

# VALIDATION RULES REPORT

## OTC derivatives

Table group 1: Regular derivatives market statistics, foreign exchange and gold contracts

T1A Table 1A: Foreign exchange derivatives, nominal or notional principal amounts outstanding at end of reporting period

T1A. Internal validations

a0001\_m (40 tests)

c\* :

$$\text{sum}(\{r[160, 170, 190]\}) = \{r200\}$$

$$\text{sum}(\{r[110, 120, 140]\}) = \{r150\}$$

$$\text{sum}(\{r[060, 070, 090]\}) = \{r100\}$$

$$\text{sum}(\{r[010, 020, 040]\}) = \{r050\}$$

a0002\_m (40 tests)

c\* :

$$\{r170\} \geq \{r180\}$$

$$\{r120\} \geq \{r130\}$$

$$\{r070\} \geq \{r080\}$$

$$\{r020\} \geq \{r030\}$$

a0004\_m (10 tests)

$$c* : \text{sum}(\{r[150, 200]\}) = \{r210\}$$

a0005\_m (10 tests)

$$c* : \text{sum}(\{r[050, 100, 210]\}) = \{r220\}$$

a0006\_m (22 tests)

$$r* : \text{sum}(\{c[010, 020, 030, 040, 050, 060, 070, 080, 090]\}) = \{c100\}$$

T1A. Cross-validations with other tables: T4A

a0010\_m (21 tests)

$$\{T1A, r200, c100\} = \text{sum}(\{T4A, r050, c[100-120]\})$$

$$\{T1A, r150, c100\} = \text{sum}(\{T4A, r050, c[070, 080, 090]\})$$

$$\{T1A, r090, c100\} = \text{sum}(\{T4A, r040, c[040, 050, 060]\})$$

$$\{T1A, r080, c100\} = \text{sum}(\{T4A, r030, c[040, 050, 060]\})$$

$$\{T1A, r070, c100\} = \text{sum}(\{T4A, r020, c[040, 050, 060]\})$$

$$\{T1A, r060, c100\} = \text{sum}(\{T4A, r010, c[040, 050, 060]\})$$

$$r040 : \{T1A, c100\} = \text{sum}(\{T4A, c[010, 020, 030]\})$$

$$r030 : \{T1A, c100\} = \text{sum}(\{T4A, c[010, 020, 030]\})$$

$$r020 : \{T1A, c100\} = \text{sum}(\{T4A, c[010, 020, 030]\})$$

$$r010 : \{T1A, c100\} = \text{sum}(\{T4A, c[010, 020, 030]\})$$

$$\{T1A, r100, c100\} = \text{sum}(\{T4A, r050, c[040, 050, 060]\})$$

$$r050 : \{T1A, c100\} = \text{sum}(\{T4A, c[010, 020, 030]\})$$

$$\{T1A, r190, c100\} = \text{sum}(\{T4A, r040, c[100-120]\})$$

$$\{T1A, r140, c100\} = \text{sum}(\{T4A, r040, c[070, 080, 090]\})$$

$$\{T1A, r180, c100\} = \text{sum}(\{T4A, r030, c[100-120]\})$$

$\{T1A, r130, c100\} = \text{sum}(\{T4A, r030, c[070, 080, 090]\})$   
 $\{T1A, r170, c100\} = \text{sum}(\{T4A, r020, c[100-120]\})$   
 $\{T1A, r120, c100\} = \text{sum}(\{T4A, r020, c[070, 080, 090]\})$   
 $\{T1A, r160, c100\} = \text{sum}(\{T4A, r010, c[100-120]\})$   
 $\{T1A, r110, c100\} = \text{sum}(\{T4A, r010, c[070, 080, 090]\})$   
 $\{T1A, r220, c100\} = \text{sum}(\{T4A, r050, c[130-150]\})$

T1A. Cross-validations with other tables: T7

a0026\_m (1 test)

$\{T1A, r220, c100\} \geq \{T7, c010, r010\}$

T1B Table 1B: Foreign exchange derivatives, gross positive market values at end of reporting period

T1B. Internal validations

a0001\_m (30 tests)

c\* :

$\text{sum}(\{r[060, 070, 090]\}) = \{r100\}$

$\text{sum}(\{r[010, 020, 040]\}) = \{r050\}$

$\text{sum}(\{r[110, 120, 140]\}) = \{r150\}$

a0002\_m (30 tests)

c\* :

$\{r120\} \geq \{r130\}$

$\{r070\} \geq \{r080\}$

$\{r020\} \geq \{r030\}$

a0005\_m (10 tests)

c\* :  $\text{sum}(\{r[050, 100, 150]\}) = \{r160\}$

a0006\_m (16 tests)

r\* :  $\text{sum}(\{c[010, 020, 030, 040, 050, 060, 070, 080, 090]\}) = \{c100\}$

T1B. Cross-validations with other tables: T1D, T2B, T3B, T3D, T5

a0024\_m (1 test)

$\{T1B, c100, r160\} + \{T1D, c020, r040\} + \{T2B, c100, r160\} +$   
 $\text{sum}(\{T3B, r160, c^*\}) + \text{sum}(\{T3D, r050, c[030, 040]\}) = \{T5, c010,$   
 $r010\}$

T1C Table 1C: Foreign exchange derivatives, gross negative market values at end of reporting period

T1C. Internal validations

a0001\_m (30 tests)

c\* :

$\text{sum}(\{r[060, 070, 090]\}) = \{r100\}$

$\text{sum}(\{r[010, 020, 040]\}) = \{r050\}$

$\text{sum}(\{r[110, 120, 140]\}) = \{r150\}$

a0002\_m (30 tests)

c\* :

{r120} >= {r130}

{r070} >= {r080}

{r020} >= {r030}

a0005\_m (10 tests)

c\* : sum({r[050, 100, 150]}) = {r160}

a0006\_m (16 tests)

r\* : sum({c[010, 020, 030, 040, 050, 060, 070, 080, 090]}) = {c100}

T1C. Cross-validations with other tables: T1D, T2C, T3C, T3D, T5

a0025\_m (1 test)

