



LCH Ltd Stress Testing and Assessment Disclosure

29-Sep-23

SwapClear (DF €6.9 bn)	3 Defaults	4 Defaults	5 Defaults	6 Defaults	7 Defaults	8 Defaults	9 Defaults	10 Defaults
Skin in the Game Loss	100%	100%	100%	100%	100%	100%	100%	100%
Remaining Non Defaulter Assessments	93%	116%	134%	162%	189%	216%	240%	255%
Scenario Number	1519	1519	1519	1519	1519	1519	1519	1519
Scenario Type	Historical	Historical	Historical	Historical	Historical	Historical	Historical	Historical
Scenario Description	Lehman	Lehman	Lehman	Lehman	Lehman	Lehman	Lehman	Lehman

RepoClear (DF €575 mn)	3 Defaults	4 Defaults	5 Defaults	6 Defaults	7 Defaults	8 Defaults	9 Defaults	10 Defaults
Skin in the Game Loss	100%	100%	100%	100%	100%	100%	100%	100%
Remaining Non Defaulter Assessments	0%	0%	0%	0%	0%	0%	0%	26%
Scenario Number	2030	2030	2030	2030	2030	2030	2030	2030
Scenario Type	Historical	Historical	Historical	Historical	Historical	Historical	Historical	Historical
Scenario Description	UK yield steepening	UK yield steepening	UK yield steepening	UK yield steepening	UK yield steepening	UK yield steepening	UK yield steepening	UK yield steepening

EquityClear (DF €173 mn)	3 Defaults	4 Defaults	5 Defaults	6 Defaults	7 Defaults	8 Defaults	9 Defaults	10 Defaults
Skin in the Game Loss	0%	0%	0%	0%	0%	0%	0%	0%
Remaining Non Defaulter Assessments	0%	0%	0%	0%	0%	0%	0%	0%
Scenario Number	791	791	791	791	791	791	791	791
Scenario Type	Antithetical	Antithetical	Antithetical	Antithetical	Antithetical	Antithetical	Antithetical	Antithetical
Scenario Description	1987 Stock Crash	1987 Stock Crash	1987 Stock Crash	1987 Stock Crash	1987 Stock Crash	1987 Stock Crash	1987 Stock Crash	1987 Stock Crash

ForexClear (DF €1.2 bn)	3 Defaults	4 Defaults	5 Defaults	6 Defaults	7 Defaults	8 Defaults	9 Defaults	10 Defaults
Skin in the Game Loss	100%	100%	100%	100%	100%	100%	100%	100%
Remaining Non Defaulter Assessments	76%	88%	93%	97%	110%	141%	141%	160%
Scenario Number	1613	1613	1613	1613	1613	1613	1613	1613
Scenario Type	Theoretical	Theoretical	Theoretical	Theoretical	Theoretical	Theoretical	Theoretical	Theoretical
Scenario Description	BRL Depreciation	BRL Depreciation	BRL Depreciation	BRL Depreciation	BRL Depreciation	BRL Depreciation	BRL Depreciation	BRL Depreciation

Number of defaults:

N represents the number of member groups in default. A member group may contain more than 1 member, and all client accounts within the members. Defaults are assumed to be instantaneous and under the same stress conditions (i.e. the same scenario).

For example the worst 6 defaults is assumed to occur under the same scenario, however this could be a different scenario to the worst 7 defaults.

Stress losses over total margin (STLOTM) is used in this simulation. The aggregation of stress losses over margin follow the member and customer account segregation rules.

Skin in the Game Loss:

Represents the percentage of 'skin in the game' capital loss for each default fund waterfall. LCH skin in the game capital is ahead of non defaulter contributions.

Remaining Non Defaulter Assessments:

Represents the estimated maximum unfunded contribution payable to LCH for a given number of defaults. The figures are expressed as a percentage of the funded default fund contribution.

