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Treatment of Credit Default Swaps & Valuation of Debt Securities at Nominal and Market Value

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Outline

- **Guidance note – F.5 Treatment of Credit Default Swaps: Classification by Type and Risk Category**
  - ✓ **Introduction and background to the issue**
  - ✓ **Options considered & recommended approach**

- **Guidance note – F.8 Valuation of Debt Securities at Market and Nominal Value**
  - ✓ **Introduction and background to the issue**
  - ✓ **Options considered & recommended approach**

Guidance Notes prepared by the Joint Financial and Payments Systems Task Team (FITT)

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F.5 Treatment of Credit Default Swaps: Classification by Type and Risk Category

Treatment of Credit Default Swaps: Introduction to Issue

Credit default swaps (CDS) are treated as option-type financial derivates in the statistical standards. However, CDS have some characteristics of forward-type derivatives – primarily the CDS contract can switch from an asset to liability and vice versa depending on the credit quality of the reference entity.

- Is there sufficient grounds to change the classification of CDS from option-type derivatives to forward-type derivatives in the next update of the statistical manuals?
- Is there analytical value in a supplementary presentation of financial derivatives by risk type – thereby separately identifying credit derivatives ?

Treatment of Credit Default Swaps: Background

Credit Default Swaps

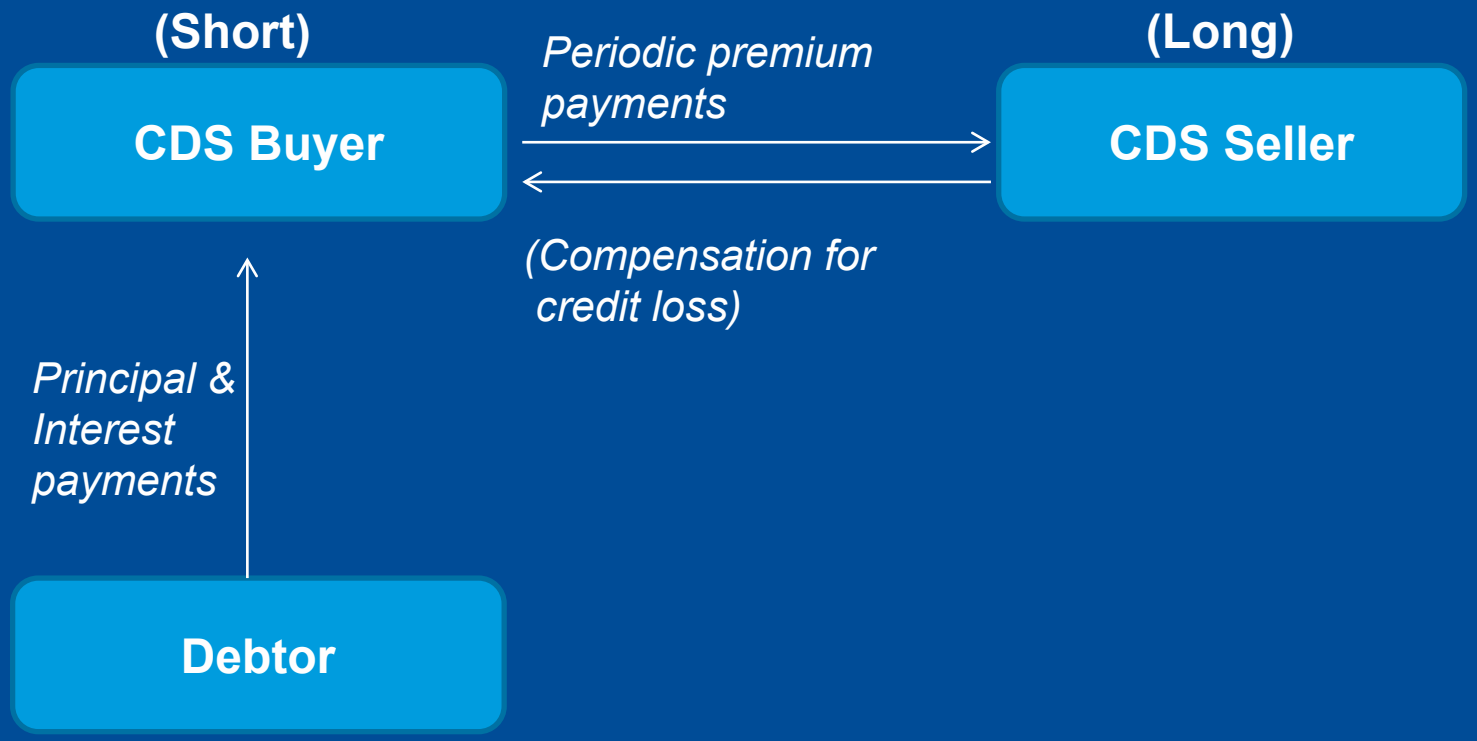
- A credit default swap is a derivative contract between two parties, a credit protection buyer and a credit protection seller, in which the buyer makes a series of cash payments to the seller and receives a promise of compensation for credit losses resulting from the default of a third party (similar to an insurance contract).