{T1C, c100, r160} + {T1D, c030, r040} + {T2C, c100, r160} +  
sum({T3C, r160, c\*}) + sum({T3D, r050, c[050, 060]}) = {T5, c020,  
r010}

T1D Table 1D: Foreign exchange gold derivatives, nominal or notional principal, gross positive and gross negative amounts outstanding at end of reporting period

T1D. Internal validations

a0007\_m (3 tests)

c010 : sum({r[010, 020, 030]}) = {r040}

c030 : sum({r[010, 020]}) = {r040}

c020 : sum({r[010, 030]}) = {r040}

T1D. Cross-validations with other tables: T4B

a0029\_m (1 test)

{T1D, c010, r040} = sum({T4B, r010, c\*})

T1D. Cross-validations with other tables: T1B, T2B, T3B, T3D, T5

a0024\_m (1 test)

{T1B, c100, r160} + {T1D, c020, r040} + {T2B, c100, r160} +  
sum({T3B, r160, c\*}) + sum({T3D, r050, c[030, 040]}) = {T5, c010,  
r010}

T1D. Cross-validations with other tables: T1C, T2C, T3C, T3D, T5

a0025\_m (1 test)

{T1C, c100, r160} + {T1D, c030, r040} + {T2C, c100, r160} +  
sum({T3C, r160, c\*}) + sum({T3D, r050, c[050, 060]}) = {T5, c020,  
r010}

Table group 2: Regular derivatives market statistics, single-currency interest rate derivatives

T2A Table 2A: Single-currency interest rate derivatives, nominal or notional principal amounts outstanding at end of reporting period

T2A. Internal validations

a0001\_m (40 tests)

c\* :

sum({r[160, 170, 190]}) = {r200}  
sum({r[110, 120, 140]}) = {r150}  
sum({r[060, 070, 090]}) = {r100}  
sum({r[010, 020, 040]}) = {r050}

a0002\_m (40 tests)

c\* :

{r170} >= {r180}  
{r120} >= {r130}  
{r070} >= {r080}  
{r020} >= {r030}

a0004\_m (10 tests)

c\* : sum({r[150, 200]}) = {r210}

a0005\_m (10 tests)

c\* : sum({r[050, 100, 210]}) = {r220}

a0006\_m (22 tests)

r\* : sum({c[010, 020, 030, 040, 050, 060, 070, 080, 090]}) = {c100}

T2A. Cross-validations with other tables: T4A

a0011\_m (20 tests)

r100 : {T2A, c100} = sum({T4A, c[040, 050, 060]})  
r090 : {T2A, c100} = sum({T4A, c[040, 050, 060]})  
r080 : {T2A, c100} = sum({T4A, c[040, 050, 060]})  
r070 : {T2A, c100} = sum({T4A, c[040, 050, 060]})  
r060 : {T2A, c100} = sum({T4A, c[040, 050, 060]})  
{T2A, c100, r050} = sum({T4A, r100, c[010, 020, 030]})  
{T2A, c100, r040} = sum({T4A, r090, c[010, 020, 030]})  
{T2A, c100, r030} = sum({T4A, r080, c[010, 020, 030]})  
{T2A, c100, r020} = sum({T4A, r070, c[010, 020, 030]})  
{T2A, c100, r010} = sum({T4A, r060, c[010, 020, 030]})  
{T2A, c100, r200} = sum({T4A, r100, c[100-120]})  
{T2A, c100, r150} = sum({T4A, r100, c[070, 080, 090]})  
{T2A, c100, r190} = sum({T4A, r090, c[100-120]})  
{T2A, c100, r140} = sum({T4A, r090, c[070, 080, 090]})  
{T2A, c100, r180} = sum({T4A, r080, c[100-120]})  
{T2A, c100, r130} = sum({T4A, r080, c[070, 080, 090]})  
{T2A, c100, r170} = sum({T4A, r070, c[100-120]})  
{T2A, c100, r120} = sum({T4A, r070, c[070, 080, 090]})  
{T2A, c100, r160} = sum({T4A, r060, c[100-120]})  
{T2A, c100, r110} = sum({T4A, r060, c[070, 080, 090]})

T2A. Cross-validations with other tables: T7

a0027\_m (1 test)

{T2A, c100, r220} >= {T7, c020, r010}

T2B Table 2B: Single-currency interest rate derivatives, gross positive market values at end of reporting period

T2B. Internal validations

a0001\_m (30 tests)

c\* :

$$\text{sum}(\{r[060, 070, 090]\}) = \{r100\}$$

$$\text{sum}(\{r[010, 020, 040]\}) = \{r050\}$$

$$\text{sum}(\{r[110, 120, 140]\}) = \{r150\}$$

a0002\_m (30 tests)

c\* :

$$\{r120\} \geq \{r130\}$$

$$\{r070\} \geq \{r080\}$$

$$\{r020\} \geq \{r030\}$$

a0005\_m (10 tests)

$$c* : \text{sum}(\{r[050, 100, 150]\}) = \{r160\}$$

a0006\_m (16 tests)

$$r* : \text{sum}(\{c[010, 020, 030, 040, 050, 060, 070, 080, 090]\}) = \{c100\}$$

T2B. Cross-validations with other tables: T1B, T1D, T3B, T3D, T5

a0024\_m (1 test)

$$\{T1B, c100, r160\} + \{T1D, c020, r040\} + \{T2B, c100, r160\} + \text{sum}(\{T3B, r160, c*\}) + \text{sum}(\{T3D, r050, c[030, 040]\}) = \{T5, c010, r010\}$$

T2C Table 2C: Single-currency interest rate derivatives, gross negative market values at end of reporting period

