTML. In addition, trades cleared via CME are available via SwisKey and the delivery methods currently in place through this channel.

#### Third party copies

We routinely provide fund administrators access to online systems for report retrieval or distribute these reports via the above services (subject to your prior approval).

#### Customized reports

We understand that clients have unique reporting requirements. In order to best help you meet your needs, we have a dedicated client solutions team that will work with you to understand your specific requirements and assist with customised reports where appropriate.

## Clearing house margin models

The CCP calculates the minimum margin requirement, derived from the clearing house pricing and margin methodology, which UBS will pass on. However, in the event that our own risk models indicate additional margin is required, we would request further margin from you.

Margin movements will be reflected in the daily Margin Call Statement, which includes both centrally cleared margin requirements and any remaining bilateral non-cleared margin requirements. Clearing house trade level mark-to-markets are available in the Trade Summary report.

##### • CME Margin Model

Approach: seven-factor risk model covering macro, sector, idiosyncratic, liquidity and basis risks will determine margin requirements

- Initial margin is applied immediately and called on T+1, then assessed and adjusted daily. CME requires gross margin
- Variation margin is charged for the first time, for a new trade, on clearing date + 1, then on a daily basis.

##### • ICE Trust Margin Model

Approach: univariate model (volatility driven).

The margin for cleared trades would be called in accordance with ICEISDA Annex.

The process is as follows:

- Initial margin is applied immediately and called on T+1 and then assessed and adjusted on a daily basis (as per the ICE gross margin requirement). Variation Margin is called on T+1
- ICE requires Gross Margin

- **LCH. SwapClear Margin Model**

- Approach: univariate model (volatility driven)
- Initial margin can be held on a gross or net basis, however, UBS is choosing to call clients on a gross basis

**Valuation**

Positions will be valued using the CCP's daily price valuation. We adhere to the valuation and margin process set by the clearing house and would not expect clients to have input into this process.

**UBS risk models**

We have a comprehensive, independent internal risk management framework to calculate risk exposure on our client portfolios (on a daily basis) and to monitor the differential between our internal calculation and the clearing house calculation.

If there is any stress loss-taking on the portfolio, depending on the credit profile, transparency provided and portfolio dynamics, additional collateral requirement might be requested to mitigate counterparty risk exposure on the portfolio. This framework is applied globally to our entire client base to ensure best risk management practices are applied within our business.

**Segregation**

Segregation and portability represent the cornerstone of each of the clearing house solutions.

UBS conforms to the clearing house rules to ensure the segregation and portability framework is passed on to your advantage.

Segregation models vary across clearing houses, as follows:

- **CME**

Depending on the cleared instrument, the CFTC will make a determination respecting the margin account type at which customer funds will be held. There are three potential account types:

1. A Commodity Exchange Act (CEA) Section 4(d) segregated account. This is the same account in which futures and options on futures customers' segregated funds are held.
2. A CFTC Regulation 30.7 account. This is the same account in which futures and options on futures customers' secured amount account funds are held where those customers are trading on non-US exchanges. It is also the default account where customer funds are held where CFTC approval for margin to secure the underlying instrument has not yet been approved.
3. Finally, the CFTC has recently proposed a third type of account, whereby customer margin pledged for cleared OTC products would be held, if the CFTC should decide that 4d treatment is not appropriate. While this account type has been proposed, the CFTC has not yet issued a final rule on its proposal.

Although the CME has requested 4d treatment for its CDS cleared product, the CFTC has not yet acted. Until such time as the CFTC makes a decision on the CME's 4d petition, customer funds and property for OTC derivatives (including CDS contracts) must be held in a 30.7 secured account.

- **ICE Trust**

Under the current ICE model, promptly upon receipt, UBS, as DCM is required to transfer a client's Minimum ICE Trust Required Initial Margin to the ICE Trust Custodial Client Omnibus Margin Account, where it will satisfy UBS's Initial Margin requirement in respect of client-related positions.

UBS would receive the margin posted (by you) in respect of the Minimum ICE Trust Required Initial Margin as your agent or custodian, subject to a security interest and lien in favour of UBS.

Your Minimum ICE Trust Required Initial Margin must be separately accounted for and segregated from UBS (and its affiliates) assets and accounts, whether credited to the ICE Trust Custodial Client Omnibus Margin Account or held by the DCM or its custodian. This applies during any period pending its transfer by UBS to the account.