- For a CDS, the underlying instrument is the credit quality of the borrower – the reference obligation is a fixed income security on which the protection is written

- BPM6 pp.5.68 and 5.93 note that ....credit default swaps are included in financial derivatives as options-type contracts

- 2008 SNA does not explicitly indicate that CDS are option-type contracts. 2008 SNA: pp.123 only notes that .....credit derivatives (including CDS) take the form of both forward-type and option-type contracts

Treatment of Credit Default Swaps: Background



Value of CDS may change over life of the contract depending on the credit quality of the reference entity (borrower)

In a CDS contract:

- If the reference entity's credit quality declines, the CDS buyer benefits since the risk is greater than the coverage assessed at the initiation of the contract. Therefore:
  - ✓ Value to the CDS buyer increases (asset)
  - ✓ Value to CDS seller decreases because the premium received is less than the value for the risk (liability)
- Conversely, if the reference entity's credit quality increases :
  - ✓ The CDS buyer loses (liability)
  - ✓ The CDS seller gains (asset)

Derivatives in Statistical Standards

Option - Type

...the purchaser acquires from the seller a right to buy or sell (depending on whether the option is a call (buy) or a put (sell)) a specified underlying item at a strike price on or before a specified date.

- ✓Premium paid at inception represents a nonzero value
- ✓Buyer is the creditor, and the writer is the debtor - always
- ✓Redemption is determined by the buyer – no binding obligation
- ✓Payout contingent on performance of underlying
- ✓Requires margin payments
- ✓Both exchange traded & OTC

Forward - Types

..an unconditional contract by which two counterparties agree to exchange a specified quantity of an underlying item (real or financial) at an agreed-on contract price (the strike price) on a specified date

- ✓No upfront payment – zero value at inception
- ✓Either party can switch from debtor to creditor
- ✓Redemption is unconditional – binding obligation
- ✓Forward commitment – not contingent
- ✓Requires margin payment
- ✓Both exchange trade & OTC

Credit Default Swaps

..primary purpose is to trade credit risk. They are designed for trading in loan and security default risk... Credit derivatives take the form of both forward-type .. and option-type contracts (credit default swaps)

- Premiums are paid by the buyer to the seller – fixed at initiation
- ✓CDS can switch from asset to liability
- ✓No binding obligation - depends on the occurrence of a credit event
- ✓Payout contingent on performance of underlying
- ✓Requires margin payments
- ✓OTC traded

Treatment of Credit Default Swaps: Introduction to Issue

- The potential to switch from asset position to liability position and vice-versa brings into question whether CDS have more in common with forward-type derivatives than option-type derivatives and should therefore be reclassified.
- By nature, CDS are similar to ‘put’ options – holder is entitled to sell the underlying to the seller if it performs poorly relative to the exercise price. *The holder is compensated when the underlying performs poorly.* For CDS – the protection buyer is compensated by the protection seller if *the underlying (credit quality of the borrower) performs poorly*
- Since CDS share characteristics with both option and forward-type derivatives, which set of characteristics should be given greater priority?

