Derivatives

What are derivatives?

A derivative is a financial instrument that transfers risk from one party to another and derives its value from the performance of an underlying asset (e.g., agricultural commodity, an equity index, the credit of a corporation, a currency or an interest rate).

Common Derivative Contracts

- **Forwards**: Contracts or agreements to exchange something at an agreed time in the future at a price agreed upon today
- **Swaps**: Contracts or agreements between two counterparties to exchange cash flows at agreed terms on a notional amount at regular intervals during a stated period
- **Options**: Contracts that give the buyer, in exchange for the payment of a premium, the right but not the obligation to buy or sell a specified amount of the underlying asset at a predetermined price at or until a stated time
- **Futures**: Standardized forward contract that trades on an exchange

Whiteboard Animations:

- [Who uses derivatives and why](#)
- [How do derivatives benefit the global economy](#)
Who uses derivatives and why?
How do derivatives benefit the global economy?
Benefits of Using Derivatives

Hedging of risks

- Transfer of unwanted risk to another party, usually a bank. Bank clients may choose to hedge against valuation fluctuation, to protect against extreme events, or to avoid earnings volatility.

- **Hedging is not a money making strategy, but a loss limiting one.**

- Because all risks cannot be completely eliminated, the firm needs to decide which risk exposures should remain and which should be neutralized or reduced through hedging.

Examples of Corporate End Users

“In accordance with our corporate risk management policies, we use derivative instruments, when available, such as forward contracts, swaps, and options that economically hedge certain exposures (foreign currency, commodity, and interest rates).”

“Our Company uses derivative financial instruments primarily to reduce our exposure to adverse fluctuations in foreign currency exchange rates, interest rates, commodity prices and other market risks.”

“Our objectives in managing exposure to commodity fluctuations are to use commodity derivatives to reduce volatility of earnings and cash flows arising from commodity price changes. The amounts hedged using commodity swap contracts are based on forecasted levels of consumption of certain commodities, such as fuel oil and gasoline.”

<table>
<thead>
<tr>
<th>User</th>
<th>Underlying Risk</th>
<th>Derivative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food manufacturer, farmer</td>
<td>Agricultural price</td>
<td>Commodity derivatives</td>
</tr>
<tr>
<td>Airlines, power suppliers</td>
<td>Energy price</td>
<td>Commodity derivatives</td>
</tr>
<tr>
<td>Corporate/sovereign debt managers; anyone who borrows/lends and wants to fix/unfix the interest rate</td>
<td>Interest rate movements</td>
<td>Interest rate swaps</td>
</tr>
<tr>
<td>Institutional investors concerned about potential temporary economic decline</td>
<td>Share price risk</td>
<td>Equity swaps and options</td>
</tr>
<tr>
<td>Exporters, portfolio investors</td>
<td>Foreign exchange rate fluctuations</td>
<td>FX forwards/options</td>
</tr>
<tr>
<td>Events organizers, agricultural producers</td>
<td>Weather</td>
<td>Weather derivatives</td>
</tr>
<tr>
<td>Anyone who wants to protect against risk of default</td>
<td>Credit risk of default/non-payment</td>
<td>Credit default swaps</td>
</tr>
</tbody>
</table>
Developing an Appropriate Framework for Safe, Efficient Derivatives Activity

• Developing a robust, safe and efficient derivatives market requires an appropriate policy framework. There are some practices, laws and/or rules that are essential in every jurisdiction (e.g., the enforceability of close-out netting agreements between counterparties). But not every global rule set can or should be implemented in every jurisdiction (e.g., a clearing mandate in a market with few transactions).

• In developing a framework for safe, efficient derivatives activity, the following issues should be considered:
  • Legal issues: It is essential that jurisdictions ensure that derivatives transactions are legally enforceable and do not violate any laws or regulations in their jurisdiction.
  • Regulatory issues: Emerging and developing jurisdictions need to determine how to transpose the substance and purpose of the Group-of-20 (G-20) global derivatives market reforms to their jurisdictions (see Appendix).
  • Risk governance and management issues: Firms using derivatives need to understand, measure and manage their risks. This ability and the capacity to make continued improvements to risk management are important factors in driving capital markets development.

• How emerging and developing jurisdictions can address the above areas are discussed in ISDA’s Policy Framework for Safe and Efficient Derivatives Activity in Emerging and Developing Markets.

• ISDA works to help jurisdictions develop safe and efficient derivatives markets in several ways, including by participating in and/or conducting educational programs, researching and publishing white papers on key topics and working with regulators, IOSCO, supranationals/IFIs, local bodies/associations and self regulatory organisations.
What are the benefits of close-out netting?

EXPOSURE WITHOUT NETTING: $6M → $5M

EXPOSURE WITH NETTING: $1M

IN DEFAULT

COUNTER-PARTY

ISDA Whiteboard Animation
Law Reform and Netting

• Among the key issues to consider is ensuring that derivatives transactions are permitted and that close out netting provisions under derivatives agreements are enforceable under local law.

