

Policy Framework for Safe and Efficient Derivatives Activity in Emerging and Developing Markets

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EXECUTIVE SUMMARY

Derivatives have an important role to play in the development of capital markets in emerging and developing jurisdictions and in enabling a wide range of their end users to better manage the business and financial risks they are exposed to in their normal course of business.

This paper seeks to help policymakers in emerging and developing markets¹ establish an appropriate framework to ensure safe and efficient derivatives activity. It outlines the key elements – legal, regulatory and risk management – that policymakers should consider. In doing so, it draws on previous work by global standard setters, regulators and supervisors in advanced economies, as well as market participants and others, to identify issues and practices in these areas.

Importantly, the paper also discusses the relevant transposition of derivatives policies and rule sets developed by global policymakers and market participants in advanced economies to emerging and developing markets. There are, for example, some practices, laws and/or rules that are essential in every jurisdiction (eg, the legal certainty of derivatives transactions and the enforceability of netting agreements between counterparties). But it is also true that not every global rule set can or should be implemented in every jurisdiction (eg, a clearing mandate in a market with few transactions or with a closed currency).

For these reasons, it is important that a jurisdiction's policy/regulatory framework be aligned and evolve with the development of its capital markets and derivatives activity to foster growth and enable access to prudent risk management practices.

¹ The term 'emerging and developing markets' as used in this paper refers to the International Monetary Fund's (IMF) World Economic Outlook country classification system, which divides the world into two major groups: advanced economies and emerging and developing markets economies (EMDE): www.imf.org/external/pubs/ft/weo/2021/02/weodata/groups.htm. As the IMF notes: "This classification is not based on strict criteria, economic or otherwise, and it has evolved over time. The objective is to facilitate analysis by providing a reasonably meaningful method of organizing data." Similarly, ISDA recognizes the EMDE classification includes a broad range and number of countries with financial markets and financial regulatory and policy frameworks at different stages of development, and this paper is intended to be read with that in mind

THE IMPORTANCE OF DERIVATIVES IN EMERGING AND DEVELOPING MARKETS

Derivatives² are customized contracts with terms that can be bilaterally agreed (such as the underlying reference rate, maturity date/tenor and size) to transfer and manage risk and enable precise hedging at the cashflow level. An increasing percentage of derivatives are, and can be, cleared by a clearing house.

Because derivatives have the ability to transfer risk and be tailored to meet the hedging and exposure management requirements of firms, these financial instruments are used by a number of different entities to manage their business and financial risks more effectively. As testimony to the global nature of the derivatives market, ISDA has over 980 members based in 78 jurisdictions around the world.

In emerging and developing markets, where economies, GDPs, exchange rates, interest rates and capital flows can be relatively more volatile than those of advanced economies, derivatives are especially important in enhancing risk management and enabling access to capital. Different types of firms benefit from using these risk management tools in a variety of ways:

- Corporates can use derivatives to hedge their exposure to changes in the value of currencies and interest rates;
- Energy companies can use derivatives to hedge changes in commodity prices;
- Asset managers can use derivatives to effectively take on their desired investment exposure;
- Pension funds can use derivatives to hedge inflation and interest rate risk in long-dated pension liabilities;
- Governments and supnationals can use derivatives to reduce interest rate and/or currency risk on new bond issuance; and
- Banks can use derivatives to manage the risk mismatches between their assets and liabilities.

Banks and Managing Interest Rate Risk

Banks are typically an emerging and developing market's most important financial intermediaries. As such, they support economic growth and development via lending to corporations, managing customer deposits, investing in sovereign debt and facilitating the financing of foreign trade.

However, these activities potentially expose banks to a range of risks: credit risk from lending; interest rate risk on both sides of the balance sheet; foreign exchange (FX) risk from trade receivables and financing; and liquidity risk from maturity mismatches between assets and liabilities.

Interest rate risk needs to be prudently managed so banks can efficiently support the economic activities of their customers and clients. Derivatives play an especially important role for banks in managing this risk. Without these risk management tools, banks may be significantly hampered in the amount and type of credit/loans they can extend, as they need to closely match assets and liabilities.