T2C. Internal validations

a0001\_m (30 tests)

c\* :

$$\text{sum}(\{r[060, 070, 090]\}) = \{r100\}$$

$$\text{sum}(\{r[010, 020, 040]\}) = \{r050\}$$

$$\text{sum}(\{r[110, 120, 140]\}) = \{r150\}$$

a0002\_m (30 tests)

c\* :

$$\{r120\} \geq \{r130\}$$

$$\{r070\} \geq \{r080\}$$

$$\{r020\} \geq \{r030\}$$

a0005\_m (10 tests)

$$c* : \text{sum}(\{r[050, 100, 150]\}) = \{r160\}$$

a0006\_m (16 tests)

$$r* : \text{sum}(\{c[010, 020, 030, 040, 050, 060, 070, 080, 090]\}) = \{c100\}$$

T2C. Cross-validations with other tables: T1C, T1D, T3C, T3D, T5

a0025\_m (1 test)

{T1C, c100, r160} + {T1D, c030, r040} + {T2C, c100, r160} +  
sum({T3C, r160, c\*}) + sum({T3D, r050, c[050, 060]}) = {T5, c020,  
r010}

Table group 3: Regular derivatives market statistics, equity and commodity derivatives

T3A Table 3A: Equity, credit and other derivatives, nominal or notional principal amounts outstanding at end of reporting period

T3A. Internal validations

a0001\_m (32 tests)

c\* :

sum({r[160, 170, 190]}) = {r200}

sum({r[110, 120, 140]}) = {r150}

sum({r[060, 070, 090]}) = {r100}

sum({r[010, 020, 040]}) = {r050}

a0002\_m (32 tests)

c\* :

{r170} >= {r180}

{r120} >= {r130}

{r070} >= {r080}

{r020} >= {r030}

a0004\_m (8 tests)

c\* : sum({r[150, 200]}) = {r210}

a0005\_m (8 tests)

c\* : sum({r[050, 100, 210]}) = {r220}

T3A. Cross-validations with other tables: T4A

a0012\_m (20 tests)

sum({T3A, r100, c[010, 020, 030, 040, 050, 060]}) = sum({T4A, r150,  
c[040, 050, 060]})

sum({T3A, r090, c[010, 020, 030, 040, 050, 060]}) = sum({T4A, r140,  
c[040, 050, 060]})

sum({T3A, r080, c[010, 020, 030, 040, 050, 060]}) = sum({T4A, r130,  
c[040, 050, 060]})

sum({T3A, r070, c[010, 020, 030, 040, 050, 060]}) = sum({T4A, r120,  
c[040, 050, 060]})

sum({T3A, r060, c[010, 020, 030, 040, 050, 060]}) = sum({T4A, r110,  
c[040, 050, 060]})

sum({T3A, r050, c[010, 020, 030, 040, 050, 060]}) = sum({T4A, r150,  
c[010, 020, 030]})

sum({T3A, r040, c[010, 020, 030, 040, 050, 060]}) = sum({T4A, r140,  
c[010, 020, 030]})

sum({T3A, r030, c[010, 020, 030, 040, 050, 060]}) = sum({T4A, r130,  
c[010, 020, 030]})

sum({T3A, r020, c[010, 020, 030, 040, 050, 060]}) = sum({T4A, r120,  
c[010, 020, 030]})

$\text{sum}(\{\text{T3A}, \text{r010}, \text{c}[010, 020, 030, 040, 050, 060]\}) = \text{sum}(\{\text{T4A}, \text{r110}, \text{c}[010, 020, 030]\})$   
 $\text{sum}(\{\text{T3A}, \text{r200}, \text{c}[010, 020, 030, 040, 050, 060]\}) = \text{sum}(\{\text{T4A}, \text{r150}, \text{c}[100-120]\})$   
 $\text{r150} : \text{sum}(\{\text{T3A}, \text{c}[010, 020, 030, 040, 050, 060]\}) = \text{sum}(\{\text{T4A}, \text{c}[070, 080, 090]\})$   
 $\text{sum}(\{\text{T3A}, \text{r190}, \text{c}[010, 020, 030, 040, 050, 060]\}) = \text{sum}(\{\text{T4A}, \text{r140}, \text{c}[100-120]\})$   
 $\text{r140} : \text{sum}(\{\text{T3A}, \text{c}[010, 020, 030, 040, 050, 060]\}) = \text{sum}(\{\text{T4A}, \text{c}[070, 080, 090]\})$   
 $\text{sum}(\{\text{T3A}, \text{r180}, \text{c}[010, 020, 030, 040, 050, 060]\}) = \text{sum}(\{\text{T4A}, \text{r130}, \text{c}[100-120]\})$   
 $\text{r130} : \text{sum}(\{\text{T3A}, \text{c}[010, 020, 030, 040, 050, 060]\}) = \text{sum}(\{\text{T4A}, \text{c}[070, 080, 090]\})$   
 $\text{sum}(\{\text{T3A}, \text{r170}, \text{c}[010, 020, 030, 040, 050, 060]\}) = \text{sum}(\{\text{T4A}, \text{r120}, \text{c}[100-120]\})$   
 $\text{r120} : \text{sum}(\{\text{T3A}, \text{c}[010, 020, 030, 040, 050, 060]\}) = \text{sum}(\{\text{T4A}, \text{c}[070, 080, 090]\})$   
 $\text{sum}(\{\text{T3A}, \text{r160}, \text{c}[010, 020, 030, 040, 050, 060]\}) = \text{sum}(\{\text{T4A}, \text{r110}, \text{c}[100-120]\})$   
 $\text{r110} : \text{sum}(\{\text{T3A}, \text{c}[010, 020, 030, 040, 050, 060]\}) = \text{sum}(\{\text{T4A}, \text{c}[070, 080, 090]\})$

T3A. Cross-validations with other tables: T6B

a0021\_m (1 test)

$\{\text{T3A}, \text{r220}, \text{c070}\} \geq \text{sum}(\{\text{T6B}, \text{r010}, \text{c}^*\})$

T3B Table 3B: Equity, credit and other derivatives, gross positive market values at end of reporting period

T3B. Internal validations

a0001\_m (24 tests)

c\* :

$\text{sum}(\{\text{r}[060, 070, 090]\}) = \{\text{r100}\}$

$\text{sum}(\{\text{r}[010, 020, 040]\}) = \{\text{r050}\}$

$\text{sum}(\{\text{r}[110, 120, 140]\}) = \{\text{r150}\}$

a0002\_m (24 tests)

c\* :