For example if a member had contributed \$10m to the default fund and assessment is 196% for 5 defaults, then the member is liable to pay \$19.6m in the following days margins call (to restore the default fund).

Assessments are capped at 1X (100%) per default up to maximum 3 defaults (300%). Once the maximum assessments have been utilised, LCH will move to the next recovery tool in the waterfall.

Scenario Descriptions:

SwapClear 1519 is the Lehman scenario of negative shifts (30 - 100bps shift down)

RepoClear 2030 is related to UK centric events in 2022 with shifts down (16-208bps)

EquityClear 791 is an antithetical scenario in which equity market are up (32%)

ForexClear 1613 is a depreciation in BRL against USD (+31.75%) and an increase in implied volatility



LCH Ltd Stress Testing and Assessment Disclosure

30-Jun-23

SwapClear (DF €6.9 bn)	3 Defaults	4 Defaults	5 Defaults	6 Defaults	7 Defaults	8 Defaults	9 Defaults	10 Defaults
Skin in the Game Loss	100%	100%	100%	100%	100%	100%	100%	100%
Remaining Non Defaulter Assessments	94%	122%	156%	180%	207%	236%	259%	276%
Scenario Number	1519	1519	1519	1519	1519	1519	1519	1519
Scenario Type	Historical	Historical	Historical	Historical	Historical	Historical	Historical	Historical
Scenario Description	Lehman	Lehman	Lehman	Lehman	Lehman	Lehman	Lehman	Lehman

RepoClear (DF €579 mn)	3 Defaults	4 Defaults	5 Defaults	6 Defaults	7 Defaults	8 Defaults	9 Defaults	10 Defaults
Skin in the Game Loss	100%	100%	100%	100%	100%	100%	100%	100%
Remaining Non Defaulter Assessments	0%	0%	0%	0%	0%	0%	0%	0%
Scenario Number	2030	2030	2030	2030	2030	2030	2030	2030
Scenario Type	Historical	Historical	Historical	Historical	Historical	Historical	Historical	Historical
Scenario Description	UK yield steepening	UK yield steepening	UK yield steepening	UK yield steepening	UK yield steepening	UK yield steepening	UK yield steepening	UK yield steepening

EquityClear (DF €175 mn)	3 Defaults	4 Defaults	5 Defaults	6 Defaults	7 Defaults	8 Defaults	9 Defaults	10 Defaults
Skin in the Game Loss	100%	100%	100%	100%	100%	100%	100%	100%
Remaining Non Defaulter Assessments	0%	0%	0%	0%	0%	0%	0%	0%
Scenario Number	1989	1989	1989	1989	1989	1989	1989	1989
Scenario Type	DE-CORR	DE-CORR	DE-CORR	DE-CORR	DE-CORR	DE-CORR	DE-CORR	DE-CORR
Scenario Description	2008 Global Financial Crisis with Idiosyncratic decorrelation	2008 Global Financial Crisis with Idiosyncratic decorrelation	2008 Global Financial Crisis with Idiosyncratic decorrelation	2008 Global Financial Crisis with Idiosyncratic decorrelation	2008 Global Financial Crisis with Idiosyncratic decorrelation	2008 Global Financial Crisis with Idiosyncratic decorrelation	2008 Global Financial Crisis with Idiosyncratic decorrelation	2008 Global Financial Crisis with Idiosyncratic decorrelation

ForexClear (DF €1.6 bn)	3 Defaults	4 Defaults	5 Defaults	6 Defaults	7 Defaults	8 Defaults	9 Defaults	10 Defaults
Skin in the Game Loss	100%	100%	100%	100%	100%	100%	100%	100%
Remaining Non Defaulter Assessments	43%	47%	47%	58%	67%	72%	85%	85%
Scenario Number	1646	1646	1646	1646	1646	1646	1646	1646
Scenario Type	Theoretical	Theoretical	Theoretical	Theoretical	Theoretical	Theoretical	Theoretical	Theoretical
Scenario Description	KRW Appreciation	KRW Appreciation	KRW Appreciation	KRW Appreciation	KRW Appreciation	KRW Appreciation	KRW Appreciation	KRW Appreciation

Number of defaults:

N represents the number of member groups in default. A member group may contain more than 1 member, and all client accounts within the members. Defaults are assumed to be instantaneous and under the same stress conditions (i.e. the same scenario).