² Broadly speaking, there are two main types of derivatives. The type referred to here can be custom-tailored to meet the needs of market participants and are also referred to as swaps or over-the-counter (OTC) derivatives. Many swaps/OTC derivatives now trade on a trading platform and an even larger percentage are centrally cleared. The other main type – futures – are standardized contracts with set terms that trade on an exchange and are cleared by a clearing house. The two product types often complement each other, as a firm that engages in a custom-tailored swap with a non-financial corporate may seek to hedge the risk it takes on using a futures contract

For example, in an emerging and developing economy, banks potentially face an imbalance between the composition of their assets and their liabilities. Bond issues by the government held by banks (assets) will generally be fixed rate, relatively illiquid and longer dated. On the other hand, customer deposits held by banks (liabilities) are traditionally short term, can be withdrawn quickly and carry a floating rate.

To manage the risk of these imbalances (both the maturity and interest rate profiles of the assets and liabilities), banks will look to focus their lending activities on shorter-dated and/or floating-rate loans to offset their shorter-dated, floating-rate deposits.

However, this creates several challenges for banks, as well as for government issuers, corporate borrowers and individual depositors.

First, if banks need to manage their assets so they match their liabilities without the ability to use derivatives, they will be restricted in what form they can provide credit to their corporate customers. They may not be able to provide lower-cost, longer-term financing, meaning companies will instead have to rely on short-term, variable loans. This creates higher costs and more uncertainty for corporates and may impede their ability to invest and grow.

By using derivatives, the bank could manage the floating-rate risk on the liability side (although the risk of borrowers refinancing if rates decrease remains) and separately manage the fixed-rate risk on the asset side. It could structure both its assets and liabilities in ways that more appropriately reflect the needs of its customers and the broader economy.

Government financing activity could also be hampered without the use of derivatives by banks. If governments wish to lengthen the maturity of their debt to lower the rollover on their issuance program, they may face higher costs or less demand because banks that buy the debt cannot manage the risk of the longer maturity profile. Using derivatives to hedge the risk of the longer-dated bonds could mitigate this issue.

As previously noted, emerging and developing markets often exhibit greater volatility than more advanced markets. This volatility could lead to liquidity events or other disruptions that result in a spike in rates and a sharp downturn in economic activity in markets where hedging is not possible. The ability to prudently and appropriately use derivatives to hedge exposures and manage risks can serve to absorb these shocks.

After a period of sustained low interest rates on a global level, significant attention is being paid to interest rate risk in the banking book (IRRBB) by policymakers and market participants in all jurisdictions, including emerging and developing markets.

As the Bank for International Settlements (BIS) has stated³: “IRRBB is an important risk that arises from banking activities, and is encountered by all banks. It arises because interest rates can vary significantly over time, while the business of banking typically involves intermediation activity that produces exposures to both maturity mismatch (eg, long-maturity assets funded by short-maturity liabilities) and rate mismatch (eg, fixed rate loans funded by variable rate deposits). In addition, there are optionalities embedded in many of the common banking products (eg, non-maturity deposits, term deposits, fixed rate loans) that are triggered in accordance with changes in interest rates.”

Concerns like these underscore the need by banks for derivatives to help manage risks more effectively. Indeed, sound hedging and risk management frameworks within financial institutions today are fundamental to the regulatory and supervisory process.

³ See Basel Committee on Banking Supervision, Interest Rate Risk in the Banking Book, www.bis.org/bcbs/publ/d368.pdf

Banks and Managing FX Risk

While the need to effectively manage interest rate risk is a growing concern among emerging and developing economies, FX risk has been front and center in the minds of market participants and policymakers for some time.

In April 2019, the turnover of FX derivatives denominated in emerging and developing markets currencies was more than four times greater than that of interest rate derivatives⁴. This was in stark contrast to advanced economies, where trading in the two asset classes was on a more equal footing and where interest rate derivatives outstanding volumes exceeded those of FX derivatives by a large margin.

The dominance of FX as a traded instrument in emerging and developing economies reflects two main factors. The first is that the most important risk factor for such economies has been the development of the FX rate, particularly where a large percentage of the local financial system's balance sheet is denominated in foreign currency. Most policymakers and market participants see FX risk not just as the main risk factor but also the only risk they want to hedge, especially in cases of a significant dollarization of the local financial market. The availability of FX hedging instruments can help attract more foreign investment and enable greater access to international markets. FX has primarily been the historic valuation anchor in such jurisdictions.