Treatment of Credit Default Swaps: Options Considered

Two main options were considered for addressing the issue. The TT preferred option I – *supported by majority of the FITT members during the consultation. However, some members were in favor of treating CDS as forwards-type contracts*

Option I: No change

- Continue to classify CDS as option- type instruments in the BPM and SNA
- Clarify treatment in the SNA
- CDS share common features to both forwards and options. However, the nature of CDS is more aligned with put options

Option II: Change classification

- Reclassify CDS as forward-type instruments
- Not preferred by the TT, despite the potential of CDS to switch from assets to liabilities, this may not be sufficient to support changing the classification

Treatment of Credit Default Swaps: Options Considered

An additional proposal is to provide supplementary breakdowns of financial derivatives by risk categories where credit derivatives would be separately identified to enhance the analytical use of derivatives classification.

Supplementary Classification of Financial Derivatives by Risk Type

By type (Existing)

- Options
- Forward-type contracts

By market risk categories (New)

- Foreign exchange
- Single-currency interest rate
- Equity
- Commodity
- Credit
- Other

The FITT and BPTT members also unanimously supported the proposal on the supplementary breakdowns.

Treatment of Credit Default Swaps: Options Considered

- Include explanation to highlight the main characteristics of CDS – this is not currently provided in either the BPM6 or the 2008 SNA

- The next standards should also provide guidance on the valuation of CDS contracts within both the balance of payments' financial account and international investment position.

- Strengthen description of CDS classification and valuation in the 2008 SNA.

F.8 Valuation of Debt Securities at Market and Nominal Value

Background: Valuation of Financial Instruments in 2008 SNA and BPM6

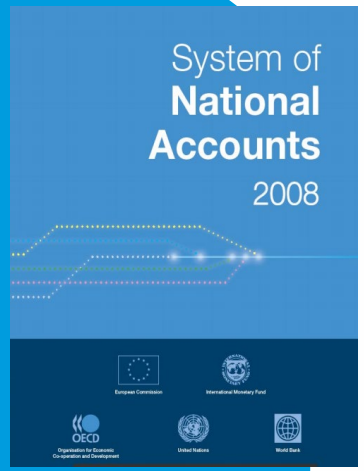
In general market price is the basis for valuing transactions and positions in the statistical standards:

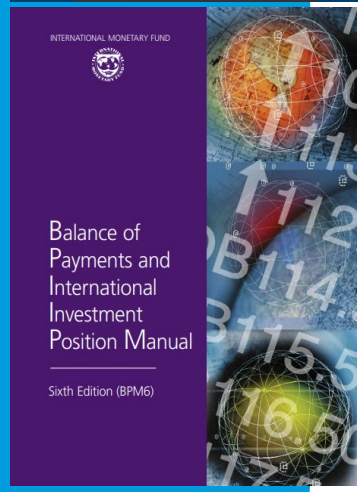
- For positions in financial assets and liabilities, nominal value is used for currency & deposits (which have fixed nominal values) and nonnegotiable instruments such as loans and accounts receivable/payable. Transactions in these instruments are recorded at market value

- The basic valuation method for debt securities is the market value. However, debt securities have <u>both nominal and market values</u>

  - Market value *: amount for which the asset can be exchange or liability settled between willing, knowledgeable parties in an arm's length transaction – estimate of value if the creditor sold the claim*

  - Nominal value: outstanding amount owed by the debtor to the credit – *principal plus accrued interest less repayments (BPM6 and 2008 SNA)*