For example the worst 6 defaults is assumed to occur under the same scenario, however this could be a different scenario to the worst 7 defaults.

Stress losses over total margin (STLOTM) is used in this simulation. The aggregation of stress losses over margin follow the member and customer account segregation rules.

Skin in the Game Loss:

Represents the percentage of 'skin in the game' capital loss for each default fund waterfall. LCH skin in the game capital is ahead of non defaulter contributions.

Remaining Non Defaulter Assessments:

Represents the estimated maximum unfunded contribution payable to LCH for a given number of defaults. The figures are expressed as a percentage of the funded default fund contribution.

For example if a member had contributed \$10m to the default fund and assessment is 196% for 5 defaults, then the member is liable to pay \$19.6m in the following days margins call (to restore the default fund).

Assessments are capped at 1X (100%) per default up to maximum 3 defaults (300%). Once the maximum assessments have been utilised, LCH will move to the next recovery tool in the waterfall.

Scenario Descriptions:

SwapClear 1519 is the Lehman scenario of negative shifts (30 - 100bps shift down)

RepoClear 2030 is related to UK centric events in 2022 with shifts down (16-208bps)

EquityClear 1989 is an antithetic equities up scenario derived from 2008 Global Financial crisis with Idiosyncratic decorrelation (26%)

ForexClear 1646 is a KRW appreciation scenario against USD (-18%) with volatility shift.



LCH Ltd Stress Testing and Assessment Disclosure

31-Mar-23

SwapClear (DF €5.7 bn)	3 Defaults	4 Defaults	5 Defaults	6 Defaults	7 Defaults	8 Defaults	9 Defaults	10 Defaults
Skin in the Game Loss	100%	100%	100%	100%	100%	100%	100%	100%
Remaining Non Defaulter Assessments	80%	103%	133%	154%	182%	208%	226%	239%
Scenario Number	1519	1519	1519	1519	1519	1519	1519	1519
Scenario Type	Historical	Historical	Historical	Historical	Historical	Historical	Historical	Historical
Scenario Description	Lehman	Lehman	Lehman	Lehman	Lehman	Lehman	Lehman	Lehman

RepoClear (DF €566 mn)	3 Defaults	4 Defaults	5 Defaults	6 Defaults	7 Defaults	8 Defaults	9 Defaults	10 Defaults
Skin in the Game Loss	100%	100%	100%	100%	100%	100%	100%	100%
Remaining Non Defaulter Assessments	0%	0%	0%	0%	0%	0%	0%	0%
Scenario Number	23	23	23	23	23	23	23	23
Scenario Type	Historical	Historical	Historical	Historical	Historical	Historical	Historical	Historical
Scenario Description	UK yield steepening	UK yield steepening	UK yield steepening	UK yield steepening	UK yield steepening	UK yield steepening	UK yield steepening	UK yield steepening

EquityClear (DF €170 mn)	3 Defaults	4 Defaults	5 Defaults	6 Defaults	7 Defaults	8 Defaults	9 Defaults	10 Defaults
Skin in the Game Loss	95%	95%	95%	95%	95%	95%	95%	95%
Remaining Non Defaulter Assessments	0%	0%	0%	0%	0%	0%	0%	0%
Scenario Number	1989	1989	1989	1989	1989	1989	1989	1989
Scenario Type	DE-CORR	DE-CORR	DE-CORR	DE-CORR	DE-CORR	DE-CORR	DE-CORR	DE-CORR
Scenario Description	2008 Global Financial Crisis with Idiosyncratic decorrelation	2008 Global Financial Crisis with Idiosyncratic decorrelation	2008 Global Financial Crisis with Idiosyncratic decorrelation	2008 Global Financial Crisis with Idiosyncratic decorrelation	2008 Global Financial Crisis with Idiosyncratic decorrelation	2008 Global Financial Crisis with Idiosyncratic decorrelation	2008 Global Financial Crisis with Idiosyncratic decorrelation	2008 Global Financial Crisis with Idiosyncratic decorrelation