$\{\text{r120}\} \geq \{\text{r130}\}$

$\{\text{r070}\} \geq \{\text{r080}\}$

$\{\text{r020}\} \geq \{\text{r030}\}$

a0005\_m (8 tests)

c\* :  $\text{sum}(\{\text{r}[050, 100, 150]\}) = \{\text{r160}\}$

T3B. Cross-validations with other tables: T6D

a0022\_m (1 test)

$\{\text{T3B}, \text{c070}, \text{r160}\} \geq \{\text{T6D}, \text{c010}, \text{r010}\}$

T3B. Cross-validations with other tables: T1B, T1D, T2B, T3D, T5

a0024\_m (1 test)

{T1B, c100, r160} + {T1D, c020, r040} + {T2B, c100, r160} +  
sum({T3B, r160, c\*}) + sum({T3D, r050, c[030, 040]}) = {T5, c010,  
r010}

T3C Table 3C: Equity, credit and other derivatives, gross negative market  
values at end of reporting period

T3C. Internal validations

a0001\_m (24 tests)

c\* :

sum({r[060, 070, 090]}) = {r100}

sum({r[010, 020, 040]}) = {r050}

sum({r[110, 120, 140]}) = {r150}

a0002\_m (24 tests)

c\* :

{r120} >= {r130}

{r070} >= {r080}

{r020} >= {r030}

a0005\_m (8 tests)

c\* : sum({r[050, 100, 150]}) = {r160}

T3C. Cross-validations with other tables: T6D

a0023\_m (1 test)

{T3C, c070, r160} >= {T6D, c020, r010}

T3C. Cross-validations with other tables: T1C, T1D, T2C, T3D, T5

a0025\_m (1 test)

{T1C, c100, r160} + {T1D, c030, r040} + {T2C, c100, r160} +  
sum({T3C, r160, c\*}) + sum({T3D, r050, c[050, 060]}) = {T5, c020,  
r010}

T3D Table 3D: Commodity derivatives, nominal, gross positive and gross  
negative market values at end of reporting period

T3D. Internal validations

a0008\_m (6 tests)

c[030, 040] : sum({r[010, 020, 040]}) = {r050}

c[050, 060] : sum({r[010, 020, 030]}) = {r050}

c[010, 020] : sum({r[010, 020, 030, 040]}) = {r050}

T3D. Cross-validations with other tables: T1B, T1D, T2B, T3B, T5

a0024\_m (1 test)

{T1B, c100, r160} + {T1D, c020, r040} + {T2B, c100, r160} +  
sum({T3B, r160, c\*}) + sum({T3D, r050, c[030, 040]}) = {T5, c010,  
r010}

T3D. Cross-validations with other tables: T1C, T1D, T2C, T3C, T5



a0025\_m (1 test)

{T1C, c100, r160} + {T1D, c030, r040} + {T2C, c100, r160} +  
sum({T3C, r160, c\*}) + sum({T3D, r050, c[050, 060]}) = {T5, c020,  
r010}

Table group 4: Regular derivatives market statistics, contracts by  
remaining maturity

T4A Table 4A: Notional amounts outstanding of OTC derivative contracts  
by remaining maturity at end of reporting period

T4A. Internal validations

a0001\_m (45 tests)

c\* :

sum({r[060, 070, 090]}) = {r100}

sum({r[010, 020, 040]}) = {r050}

sum({r[110, 120, 140]}) = {r150}

a0002\_m (45 tests)

c\* :

{r120} >= {r130}

{r070} >= {r080}

{r020} >= {r030}

a0009\_m (45 tests)

r\* :

sum({c[030, 060, 090, 120]}) = {c150}

sum({c[020, 050, 080, 110]}) = {c140}

sum({c[010, 040, 070, 100]}) = {c130}

T4A. Cross-validations with other tables: T1A

a0010\_m (21 tests)

{T1A, r200, c100} = sum({T4A, r050, c[100-120]})

{T1A, r150, c100} = sum({T4A, r050, c[070, 080, 090]})

{T1A, r090, c100} = sum({T4A, r040, c[040, 050, 060]})

{T1A, r080, c100} = sum({T4A, r030, c[040, 050, 060]})

{T1A, r070, c100} = sum({T4A, r020, c[040, 050, 060]})

{T1A, r060, c100} = sum({T4A, r010, c[040, 050, 060]})

r040 : {T1A, c100} = sum({T4A, c[010, 020, 030]})

r030 : {T1A, c100} = sum({T4A, c[010, 020, 030]})

r020 : {T1A, c100} = sum({T4A, c[010, 020, 030]})

r010 : {T1A, c100} = sum({T4A, c[010, 020, 030]})

{T1A, r100, c100} = sum({T4A, r050, c[040, 050, 060]})

r050 : {T1A, c100} = sum({T4A, c[010, 020, 030]})

{T1A, r190, c100} = sum({T4A, r040, c[100-120]})

{T1A, r140, c100} = sum({T4A, r040, c[070, 080, 090]})

{T1A, r180, c100} = sum({T4A, r030, c[100-120]})

{T1A, r130, c100} = sum({T4A, r030, c[070, 080, 090]})

{T1A, r170, c100} = sum({T4A, r020, c[100-120]})

{T1A, r120, c100} = sum({T4A, r020, c[070, 080, 090]})

{T1A, r160, c100} = sum({T4A, r010, c[100-120]})  
{T1A, r110, c100} = sum({T4A, r010, c[070, 080, 090]})  
{T1A, r220, c100} = sum({T4A, r050, c[130-150]})