The second reason, which is related to the first, is that interest rate risk in the local currency was largely ignored, facilitated by a monetary policy regime in which the interest rate played a secondary role. This approach is in contrast to advanced economies, where domestic price stability has been the main macroeconomic anchoring mechanism for some time. In such jurisdictions, the swaps curve, which describes the implied yield curve based on floating rates associated with an interest rate swap, plays an important role as an interest rate benchmark.

As emerging and developing economies transition the anchoring mechanism to domestic price stability, the interest rate channel and the ability to manage interest rate risk should therefore become more important. The need for a robust swaps market is a key catalyst for the development of interest rate benchmarks that are important to domestic economic activity.

In sum, the development of local derivatives markets would strengthen the resilience of the economy, support economic growth and enhance risk management. The development of a safe and efficient derivatives market is a step in the right direction for increased access to finance and financial risk management, a deepening of financial markets and meeting the challenges of globalization.

⁴See Bank for International Settlements (BIS), Offshore Markets Drive Trading of Emerging Market Currencies, www.bis.org/publ/qtrpdf/r_qt1912h.htm

STRUCTURE AND SCOPE OF THE PAPER

This paper seeks to help policymakers in emerging and developing countries develop an appropriate policy framework for a safe and efficient derivatives market that supports the growth of their economies and capital markets and enhances risk management.

It is divided into three main sections.

- The first section deals with the important, bedrock legal issues that emerging and developing jurisdictions need to consider. Are derivatives transactions permitted under a jurisdiction's laws? Does derivatives activity violate any laws or regulations in the jurisdiction? Does the jurisdiction enshrine the enforceability of close-out netting of derivatives contracts and related collateral arrangements, which are critical to effective risk management?
- The second section discusses important regulatory issues, the substance and purpose of the Group-of-20 (G-20) nation's global derivatives market reforms, and the appropriate and relevant transposition of the rules to emerging and developing markets. Is a regulatory authority authorized to oversee derivatives markets? Should parameters be placed on the types of market participants permitted to engage in derivatives transactions? Should all derivatives transactions executed within or by a market participant based in a jurisdiction be centrally cleared? How should firms report their derivatives transactions in order to ensure transparency? Should firms using derivatives be required to post variation margin (VM) and initial margin (IM)?
- The third section deals with risk governance and management issues for emerging and developing jurisdictions that support safe, efficient markets. What is the nature of the firm's approach to derivatives risk management? What are the responsibilities of the firm's board of directors and senior management? What risk management tools, processes and systems should firms have in place to measure and manage exposures?

LEGAL ISSUES

At the core of the issues every jurisdiction faces in developing a derivatives market that supports economic and capital markets growth is understanding that derivatives transactions are legal agreements between counterparties. The legal certainty of the contractual obligations that counterparties undertake to each other, which typically include the ability to net exposures, is of paramount importance.

Uncertainties may arise from several directions. One concern is whether a counterparty in an emerging and developing market has the legal capacity – is legally able – to enter into a derivatives transaction. This can be a particular concern with certain types of counterparties, such as sovereigns and local governments, pension funds and insurers. In response, derivatives dealers typically seek representations from their counterparties to address legal capacity and enforceability issues. This might include the counterparty's power to conduct the business and engage in derivatives, the validity and binding nature of the derivatives agreement and the absence of conflicts with the counterparty's other contracts and applicable laws.

If a counterparty does not have the legal capacity to enter into a derivatives transaction (ie, the contract is *ultra vires*), then a representation is insufficient. In such cases, legislative or other solutions will be required to provide express authority for them to use derivatives.

Many jurisdictions have longstanding gaming and wagering laws that generally pre-date the development of modern financial markets. These may inadvertently be interpreted to cover derivatives transactions – despite the fact that these transactions are entered into for financial risk management purposes. Jurisdictions would need to amend their existing laws or pass new legislation to ensure legal protection or carve outs are available to enable firms to engage in derivatives activity.

Jurisdictions should also ensure legal recognition of foreign-law-governed agreements and consider adherence to global treaties on the mutual recognition and enforcement of judgments and arbitral awards, such as the Hague Choice of Court Convention and New York Convention⁵.

Another related source of uncertainty concerns the scope of permitted transactions within an emerging and developing market. In some jurisdictions, there is a question over whether credit derivatives transactions (such as credit default swaps) should be characterized as guarantees or insurance contracts, with possible negative consequences for the enforceability of those transactions in certain circumstances.