ForexClear (DF €1.5 bn)	3 Defaults	4 Defaults	5 Defaults	6 Defaults	7 Defaults	8 Defaults	9 Defaults	10 Defaults
Skin in the Game Loss	100%	100%	100%	100%	100%	100%	100%	100%
Remaining Non Defaulter Assessments	27%	34%	41%	46%	49%	58%	59%	77%
Scenario Number	255	255	255	255	255	255	255	255
Scenario Type	Theoretical	Theoretical	Theoretical	Theoretical	Theoretical	Theoretical	Theoretical	Theoretical
Scenario Description	EM All down	EM All down	EM All down	EM All down	EM All down	EM All down	EM All down	EM All down

Number of defaults:

N represents the number of member groups in default. A member group may contain more than 1 member, and all client accounts within the members. Defaults are assumed to be instantaneous and under the same stress conditions (i.e. the same scenario).

For example the worst 6 defaults is assumed to occur under the same scenario, however this could be a different scenario to the worst 7 defaults.

Stress losses over total margin (STLOTM) is used in this simulation. The aggregation of stress losses over margin follow the member and customer account segregation rules.

Skin in the Game Loss:

Represents the percentage of 'skin in the game' capital loss for each default fund waterfall. LCH skin in the game capital is ahead of non defaulter contributions.

Remaining Non Defaulter Assessments:

Represents the estimated maximum unfunded contribution payable to LCH for a given number of defaults. The figures are expressed as a percentage of the funded default fund contribution.

For example if a member had contributed \$10m to the default fund and assessment is 196% for 5 defaults, then the member is liable to pay \$19.6m in the following days margins call (to restore the default fund).

Assessments are capped at 1X (100%) per default up to maximum 3 defaults (300%). Once the maximum assessments have been utilised, LCH will move to the next recovery tool in the waterfall.

Scenario Descriptions:

SwapClear 1519 is the Lehman scenario of negative shifts (30 - 100bps shift down)

RepoClear 23 is to UK exit from the ERM in 1992 with UK yield steeping

EquityClear 1989 is an antithetic equities up scenario derived from 2008 Global Financial crisis with Idiosyncratic decorrelation (26%)

ForexClear 255 is a depreciation of emerging markets versus USD (10-50%)



LCH Ltd Stress Testing and Assessment Disclosure

30-Dec-22

SwapClear (DF €5.3 bn)	3 Defaults	4 Defaults	5 Defaults	6 Defaults	7 Defaults	8 Defaults	9 Defaults	10 Defaults
Skin in the Game Loss	100%	100%	100%	100%	100%	100%	100%	100%
Remaining Non Defaulter Assessments	83%	104%	137%	165%	192%	222%	243%	259%
Scenario Number	1519	1519	1519	1519	1519	1519	1519	1519
Scenario Type	Historical	Historical	Historical	Historical	Historical	Historical	Historical	Historical
Scenario Description	Lehman	Lehman	Lehman	Lehman	Lehman	Lehman	Lehman	Lehman

RepoClear (DF €1.2 bn)	3 Defaults	4 Defaults	5 Defaults	6 Defaults	7 Defaults	8 Defaults	9 Defaults	10 Defaults
Skin in the Game Loss	100%	100%	100%	100%	100%	100%	100%	100%
Remaining Non Defaulter Assessments	0%	0%	0%	0%	0%	0%	0%	0%
Scenario Number	2030	2030	2030	2030	2030	2030	2030	2030
Scenario Type	Historical	Historical	Historical	Historical	Historical	Historical	Historical	Historical
Scenario Description	UK shift down	UK shift down	UK shift down	UK shift down	UK shift down	UK shift down	UK shift down	UK shift down