T4A. Cross-validations with other tables: T2A

a0011\_m (20 tests)

r100 : {T2A, c100} = sum({T4A, c[040, 050, 060]})  
r090 : {T2A, c100} = sum({T4A, c[040, 050, 060]})  
r080 : {T2A, c100} = sum({T4A, c[040, 050, 060]})  
r070 : {T2A, c100} = sum({T4A, c[040, 050, 060]})  
r060 : {T2A, c100} = sum({T4A, c[040, 050, 060]})  
{T2A, c100, r050} = sum({T4A, r100, c[010, 020, 030]})  
{T2A, c100, r040} = sum({T4A, r090, c[010, 020, 030]})  
{T2A, c100, r030} = sum({T4A, r080, c[010, 020, 030]})  
{T2A, c100, r020} = sum({T4A, r070, c[010, 020, 030]})  
{T2A, c100, r010} = sum({T4A, r060, c[010, 020, 030]})  
{T2A, c100, r200} = sum({T4A, r100, c[100-120]})  
{T2A, c100, r150} = sum({T4A, r100, c[070, 080, 090]})  
{T2A, c100, r190} = sum({T4A, r090, c[100-120]})  
{T2A, c100, r140} = sum({T4A, r090, c[070, 080, 090]})  
{T2A, c100, r180} = sum({T4A, r080, c[100-120]})  
{T2A, c100, r130} = sum({T4A, r080, c[070, 080, 090]})  
{T2A, c100, r170} = sum({T4A, r070, c[100-120]})  
{T2A, c100, r120} = sum({T4A, r070, c[070, 080, 090]})  
{T2A, c100, r160} = sum({T4A, r060, c[100-120]})  
{T2A, c100, r110} = sum({T4A, r060, c[070, 080, 090]})

T4A. Cross-validations with other tables: T3A

a0012\_m (20 tests)

sum({T3A, r100, c[010, 020, 030, 040, 050, 060]}) = sum({T4A, r150, c[040, 050, 060]})  
sum({T3A, r090, c[010, 020, 030, 040, 050, 060]}) = sum({T4A, r140, c[040, 050, 060]})  
sum({T3A, r080, c[010, 020, 030, 040, 050, 060]}) = sum({T4A, r130, c[040, 050, 060]})  
sum({T3A, r070, c[010, 020, 030, 040, 050, 060]}) = sum({T4A, r120, c[040, 050, 060]})  
sum({T3A, r060, c[010, 020, 030, 040, 050, 060]}) = sum({T4A, r110, c[040, 050, 060]})  
sum({T3A, r050, c[010, 020, 030, 040, 050, 060]}) = sum({T4A, r150, c[010, 020, 030]})  
sum({T3A, r040, c[010, 020, 030, 040, 050, 060]}) = sum({T4A, r140, c[010, 020, 030]})  
sum({T3A, r030, c[010, 020, 030, 040, 050, 060]}) = sum({T4A, r130, c[010, 020, 030]})  
sum({T3A, r020, c[010, 020, 030, 040, 050, 060]}) = sum({T4A, r120, c[010, 020, 030]})  
sum({T3A, r010, c[010, 020, 030, 040, 050, 060]}) = sum({T4A, r110, c[010, 020, 030]})  
sum({T3A, r200, c[010, 020, 030, 040, 050, 060]}) = sum({T4A, r150,

c[100-120])

r150 : sum({T3A, c[010, 020, 030, 040, 050, 060]}) = sum({T4A, c[070, 080, 090]})

sum({T3A, r190, c[010, 020, 030, 040, 050, 060]}) = sum({T4A, r140, c[100-120]})

r140 : sum({T3A, c[010, 020, 030, 040, 050, 060]}) = sum({T4A, c[070, 080, 090]})

sum({T3A, r180, c[010, 020, 030, 040, 050, 060]}) = sum({T4A, r130, c[100-120]})

r130 : sum({T3A, c[010, 020, 030, 040, 050, 060]}) = sum({T4A, c[070, 080, 090]})

sum({T3A, r170, c[010, 020, 030, 040, 050, 060]}) = sum({T4A, r120, c[100-120]})

r120 : sum({T3A, c[010, 020, 030, 040, 050, 060]}) = sum({T4A, c[070, 080, 090]})

sum({T3A, r160, c[010, 020, 030, 040, 050, 060]}) = sum({T4A, r110, c[100-120]})

r110 : sum({T3A, c[010, 020, 030, 040, 050, 060]}) = sum({T4A, c[070, 080, 090]})

T4A. Cross-validations with other tables: T7

a0028\_m (2 tests)

sum({T4A, r100, c[130-150]}) >= {T7, c020, r010}

sum({T4A, r050, c[130-150]}) >= {T7, c010, r010}

T4B Table 4B: Notional amounts outstanding of OTC derivative gold contracts by remaining maturity at end of reporting period

T4B. Cross-validations with other tables: T1D

a0029\_m (1 test)

{T1D, c010, r040} = sum({T4B, r010, c\*})

Table group 5: Regular derivatives market statistics, current credit exposure and liabilities

T5 Table 5: Gross market values, current credit exposure and liabilities arising from OTC derivative contracts at end of period

T5. Internal validations

a0013\_m (4 tests)

c\* :

{r030} >= {r040}

{r010} >= {r020}

T5. Cross-validations with other tables: T1B, T1D, T2B, T3B, T3D

a0024\_m (1 test)

{T1B, c100, r160} + {T1D, c020, r040} + {T2B, c100, r160} + sum({T3B, r160, c\*}) + sum({T3D, r050, c[030, 040]}) = {T5, c010, r010}

T5. Cross-validations with other tables: T1C, T1D, T2C, T3C, T3D

a0025\_m (1 test)

{T1C, c100, r160} + {T1D, c030, r040} + {T2C, c100, r160} +  
sum({T3C, r160, c\*}) + sum({T3D, r050, c[050, 060]}) = {T5, c020,  
r010}

Table group 6: Regular derivatives market statistics, Credit Default Swaps

T6A Table 6A: Credit Default Swaps by rating category, nominal or  
notional principal amounts outstanding at end of reporting period

T6A. Internal validations

a0001\_m (24 tests)

c\* :

sum({r[220, 230, 300]}) = {r210}

sum({r[120, 130, 200]}) = {r110}

sum({r[020, 030, 100]}) = {r010}

a0003\_m (24 tests)

c\* :

{r230} = sum({r[240-290]})