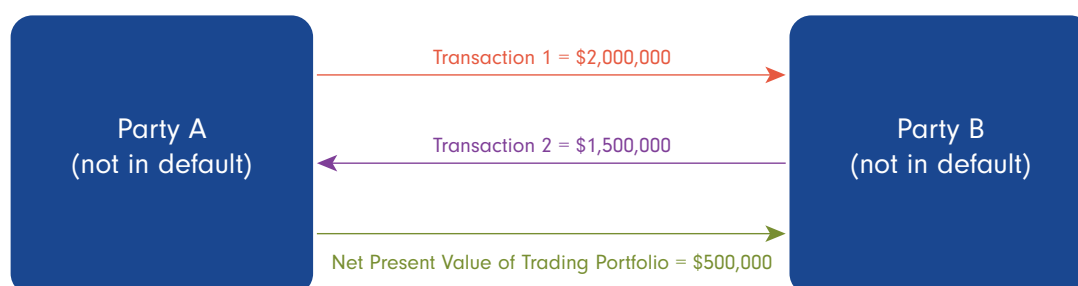
The Importance of Netting

The ISDA Master Agreement is used to govern derivatives transactions between parties⁶. These agreements contain netting arrangements and are widely used in financial markets as an important mechanism to manage the credit risk of counterparties. Netting means all monies payable or receivable on transactions subject to an ISDA Master Agreement can be combined and offset, resulting in a single net amount payable or receivable between the counterparties (see Chart A).

⁵ See 2018 ISDA Arbitration Guide & ISDA Choice of Court & Jurisdiction Guide, www.isda.org/book/2018-isda-arbitration-guide/

⁶ In addition to the Master Agreement, ISDA publishes a broad range of transaction-specific documentation for conventional and Islamic derivatives. For example, ISDA recently published new documentation to allow repos and stock loans to be documented under an ISDA Master Agreement. This will allow parties entering into new trading relationships to execute a single ISDA Master Agreement covering derivatives, repos and stock loans

Chart A: Understanding Netting



Close-out netting gives firms the ability to: (a) terminate all transactions early; (b) value these terminated transactions; and (c) take those values and all amounts previously due and unpaid into account to determine a single net sum owed by one party to the other. Netting is used to manage the risk of a counterparty default or some other significant event in which the parties can no longer continue their derivatives relationship.

Regulatory authorities around the world, including the Financial Stability Board (FSB) and the Cross-border Bank Resolution Group of the Basel Committee on Banking Supervision (BCBS), strongly encourage the use of close-out netting provisions (alongside collateral margining) because of their beneficial effects on the stability of the financial system⁷.

Statistics published each year by the BIS consistently show that close-out netting reduces the gross market value⁸ of outstanding derivatives transactions across all asset classes by over 80%⁹. As of December 2019, the gross market value of all outstanding derivatives contracts was \$1.6 trillion compared to \$2.4 trillion in gross credit exposure¹⁰, which adjusts gross market value to account for legally enforceable netting agreements. The loss of close-out netting in this case would mean credit exposure increasing by \$9.2 trillion, resulting in significant additional capital and collateral being required to back this higher level of exposure. The extra capital and liquidity would consequently not be available to fund other economic activities and capital and liquidity management would be less efficient.

Market participants in legally enforceable netting jurisdictions enjoy greater access to international derivatives markets¹¹. Netting has a positive impact on the number of active international market participants and the size of transactions those firms are willing and able to execute in those jurisdictions. Local entities within a netting jurisdiction have a lower cost of funding or credit relative to entities in non-netting jurisdictions. Plus, reliable netting will enable the development of more liquid and standardized derivatives markets in emerging and developing jurisdictions¹². There are clearly many reasons why legal certainty of close-out netting should be provided.

⁷ See a consultative paper issued by the Basel Committee on Banking Supervision, www.bis.org/publ/bcbs52.pdf, and the Financial Stability Board's (FSB) Key Attributes of Effective Resolution Regimes for Financial Institutions, www.fsb.org/work-of-the-fsb/market-and-institutional-resilience/post-2008-financial-crisis-reforms/effective-resolution-regimes-and-policies/key-attributes-of-effective-resolution-regimes-for-financial-institutions/

⁸ The BIS defines gross market value as the "sum of all outstanding derivatives contracts with either positive or negative replacement values evaluated as market prices prevailing on the reporting date...Gross market values supply information about the potential scale of market risk in derivatives transactions and of the associated financial risk transfer taking place". See glossary available at www.bis.org/statistics/glossary.htm?&selection=312&scope=Statistics&c=a&base=term