EquityClear (DF €169 mn)	3 Defaults	4 Defaults	5 Defaults	6 Defaults	7 Defaults	8 Defaults	9 Defaults	10 Defaults
Skin in the Game Loss	100%	100%	100%	100%	100%	100%	100%	100%
Remaining Non Defaulter Assessments	0%	0%	0%	0%	0%	0%	0%	0%
Scenario Number	1989	1989	1989	1989	1989	1989	1989	1989
Scenario Type	DE-CORR	DE-CORR	DE-CORR	DE-CORR	DE-CORR	DE-CORR	DE-CORR	DE-CORR
Scenario Description	2008 Global Financial Crisis with Idiosyncratic decorrelation	2008 Global Financial Crisis with Idiosyncratic decorrelation	2008 Global Financial Crisis with Idiosyncratic decorrelation	2008 Global Financial Crisis with Idiosyncratic decorrelation	2008 Global Financial Crisis with Idiosyncratic decorrelation	2008 Global Financial Crisis with Idiosyncratic decorrelation	2008 Global Financial Crisis with Idiosyncratic decorrelation	2008 Global Financial Crisis with Idiosyncratic decorrelation

ForexClear (DF €1.9 bn)	3 Defaults	4 Defaults	5 Defaults	6 Defaults	7 Defaults	8 Defaults	9 Defaults	10 Defaults
Skin in the Game Loss	100%	100%	100%	100%	100%	100%	100%	100%
Remaining Non Defaulter Assessments	71%	84%	98%	103%	108%	108%	137%	169%
Scenario Number	258	258	258	258	258	258	258	258
Scenario Type	Theoretical	Theoretical	Theoretical	Theoretical	Theoretical	Theoretical	Theoretical	Theoretical
Scenario Description	EM All up	EM All up	EM All up	EM All up	EM All up	EM All up	EM All up	EM All up

Number of defaults:

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For example the worst 6 defaults is assumed to occur under the same scenario, however this could be a different scenario to the worst 7 defaults.

Stress losses over total margin (STLOTM) is used in this simulation. The aggregation of stress losses over margin follow the member and customer account segregation rules.

Skin in the Game Loss:

Represents the percentage of 'skin in the game' capital loss for each default fund waterfall. LCH skin in the game capital is ahead of non defaulter contributions.

Remaining Non Defaulter Assessments:

Represents the estimated maximum unfunded contribution payable to LCH for a given number of defaults. The figures are expressed as a percentage of the funded default fund contribution.

For example if a member had contributed \$10m to the default fund and assessment is 196% for 5 defaults, then the member is liable to pay \$19.6m in the following days margins call (to restore the default fund).

Assessments are capped at 1X (100%) per default up to maximum 3 defaults (300%). Once the maximum assessments have been utilised, LCH will move to the next recovery tool in the waterfall.

Scenario Descriptions:

SwapClear 1519 is the lehman scenario of negative shifts (30 - 100bps shift down)

RepoClear 2030 is related to UK centric events in 2022 with shifts down (16-208bps)

EquityClear 1989 is an antithetic equities up scenario derived from 2008 Global Financial crisis with Idiosyncratic decorrelation (26%)

ForexClear 258 is an appreciation of emerging markets versus USD (15-20%).