{r130} = sum({r[140-190]})

{r030} = sum({r[040, 050, 060, 070, 080, 090]})

a0014\_m (80 tests)

c\* :

{r030} = sum({r[130, 230]})

{r020} = sum({r[120, 220]})

{r010} = sum({r[110, 210]})

{r100} = sum({r[200, 300]})

{r090} = sum({r[190, 290]})

{r080} = sum({r[180, 280]})

{r070} = sum({r[170, 270]})

{r060} = sum({r[160, 260]})

{r050} = sum({r[150, 250]})

{r040} = sum({r[140, 240]})

T6A. Cross-validations with other tables: T6B

a0016\_m (60 tests)

r\* :

sum({T6A, c[020, 040, 060, 080]}) = sum({T6B, c[020, 040, 060]})

sum({T6A, c[010, 030, 050, 070]}) = sum({T6B, c[010, 030, 050]})

T6A. Cross-validations with other tables: T6C

a0017\_m (60 tests)

r[010, 020, 030, 040, 050, 060, 070, 080, 090, 100, 210-300] : sum({T6A,  
c[020, 040, 060, 080]}) = sum({T6C, c[020, 040, 060, 080, 100, 120]})

r[010, 020, 030, 040, 050, 060, 070, 080, 090, 100, 210-300] : sum({T6A,  
c[010, 030, 050, 070]}) = sum({T6C, c[010, 030, 050, 070, 090, 110]})

r[110-200] : sum({T6A, c[020, 040, 060, 080]}) = sum({T6C, c[020, 040,

060}})

$r[110-200] : \text{sum}(\{\text{T6A}, c[010, 030, 050, 070]\}) = \text{sum}(\{\text{T6C}, c[010, 030, 050]\})$

T6A. Cross-validations with other tables: T6E

a0018\_m (2 tests)

$\text{sum}(\{\text{T6A}, r020, c[020, 040, 060, 080]\}) = \{\text{T6E}, c020, r010\}$

$\text{sum}(\{\text{T6A}, r020, c[010, 030, 050, 070]\}) = \{\text{T6E}, c010, r010\}$

a0019\_m (2 tests)

$\text{sum}(\{\text{T6A}\}\{c020, r030\}\{c020, r100\}\{c040, r030\}\{c040, r100\}\{c060, r030\}\{c060, r100\}\{c080, r030\}\{c080, r100\}) = \{\text{T6E}, c040, r010\}$

$\text{sum}(\{\text{T6A}\}\{c010, r030\}\{c010, r100\}\{c030, r030\}\{c030, r100\}\{c050, r030\}\{c050, r100\}\{c070, r030\}\{c070, r100\}) = \{\text{T6E}, c030, r010\}$

T6B Table 6B: Credit Default Swaps by remaining contract maturity, nominal or notional principal amounts outstanding at end of reporting period

T6B. Internal validations

a0001\_m (18 tests)

c\* :

$\text{sum}(\{r[220, 230, 300]\}) = \{r210\}$

$\text{sum}(\{r[120, 130, 200]\}) = \{r110\}$

$\text{sum}(\{r[020, 030, 100]\}) = \{r010\}$

a0003\_m (18 tests)

c\* :

$\{r230\} = \text{sum}(\{r[240-290]\})$

$\{r130\} = \text{sum}(\{r[140-190]\})$

$\{r030\} = \text{sum}(\{r[040, 050, 060, 070, 080, 090]\})$

a0014\_m (60 tests)

c\* :

$\{r100\} = \text{sum}(\{r[200, 300]\})$

$\{r090\} = \text{sum}(\{r[190, 290]\})$

$\{r080\} = \text{sum}(\{r[180, 280]\})$

$\{r070\} = \text{sum}(\{r[170, 270]\})$

$\{r060\} = \text{sum}(\{r[160, 260]\})$

$\{r050\} = \text{sum}(\{r[150, 250]\})$

$\{r040\} = \text{sum}(\{r[140, 240]\})$

$\{r030\} = \text{sum}(\{r[130, 230]\})$

$\{r020\} = \text{sum}(\{r[120, 220]\})$

$\{r010\} = \text{sum}(\{r[110, 210]\})$

T6B. Cross-validations with other tables: T3A

a0021\_m (1 test)

$\{\text{T3A}, r220, c070\} \geq \text{sum}(\{\text{T6B}, r010, c^*\})$

T6B. Cross-validations with other tables: T6A

a0016\_m (60 tests)

r\* :

$\text{sum}(\{\text{T6A}, \text{c}[020, 040, 060, 080]\}) = \text{sum}(\{\text{T6B}, \text{c}[020, 040, 060]\})$

$\text{sum}(\{\text{T6A}, \text{c}[010, 030, 050, 070]\}) = \text{sum}(\{\text{T6B}, \text{c}[010, 030, 050]\})$

T6B. Cross-validations with other tables: T6F

a0020\_m (20 tests)

$\text{sum}(\{\text{T6B}, \text{r}300, \text{c}[020, 040, 060]\}) \geq \{\text{T6F}, \text{r}100, \text{c}020\}$

$\text{sum}(\{\text{T6B}, \text{r}300, \text{c}[010, 030, 050]\}) \geq \{\text{T6F}, \text{r}100, \text{c}010\}$

$\text{sum}(\{\text{T6B}, \text{r}290, \text{c}[020, 040, 060]\}) \geq \{\text{T6F}, \text{r}090, \text{c}020\}$

$\text{sum}(\{\text{T6B}, \text{r}290, \text{c}[010, 030, 050]\}) \geq \{\text{T6F}, \text{r}090, \text{c}010\}$

$\text{sum}(\{\text{T6B}, \text{r}280, \text{c}[020, 040, 060]\}) \geq \{\text{T6F}, \text{r}080, \text{c}020\}$

$\text{sum}(\{\text{T6B}, \text{r}280, \text{c}[010, 030, 050]\}) \geq \{\text{T6F}, \text{r}080, \text{c}010\}$