In line with the rules, UBS would need to agree that assets transferred to the Custodial Client Omnibus Margin Account will be handled as follows:

1. Cash will become the property of the ICE (with ICE being obligated to return the cash as specified in the Rules) for the benefit of the client(s) (or the Member as agent/custodian).
2. Non-cash assets will remain the property of the client(s), subject to a security interest in favour of the Member (and ICE, as applicable).

- **LCH.SwapClear**

Under LCH.SwapClear rules, protection would be given to you, the client by means of security interest paid to you by us (UBS AG), as clearer. This would become effective in the event of clearer default. This set-up results in LCH paying amounts directly to you and means that you have a directly enforceable security right over margin amounts held by the LCH in the event of a clearing member default.

**How is 'your' margin protected?**

- **CME**

Your margin would have the protections of segregation and being placed in client-only omnibus accounts in the pass through UBS Securities LLC (the UBS futures commission merchant in the US).

- **ICE Trust**

UBS would receive the margin posted (by you) in respect of the Minimum ICE Trust Required Margin as your agent or custodian, subject to a security interest and lien in favour of UBS.

Your Minimum ICE Trust Required Initial Margin must be separately accounted for and segregated from UBS (and its affiliates) assets and accounts, whether credited to the ICE Trust Custodial Client Omnibus Margin Account or held by the DCM or its custodian. This applies during any period pending its transfer by UBS to the account.

• **LCH. SwapClear (LCH)**

SwapClear operates an outright title transfer system. However, alternative benefits are offered, which address the same underlying concerns that client asset rules attempt to address, i.e. LCH records the identity of the underlying client against all margin amounts held, so collateral is identifiable against that client independently of the books and records of their clearing member. LCH is subject to a security deed (Deed of Assignment) that provides, following the default of a clearing member, any receivable of margin due to that clearing member will instead be returned to you (despite it legally having been transferred on an OTT basis). Additionally, the default management rules recognize your rights over the margin.

**Legal title to margin**

• **CME**

Legal title to margin is retained by the customer. Customers must provide a security interest and first lien. The security interest is given to the DCM (or, in the case of CME, the OTC Clearing Member).

• **ICE Trust**

Under the current ICE Trust model, in line with the ICE Trust Rules, each DCM would need to agree that with respect to initial margin posted to ICE's client omnibus account:

- (i) cash so transferred will become property of ICE (with ICE being obligated to return such cash for the benefit of the client(s) (or the Member agent/custodian), and
- (ii) non-cash assets so transferred will remain client(s) property, subject to a security interest in favour of the Member (and ICE, as applicable).

• **LCH. SwapClear (LCH)**

SwapClear operates an outright title transfer system. However, alternative benefits are offered, which address the same underlying concerns that client asset rules attempt to address, i.e. LCH records the identity of the underlying client against all margin amounts held, so collateral is identifiable against that client independently of the books and records of their clearing member. LCH is subject to a security deed (Deed of Assignment) that provides, following the default of a clearing member, any receivable of margin due to that clearing member will instead be returned to you (despite it legally having been transferred on an OTT basis). Additionally, the default management rules recognize your rights over the margin.

**How are underlying clients protected if the CCP goes bankrupt?**

• **CME**

The CCP has created a set of priorities respecting the allocation of various tranches of assets to be applied in the event of its default. Public customers of the CCP's OTC Clearing members' segregated margin deposits are provided a preference under US Bankruptcy law.

• **ICE Trust**

If ICE's Guarantee Fund is depleted, each DCM's Custodial Client Omnibus Margin Account would be used to cover losses and every customer's initial margin contribution would be used to cover the shortfall on a pro rata basis.

• **LCH.SwapClear**

CCP is protected by several layers of protection (membership criteria of clearing brokers, variation margin, initial margin, intra-day margining, defaulters default fund contribution, then GBP 20 million of LCH's own capital, remaining default fund, remainder of LCH's capital) and could possibly be bailed out by government.

Current contributions to the CCP default fund are as follows:

- CME: approximately USD 165 million
- ICE Trust: USD 20 million
- LCH.SwapClear: minimum contribution of GBP 2 million.



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