LCH Ltd Stress Testing and Assessment Disclosure

30-Sep-22

SwapClear (DF €5.8 bn)	3 Defaults	4 Defaults	5 Defaults	6 Defaults	7 Defaults	8 Defaults	9 Defaults	10 Defaults
Skin in the Game Loss	100%	100%	100%	100%	100%	100%	100%	100%
Remaining Non Defaulter Assessments	81%	112%	149%	187%	215%	247%	277%	292%
Scenario Number	1519	1519	1519	1519	1519	1519	1519	1519
Scenario Type	Historical	Historical	Historical	Historical	Historical	Historical	Historical	Historical
Scenario Description	Lehman	Lehman	Lehman	Lehman	Lehman	Lehman	Lehman	Lehman

RepoClear (DF €828 mn)	3 Defaults	4 Defaults	5 Defaults	6 Defaults	7 Defaults	8 Defaults	9 Defaults	10 Defaults
Skin in the Game Loss	100%	100%	100%	100%	100%	100%	100%	100%
Remaining Non Defaulter Assessments	32%	32%	33%	34%	34%	40%	44%	48%
Scenario Number	473	473	473	473	473	473	473	473
Scenario Type	Historical	Historical	Historical	Historical	Historical	Historical	Historical	Historical
Scenario Description	UK yield steepening	UK yield steepening	UK yield steepening	UK yield steepening	UK yield steepening	UK yield steepening	UK yield steepening	UK yield steepening

EquityClear (DF €171 mn)	3 Defaults	4 Defaults	5 Defaults	6 Defaults	7 Defaults	8 Defaults	9 Defaults	10 Defaults
Skin in the Game Loss*	0%	0%	0%	0%	0%	0%	0%	0%
Remaining Non Defaulter Assessments	0%	0%	0%	0%	0%	0%	0%	0%
Scenario Number	791	791	791	791	791	791	791	791
Scenario Type	Antithetical	Antithetical	Antithetical	Antithetical	Antithetical	Antithetical	Antithetical	Antithetical
Scenario Description	1987 Stock Crash	1987 Stock Crash	1987 Stock Crash	1987 Stock Crash	1987 Stock Crash	1987 Stock Crash	1987 Stock Crash	1987 Stock Crash

ForexClear (DF €2.4 bn)	3 Defaults	4 Defaults	5 Defaults	6 Defaults	7 Defaults	8 Defaults	9 Defaults	10 Defaults
Skin in the Game Loss	100%	100%	100%	100%	100%	100%	100%	100%
Remaining Non Defaulter Assessments	50%	66%	85%	104%	105%	132%	139%	169%
Scenario Number	1095	1095	1095	1095	1095	1013	1013	1013
Scenario Type	DE-CORR	DE-CORR	DE-CORR	DE-CORR	DE-CORR	DE-CORR	DE-CORR	DE-CORR
Scenario Description	EM up/ AUD depreciation	EM up/ AUD depreciation	EM up/ AUD depreciation	EM up/ AUD depreciation	EM up/ AUD depreciation	KRW Appreciation	KRW Appreciation	KRW Appreciation

* At quarter end, all EquityClear members had no material stress exposures

Number of defaults:

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Skin in the Game Loss:

Represents the percentage of 'skin in the game' capital loss for each default fund waterfall. LCH skin in the game capital is ahead of non defaulter contributions.

Remaining Non Defaulter Assessments:

Represents the estimated maximum unfunded contribution payable to LCH for a given number of defaults. The figures are expressed as a percentage of the funded default fund contribution.

For example if a member had contributed \$10m to the default fund and assessment is 196% for 5 defaults, then the member is liable to pay \$19.6m in the following days margins call (to restore the default fund).

Assessments are capped at 1X (100%) per default up to maximum 3 defaults (300%). Once the maximum assessments have been utilised, LCH will move to the next recovery tool in the waterfall.

Scenario Descriptions:

RepoClear 473 is a historical scenario with UK yield steeping.

EquityClear 791 is an antithetical scenario in which equity market are up (32%).

ForexClear 1095 is a decorrelation scenario with EM appreciation and AUD depreciation; ForexClear 1013 is a KRW appreciation scenario against USD (-18%)

SwapClear 1519 is the lehman scenario of negative shifts (30 - 100bps shift down)