$\text{sum}(\{\text{T6B}, \text{r}270, \text{c}[020, 040, 060]\}) \geq \{\text{T6F}, \text{r}070, \text{c}020\}$

$\text{sum}(\{\text{T6B}, \text{r}270, \text{c}[010, 030, 050]\}) \geq \{\text{T6F}, \text{r}070, \text{c}010\}$

$\text{sum}(\{\text{T6B}, \text{r}260, \text{c}[020, 040, 060]\}) \geq \{\text{T6F}, \text{r}060, \text{c}020\}$

$\text{sum}(\{\text{T6B}, \text{r}260, \text{c}[010, 030, 050]\}) \geq \{\text{T6F}, \text{r}060, \text{c}010\}$

$\text{sum}(\{\text{T6B}, \text{r}250, \text{c}[020, 040, 060]\}) \geq \{\text{T6F}, \text{r}050, \text{c}020\}$

$\text{sum}(\{\text{T6B}, \text{r}250, \text{c}[010, 030, 050]\}) \geq \{\text{T6F}, \text{r}050, \text{c}010\}$

$\text{sum}(\{\text{T6B}, \text{r}240, \text{c}[020, 040, 060]\}) \geq \{\text{T6F}, \text{r}040, \text{c}020\}$

$\text{sum}(\{\text{T6B}, \text{r}240, \text{c}[010, 030, 050]\}) \geq \{\text{T6F}, \text{r}040, \text{c}010\}$

$\text{sum}(\{\text{T6B}, \text{r}230, \text{c}[020, 040, 060]\}) \geq \{\text{T6F}, \text{r}030, \text{c}020\}$

$\text{sum}(\{\text{T6B}, \text{r}230, \text{c}[010, 030, 050]\}) \geq \{\text{T6F}, \text{r}030, \text{c}010\}$

$\text{sum}(\{\text{T6B}, \text{r}220, \text{c}[020, 040, 060]\}) \geq \{\text{T6F}, \text{r}020, \text{c}020\}$

$\text{sum}(\{\text{T6B}, \text{r}220, \text{c}[010, 030, 050]\}) \geq \{\text{T6F}, \text{r}020, \text{c}010\}$

$\text{sum}(\{\text{T6B}, \text{r}210, \text{c}[020, 040, 060]\}) \geq \{\text{T6F}, \text{r}010, \text{c}020\}$

$\text{sum}(\{\text{T6B}, \text{r}210, \text{c}[010, 030, 050]\}) \geq \{\text{T6F}, \text{r}010, \text{c}010\}$

T6C Table 6C: Credit Default Swaps by sector, nominal or notional principal amounts outstanding at end of reporting period

T6C. Internal validations

a0001\_m (30 tests)

$\text{c}[010, 020, 030, 040, 050, 060] : \text{sum}(\{\text{r}[120, 130, 200]\}) = \{\text{r}110\}$

$\text{c}^* : \text{sum}(\{\text{r}[220, 230, 300]\}) = \{\text{r}210\}$

$\text{c}^* : \text{sum}(\{\text{r}[020, 030, 100]\}) = \{\text{r}010\}$

a0003\_m (30 tests)

$\text{c}[010, 020, 030, 040, 050, 060] : \{\text{r}130\} = \text{sum}(\{\text{r}[140-190]\})$

$\text{c}^* : \{\text{r}230\} = \text{sum}(\{\text{r}[240-290]\})$

$\text{c}^* : \{\text{r}030\} = \text{sum}(\{\text{r}[040, 050, 060, 070, 080, 090]\})$

a0014\_m (60 tests)

$\text{c}[010, 020, 030, 040, 050, 060] :$

$\{\text{r}100\} = \text{sum}(\{\text{r}[200, 300]\})$

$\{\text{r}090\} = \text{sum}(\{\text{r}[190, 290]\})$

$\{\text{r}080\} = \text{sum}(\{\text{r}[180, 280]\})$

$\{\text{r}070\} = \text{sum}(\{\text{r}[170, 270]\})$

$\{\text{r}060\} = \text{sum}(\{\text{r}[160, 260]\})$

$\{\text{r}050\} = \text{sum}(\{\text{r}[150, 250]\})$

$\{r040\} = \text{sum}(\{r[140, 240]\})$   
 $\{r030\} = \text{sum}(\{r[130, 230]\})$   
 $\{r020\} = \text{sum}(\{r[120, 220]\})$   
 $\{r010\} = \text{sum}(\{r[110, 210]\})$

T6C. Cross-validations with other tables: T6A

a0017\_m (60 tests)

$r[010, 020, 030, 040, 050, 060, 070, 080, 090, 100, 210-300] : \text{sum}(\{\text{T6A}, c[020, 040, 060, 080]\}) = \text{sum}(\{\text{T6C}, c[020, 040, 060, 080, 100, 120]\})$   
 $r[010, 020, 030, 040, 050, 060, 070, 080, 090, 100, 210-300] : \text{sum}(\{\text{T6A}, c[010, 030, 050, 070]\}) = \text{sum}(\{\text{T6C}, c[010, 030, 050, 070, 090, 110]\})$   
 $r[110-200] : \text{sum}(\{\text{T6A}, c[020, 040, 060, 080]\}) = \text{sum}(\{\text{T6C}, c[020, 040, 060]\})$   
 $r[110-200] : \text{sum}(\{\text{T6A}, c[010, 030, 050, 070]\}) = \text{sum}(\{\text{T6C}, c[010, 030, 050]\})$

T6D Table 6D: Credit Default Swaps, gross market values at end of reporting period

T6D. Internal validations

a0001\_m (6 tests)

c\* :

$\text{sum}(\{r[220, 230, 300]\}) = \{r210\}$   
 $\text{sum}(\{r[120, 130, 200]\}) = \{r110\}$   
 $\text{sum}(\{r[020, 030, 100]\}) = \{r010\}$

a0003\_m (6 tests)

c\* :

$\{r230\} = \text{sum}(\{r[240-290]\})$   
 $\{r130\} = \text{sum}(\{r[140-190]\})$   
 $\{r030\} = \text{sum}(\{r[040, 050, 060, 070, 080, 090]\})$

a0014\_m (20 tests)

c\* :