• Objectives of netting legislation:
  - To ensure the enforceability of close-out netting post-insolvency according to its terms
  - To provide legal certainty
  - To meet requirements of bank regulatory rules for close-out netting and financial collateral
  - To address specific areas of enforceability risk:
    • Insolvency laws
    • Mandatory debtor-creditor rules
    • Gaming or wagering laws
    • Jurisdiction-specific issues

• It is also important to consider the type of derivatives transactions permitted and the parties permitted to enter into them.
  - Types of products: Interest rate swaps, credit default swaps, equity swaps, commodity swaps and FX derivatives
  - Types of participants: banks, pension funds, asset managers, insurers, government entities, corporates, etc.
  - Types of uses: hedging, position taking, “speculation”

• The provisions of the 2018 Model Netting Act published by ISDA are helpful for jurisdictions trying to draft new netting legislation. Once netting protections are in place, an opinion would need to be obtained from a law firm confirming that close-out netting is enforceable.
Global Support for Close-out Netting

The Basel Committee on Banking Supervision (“BCBS”) has praised the progress made “in achieving legal certainty for close-out netting of financial contracts and collateral arrangements.”

However, because less progress has been made in some emerging market jurisdictions, “further convergence and the strengthening of national frameworks are strongly desirable.”

The Financial Stability Board (“FSB”), in its Key Attributes, underlines the importance of preserving close-out netting in all stages of resolution and insolvency processes due to the following characteristics of resolution proceedings:

- subject to appropriate safeguards, entry into resolution or the exercise of a resolution power should not trigger early termination rights (the necessary first stage in the close-out netting process and a pre-condition for the enforcement of financial collateral); and
- a resolution authority should have the power to stay early termination rights in other circumstances, but subject to strict conditions, including that the stay should not exceed 2 business days.

UNIDROIT (International Institute for the Unification of Private Law) has developed global netting principles to provide guidance to national legislators seeking to revise or introduce close-out netting legislation.

- The UNIDROIT 2009 Geneva Securities Convention adopts recommendations in support of close-out netting by the Financial Stability Board and the Basel Committee on Banking Supervision
  - Currently, UNIDROIT cites the global “patchwork” of non-standardized or non-existent close-out netting legislation exposes cross-jurisdictional market participants to legal uncertainty and problems with risk management.

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1 BCBS, Report and Recommendations of the Cross-border Bank Resolution Group (March 2010), para 106. See more generally Recommendation 8 and accompanying text in paras 105-114. The full text of the report is available from the BCBS website at: [http://www.bis.org/publ/bcbs169.pdf](http://www.bis.org/publ/bcbs169.pdf).
Global Coverage – ISDA Netting Opinions
## Current Status of Netting Legislation – Africa

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Netting Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egypt</td>
<td>Under consideration</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>Under consideration</td>
</tr>
<tr>
<td>Ghana</td>
<td>Adopted</td>
</tr>
<tr>
<td>Mauritius</td>
<td>Adopted</td>
</tr>
<tr>
<td>Morocco</td>
<td>Under consideration</td>
</tr>
<tr>
<td>Nigeria</td>
<td>Adopted</td>
</tr>
<tr>
<td>Seychelles</td>
<td>Under consideration</td>
</tr>
<tr>
<td>South Africa</td>
<td>Adopted</td>
</tr>
<tr>
<td>Tunisia</td>
<td>Under consideration</td>
</tr>
<tr>
<td>Uganda</td>
<td>Under consideration</td>
</tr>
<tr>
<td>Zambia</td>
<td>Adopted</td>
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<tr>
<td>Zimbabwe</td>
<td>Adopted</td>
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</tbody>
</table>
G-20 Reforms – Clearing

• The G-20 reforms also introduced the requirement to clear standardized derivatives transactions through central clearinghouses.
  – The predominant aim of clearing is to reduce systemic risk, at the cost of implementing additional market infrastructure.
  – Today, most derivatives are cleared in major jurisdictions.
  – In developed economies with significant derivatives activity, regulations stipulate the type of firms and the range of products within the scope of mandatory clearing.

• Mandatory clearing requirements might not be an appropriate tool in jurisdictions with a relatively small derivatives market
  – Small derivatives markets are unlikely to pose systemic risk
  – These markets might not be large enough to sustain the implementation of dedicated CCPs or infrastructure.
  – The bilateral exchange of IM for non-cleared derivatives may be a more effective and efficient means to reduce systemic risk.

• Such markets might instead focus on implementing a clean netting regime where close-out netting is enforceable prior to establishing any clearing mandate. Reliable netting will enable the development of more liquid and standardized derivatives markets. Emerging market jurisdictions should also work on having a liquid and efficient collateral market, without undue restrictions.
G-20 Reforms - Margin

- As part of the G-20 reforms, the BCBS and the IOSCO established the Working Group on Margin Requirements to formulate global margin standards for derivatives transactions.
  - The main role of margin is to mitigate counterparty risk – the risk that a counterparty to a transaction or contract will default (fail to perform) on its obligation under the contract.
  - Margin includes both initial margin (IM) and variation margin (VM)
  - There was approximately $1.2 trillion of IM and VM posted for non-cleared derivatives trades at year-end 2021

- The BCBS-IOSCO framework applies largely to financial firms and systemically important non-financial entities. It specifically excludes non-financial entities that are not systemically important because their transactions are viewed as posing little or no systemic risk and are mostly exempt from central clearing requirements.