⁹ See latest BIS statistics on OTC derivatives, www.bis.org/publ/otc_hy2111.htm

¹⁰ The BIS defines gross credit exposure as "gross market value minus amounts netted with the same counterparty across all risk categories under legally enforceable bilateral netting agreements. Gross credit exposure provides a measure of exposure to counterparty credit risk (before collateral)". See glossary available at www.bis.org/statistics/glossary.htm?&selection=313&scope=Statistics&c=a&base=term

¹¹ The status of netting legislation in various jurisdictions is set out on ISDA's website, www.isda.org/2020/07/03/status-of-netting-legislation/

¹² See ISDA's Clearing in Smaller or Closed Jurisdictions paper, www.isda.org/a/tsvEE/ITC-Small-Jurisdictions-final.pdf

Close-out netting should be distinguished from payment netting. Payment netting takes place during the normal business of a solvent firm and involves combining offsetting cashflow obligations between two parties on a given day in a given currency into a single net payable or receivable. As transaction payment netting operates prior to a default or termination event, its enforceability does not normally need to be protected by legislation.

However, close-out netting operates following the occurrence of an event of default or termination event, such as insolvency. To benefit from close-out netting provisions, firms need legal certainty that these provisions will be enforceable, including in the event of an insolvency of one of the parties to the transaction.

Netting Legislation

The primary purpose of netting legislation is to ensure the enforceability of close-out netting and related collateral arrangements under the law of that jurisdiction following an event of default or termination, both prior to and following the commencement of insolvency proceedings.

Generally, pre-insolvency enforceability of close-out netting is not problematic under the laws of most jurisdictions and no special legislation is necessary to ensure its enforceability. The principal challenge is ensuring the enforceability of close-out netting post insolvency. In its *Key Attributes of Effective Resolution Regimes for Financial Institutions*, the FSB underlines the importance of preserving close-out netting in all stages of resolution and insolvency¹³.

Meanwhile, the United Nations Commission on International Trade Law (UNCITRAL) states that netting of securities and derivatives contracts is essential to a functioning financial market, and the netting of securities and derivatives transactions should therefore be exempt from insolvency avoidance provisions¹⁴. To help legislators and policymakers ensure the recognition of close-out netting, the International Institute for the Unification of Private Law (UNIDROIT) published *Principles on the Operation of Close-out Netting Provisions*¹⁵.

A high degree of legal certainty over the enforceability of close-out netting is required by financial institutions both to ensure safe and sound management of credit risk and to be considered risk reducing for the purposes of bank regulatory capital requirements under international standards.

As previously noted, counterparty credit exposures are significantly reduced in jurisdictions where netting is legally enforceable, which enhances capital efficiency and liquidity management and can facilitate additional investment and economic activity. As such, netting legislation may be necessary to resolve any material uncertainty and put the question beyond reasonable doubt, even in jurisdictions where close-out netting is likely to be enforceable post insolvency on the basis of general principles.

¹³ See the FSB's Key Attributes of Effective Resolution Regimes for Financial Institutions, www.fsb.org/2014/10/key-attributes-of-effective-resolution-regimes-for-financial-institutions-2/

¹⁴ See UNCITRAL, Legislative Guide on Insolvency Law (2004), Part II, para 185. See more generally recommendations for insolvency avoidance criteria in Part II, paras 156-169, https://uncitral.un.org/en/texts/insolvency/legislativeguides/insolvency_law

¹⁵ See UNIDROIT's Principles on the Operation of Close-out Netting Provisions, www.unidroit.org/instruments/capital-markets/netting/

Legislators may choose to adopt one of the following:

- A broader approach in terms of netting legislation that is more robust than narrow specific legislation; or
- Narrow specific legislation that addresses a limited number of known issues. However, this may not provide protection against subsequent developments.

Legislators will need to identify in detail the relevant areas of local law that could potentially conflict with the effectiveness of netting agreements so all relevant issues are adequately covered by local legislation. The following are examples of areas that should be considered:

- Insolvency laws, including provisions of local law enacted for the prevention of insolvency;
- Any specific mandatory provisions enacted for the protection of debtors generally (in addition to insolvency law) or for the protection of certain categories of debtors;
- Gaming or wagering laws;¹⁶ and
- Other principles of domestic law.