$\{r100\} = \text{sum}(\{r[200, 300]\})$   
 $\{r090\} = \text{sum}(\{r[190, 290]\})$   
 $\{r080\} = \text{sum}(\{r[180, 280]\})$   
 $\{r070\} = \text{sum}(\{r[170, 270]\})$   
 $\{r060\} = \text{sum}(\{r[160, 260]\})$   
 $\{r050\} = \text{sum}(\{r[150, 250]\})$   
 $\{r040\} = \text{sum}(\{r[140, 240]\})$   
 $\{r030\} = \text{sum}(\{r[130, 230]\})$   
 $\{r020\} = \text{sum}(\{r[120, 220]\})$   
 $\{r010\} = \text{sum}(\{r[110, 210]\})$

T6D. Cross-validations with other tables: T3B

a0022\_m (1 test)

$\{\text{T3B}, c070, r160\} \geq \{\text{T6D}, c010, r010\}$

T6D. Cross-validations with other tables: T3C

a0023\_m (1 test)

{T3C, c070, r160} >= {T6D, c020, r010}

T6E Table 6E: Credit Default Swaps by location of counterparty, nominal or notional principal amounts outstanding at end of reporting period

T6E. Internal validations

a0015\_m (4 tests)

c\* : {r010} = sum({r[020, 030, 040, 050, 060, 070, 080]})

T6E. Cross-validations with other tables: T6A

a0018\_m (2 tests)

sum({T6A, r020, c[020, 040, 060, 080]}) = {T6E, c020, r010}

sum({T6A, r020, c[010, 030, 050, 070]}) = {T6E, c010, r010}

a0019\_m (2 tests)

sum({T6A}{c020, r030}{c020, r100}{c040, r030}{c040, r100}{c060, r030}{c060, r100}{c080, r030}{c080, r100}) = {T6E, c040, r010}

sum({T6A}{c010, r030}{c010, r100}{c030, r030}{c030, r100}{c050, r030}{c050, r100}{c070, r030}{c070, r100}) = {T6E, c030, r010}

T6F Table 6F: Credit Default Swaps, index products, nominal or notional principal amounts outstanding at end of reporting period

T6F. Internal validations

a0001\_m (2 tests)

c\* : sum({r[020, 030, 100]}) = {r010}

a0003\_m (2 tests)

c\* : {r030} = sum({r[040, 050, 060, 070, 080, 090]})

T6F. Cross-validations with other tables: T6B

a0020\_m (20 tests)

sum({T6B, r300, c[020, 040, 060]}) >= {T6F, r100, c020}

sum({T6B, r300, c[010, 030, 050]}) >= {T6F, r100, c010}

sum({T6B, r290, c[020, 040, 060]}) >= {T6F, r090, c020}

sum({T6B, r290, c[010, 030, 050]}) >= {T6F, r090, c010}

sum({T6B, r280, c[020, 040, 060]}) >= {T6F, r080, c020}

sum({T6B, r280, c[010, 030, 050]}) >= {T6F, r080, c010}

sum({T6B, r270, c[020, 040, 060]}) >= {T6F, r070, c020}

sum({T6B, r270, c[010, 030, 050]}) >= {T6F, r070, c010}

sum({T6B, r260, c[020, 040, 060]}) >= {T6F, r060, c020}

sum({T6B, r260, c[010, 030, 050]}) >= {T6F, r060, c010}

sum({T6B, r250, c[020, 040, 060]}) >= {T6F, r050, c020}

sum({T6B, r250, c[010, 030, 050]}) >= {T6F, r050, c010}

sum({T6B, r240, c[020, 040, 060]}) >= {T6F, r040, c020}

sum({T6B, r240, c[010, 030, 050]}) >= {T6F, r040, c010}

sum({T6B, r230, c[020, 040, 060]}) >= {T6F, r030, c020}

sum({T6B, r230, c[010, 030, 050]}) >= {T6F, r030, c010}

sum({T6B, r220, c[020, 040, 060]}) >= {T6F, r020, c020}

sum({T6B, r220, c[010, 030, 050]}) >= {T6F, r020, c010}



$\text{sum}(\{\text{T6B}, \text{r210}, \text{c}[020, 040, 060]\}) \geq \{\text{T6F}, \text{r010}, \text{c020}\}$   
 $\text{sum}(\{\text{T6B}, \text{r210}, \text{c}[010, 030, 050]\}) \geq \{\text{T6F}, \text{r010}, \text{c010}\}$

T6G Table 6G: Credit Default Swaps, index products, current credit exposure and liabilities outstanding at end of reporting period

T6G. Internal validations

a0001\_m (2 tests)

$c^* : \text{sum}(\{\text{r}[020, 030, 100]\}) = \{\text{r010}\}$

a0003\_m (2 tests)

$c^* : \{\text{r030}\} = \text{sum}(\{\text{r}[040, 050, 060, 070, 080, 090]\})$

Table group 7: Regular derivatives market statistics, other products for foreign exchange and interest rate derivatives

T7 Table 7: Other products for foreign exchange and interest rate derivatives, nominal or notional principal amounts outstanding at end of reporting period

T7. Cross-validations with other tables: T1A

a0026\_m (1 test)

$\{\text{T1A}, \text{r220}, \text{c100}\} \geq \{\text{T7}, \text{c010}, \text{r010}\}$

T7. Cross-validations with other tables: T2A

a0027\_m (1 test)

$\{\text{T2A}, \text{c100}, \text{r220}\} \geq \{\text{T7}, \text{c020}, \text{r010}\}$

T7. Cross-validations with other tables: T4A

a0028\_m (2 tests)

$\text{sum}(\{\text{T4A}, \text{r100}, \text{c}[130-150]\}) \geq \{\text{T7}, \text{c020}, \text{r010}\}$   
 $\text{sum}(\{\text{T4A}, \text{r050}, \text{c}[130-150]\}) \geq \{\text{T7}, \text{c010}, \text{r010}\}$