- Before the exchange of bilateral IM is considered in emerging and developing jurisdictions, certain conditions should be satisfied, including:
  - Implementing a clean close-out netting regime
  - Ensuring the legal framework supports bilateral IM agreements – for instance, by providing a robust collateral enforcement regime;
  - Developing derivatives markets with a sufficient amount of standardized products;
  - Having a liquid and efficient collateral market without undue restrictions; and
  - Developing the collateral management capabilities of local financial institutions.
G-20 Reforms - Capital

• Since the global financial crisis, policymakers and market participants have worked to increase the level of capital in the financial system to strengthen its resilience and subsequently bank capital has increased by some $2 trillion over the past decade.

• Basel III is aimed at larger internationally active banks in advanced economies, and its scope extends far beyond derivatives. ISDA’s work in this area focuses primarily on trading book standards as opposed to those for the banking book, which generally covers the lending business. In the largest and most developed economies, trading assets are estimated to be 10%-20% of a bank’s total assets. These percentages are likely to be far lower – and the relative size of the banking book larger – for banks and financial institutions in developing and emerging markets.

• For smaller-size trading book operations, there are simplified regulatory prescribed methodologies for the capitalization of market and counterparty credit risk. These methodologies are typically calibrated conservatively compared to more advanced approaches. As supervisors and local financial institutions further develop their derivatives markets, there could be benefits to employing more advanced and risk-sensitive approaches that may result in a reduction of the required capital for bank trading book activities. This could further support the development of derivatives in frontier markets by better aligning capital with underlying risk.

• Policymakers and others have noted the need for proportionality in discussing how emerging and developing markets should apply the standards in their jurisdictions. As the BCBS and Basel Consultative Group have noted: "supervisory practices should be commensurate with the risk profile and systemic importance of the banks being supervised". Adoption of the Basel III standards is optional for most emerging and developing markets and most have not adopted it.
G20 Reforms – Trade Reporting

• Reporting of derivatives transactions is a key component of the G-20 derivatives reforms as it enhances transparency and enables regulators to better identify and monitor risks.

• There are two types of derivatives reporting:
  – Regulatory reporting by counterparties to the appropriate regulators or supervisors within the relevant jurisdiction; and
  – Public reporting of transactions and the prices at which they are executed

• In EMDEs, the limited number of transactions executed, coupled with the bespoke nature of derivatives transactions (size, tenor and reference rates etc.), public reporting will be difficult and is unlikely to provide meaningful data. Pre-trade transparency can be more easily obtained through request-for-quotes from multiple firms, either bilaterally or via electronic trading platforms.

• Regulatory reporting, however, remains an important consideration in emerging and developing markets in order to enable appropriate monitoring of risk.
  – Establishing a trade repository in each emerging and developing market would be a costly and duplicative effort that would likely have an adverse impact on the development of risk management markets within a jurisdiction
  – EMDE regulators could sign memorandums of understanding with regulators in the major global trading markets (where virtually all derivatives dealers are based) that would enable access to derivatives trading information involving counterparties domiciled in their jurisdictions.
G-20 Reforms – Trade Execution

• Another G-20 reform called for standardized OTC derivatives contracts to be traded on electronic trading platforms or exchanges, where appropriate, as a means for improving market transparency and assisting in protecting against market abuse.

  – Improved transparency would be both in terms of pre-trade transparency, which allows counterparties to better compare prices prior to executing a trade, as well as post-trade transparency, which enables counterparties to see prices at which trades have been executed.

• There are three major issues for emerging and developing market policymakers with regards to the trade execution mandate.

• The first two concern the potential for mandating electronic trading (e-trading) within their jurisdictions. This would involve (1) specifying the product scope of the mandate and (2) the creation of such trading venues within their borders. Given the small amount of derivatives activity in emerging and developing market jurisdictions, an electronic trading (e-trading) mandate may not be feasible. As noted above, not all G20 jurisdictions currently have e-trading platforms and only six have determinations for specific products to be executed on such platforms.

• The third issue is whether derivatives activity by an emerging and developing market counterparty should be required to be executed on an existing platform in another jurisdiction. This determination will depend on several key factors. For example, does the counterparty meet the eligibility criteria contained in the platform’s rulebook; does the platform list the type of derivatives the counterparty needs to engage in?
About ISDA

- Since 1985, ISDA has worked to make the global derivatives markets safer and more efficient. Today, ISDA has over 980 member institutions from 78 countries comparing a broad range of market participants.

- ISDA’s work in three key areas – reducing counterparty credit risk, increasing transparency, and improving the industry’s operational infrastructure – show the strong commitment of the Association toward its primary goals: to build robust, stable financial markets and a strong financial regulatory framework.

- ISDA’s offices are located in New York, Washington, London, Brussels, Singapore, Hong Kong and Tokyo.

- Information about ISDA and its activities is available on the Association’s website: www.isda.org.
Questions