Background: Nominal Value of Debt Securities in Current Standards

It is widely recognized across statistical domains that presenting debt securities based on the nominal value is both analytically useful and practical

- Nominal Value recording for debt securities is encouraged as a supplementary item *(BPM6)*
- Supplementary data on the nominal values of positions of debt securities may be useful *(2008 SNA)*
- Nominal value is recommended as a memorandum item for debt security liabilities to support consistency with debt measures *(MFSMCG 2016)*
- The *GFSM 2014* and *PSDSG* recommend that debt instruments should be valued at nominal value, while debt securities should be valued at market value
- Issues of debt securities may be presented at nominal and market value while holdings should be recorded at market value *(Handbook on Securities Statistics)*

Options Considered and Recommended Approach

1. The need for more definitive guidance in the *2008 SNA* and *BPM6* on the possibility of disclosing nominal values as supplementary statistics.

2. Further discussions are needed in both manuals on the potential complexities of calculating nominal values for some forms of debt securities

Two options were proposed by the FITT as alternatives to addressing this issue. Option II is preferred by the TT

Option 1

- **No Change – allow existing guidance in the BPM6 and 2008 SNA to remain**

Considerations

- *Users will continue to rely on other manuals for guidance on nominal values*
- *Content and format of published data may differ between SNA and ESS data*

Option 2

- **Change guidance in SNA and BPM6 to reflect the guidance in the EDS Guide supplemented by materials from other manuals**

Considerations

- *Decision would be needed on whether to cover both assets and liabilities at nominal value or concentrate on only nominal value of liabilities*

Outcomes: Framework to reconcile nominal & market value

The proposal is to adopt a supplementary table in BPM7 (see sample below) and similar tables for could be adopted for the next update of the 2008 SNA. The framework reconciles nominal and market valuation of debt securities included in the gross external debt position.

Excerpt from recommended supplementary table: Debt Securities — Reconciliation of Nominal and Market Value

	Nominal value Position at End of Period	Difference with Market Value	Market value Position at End of Period
Institutional Sector			
Short term			
Long term			

**Could include further breakdown to show debt securities included in DI (intercompany lending)*
***High level reconciliation recommended to reflect practical considerations*

Outcomes: Framework to reconcile nominal & market value

- The task team recommends that the supplementary table is compiled **only for liabilities** – consistent with the debtor approach
- It is recommended that the definition of nominal value in the BPM6 manual be adopted for the next update of the SNA – clarifying that the nominal value of a debt instrument can be calculated by "*discounting future interest and principal payments at the existing contractual interest rate*"

Nominal value refers to the outstanding amount the debtor owes to the creditor, which is composed of the outstanding principal amount including any accrued interest. So the nominal value reflects the sum of funds originally advanced, plus any subsequent advances, plus any interest that has accrued, less any repayments (which includes any payments covering interest accrual). Nominal value in domestic currency of a debt instrument denominated in foreign currency also includes holding gains or losses arising from exchange rate changes.... BPM6 pp. 3.88

- Further clarification on the relationship between nominal value and market value is also advisable, to enhance the analytical value of the supplementary table

Questions for discussion

Treatment of Credit Default Swaps

1. Does the AEG agree with the proposal to maintain the classification of CDS as option-type contracts?

2. Does the AEG agree with the proposal to introduce the supplementary breakdown of financial derivatives by risk categories?

Valuation of Debt Securities

1. Does the AEG agree to include additional guidance in the SNA and BPM on presenting stocks of debt securities at nominal value?

2. Does the AEG agree with the proposal to introduce supplementary tables presenting the reconciliation between debt securities valued at nominal and market value – only for liabilities? Should the table include both assets and liabilities at nominal value?

3. Should the table include items on the nominal value of the total amount of assets in debt securities and debt securities used for intercompany lending?

4. Does the AEG agree that the SNA adopt the definition of nominal value in BPM6 para. 3.88 (b) for the sake of clarity and consistency?

END

Thank you!

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