As netting legislation involves a regime that derogates from the normally applicable insolvency rules, it may be decided that these derogations are only justified in certain cases. For example:

- In favor of certain eligible counterparty types¹⁷; and/or
- In favor of certain netting agreements¹⁸.

However, it is important not to limit the effectiveness of close-out netting by reference to types of market participants as the systemic risk reduction of effective close-out netting benefits all firms.

Under insolvency legislation, an insolvency practitioner often has the right to assume, affirm or require the continuation of contracts or transactions that are favorable to the insolvent party coupled with the power to disclaim, reject or repudiate contracts or transactions that are not. This assumption or disclaimer power is sometimes referred to as ‘cherry picking’. In some jurisdictions, it may be necessary for the sake of legal certainty for netting to be protected by specific legislation to ensure that cherry picking cannot disrupt close-out netting.

For example, an article of France’s monetary and financial code specifies that close-out netting is valid under French law. A subsequent article confirms that none of its insolvency provisions may interfere with the application of the first article. Consequently, by disapplying all the insolvency law provisions instead of affirming that netting and collateral arrangements will be valid in certain specific situations, it is clear that insolvency law may not be used to challenge the validity of close-out netting.

While engaging in derivatives activity, margin (also referred to as collateral) is often exchanged 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. This margin serves as a backstop that can reduce the amount a non-defaulting party would need to claim against a counterparty following a default.

¹⁶ Gaming and wagering laws may provide restrictions on contracts of chance that may inadvertently catch derivatives transactions, notwithstanding that such transactions are entered into for investment or financial risk management purposes. It is important to ensure financial contracts are not caught by such legislation

¹⁷ Such as counterparty types other than retail businesses, small- and medium-sized enterprises and consumers

¹⁸ Such as master agreements published by industry bodies like ISDA

Close-out netting and financial collateral are closely related and interdependent concepts, and both play an important role in ensuring the stability and resilience of the financial system¹⁹. It is therefore important that netting legislation should deal not only with close-out netting, but also with financial collateral. Netting legislation will need to ensure that any payment or transfer of collateral made under the netting agreement during any preference or suspect period is not treated as a preference and is not otherwise void or voidable, provided the payment or transfer of collateral is made in the ordinary course of business.

The 2018 Model Netting Act²⁰ published by ISDA is intended to help jurisdictions develop netting legislation. It sets out a checklist of issues, enabling legislators to assess whether local legal concepts used to define the scope of draft legislation are compatible with its overall purpose.

Once the jurisdictions have defined the scope of their netting legislation, they need to ensure close-out netting is enforceable following a termination event or event of default, both prior to and following commencement of insolvency proceedings – in each case, in accordance with the terms of the parties' contract.

It is important to identify and engage with all relevant local and international stakeholders early to ensure the drafting process is efficient and comprehensive. Obtaining buy in from all relevant local regulators (including supervisors, the various ministries dealing with financial markets and legislation and potentially central banks or national debt management offices) will ensure participation by all relevant local market participants throughout the process.

There are a number of potential resources available to policymakers, regulators and legislators from local trade associations (as representatives of the local market) and international trade associations (as representatives of the international capital markets). It may be worth involving these associations, which can provide valuable insight and assistance during the drafting process and can also help coordinate stakeholder engagement.

When drafting the legislative texts, it may be advisable to have the main local law firms that have specific subject matter expertise involved in the discussions from the outset (although only one can usually hold the pen on the actual draft legislation). It is worth considering involving an international law firm to ensure consistency of the local drafts with international standards.

Once netting protections are in place, an opinion would need to be obtained from a law firm confirming that close-out netting is enforceable²¹. Netting opinions that give positive analysis on the enforceability of close-out netting in a jurisdiction provide legal certainty, create efficiencies in transacting derivatives and help increase the confidence of international firms that trade with counterparties in emerging markets. Analysis that netting is legally enforceable would also give parties the legal basis for viewing their exposures on a net basis, thereby enabling them to better manage the credit risk of their counterparties²².

¹⁹ Financial collateral arrangements in derivatives and related financial markets assume the enforceability of close-out netting as a pre-condition. Financial collateral is taken to secure the net exposure of the collateral taker under a netting agreement. Close-out netting is therefore the primary form of credit risk reduction used in the global derivatives market, and financial collateral deals only with the net credit exposure that remains. Following a default, close-out netting occurs first and only then is financial collateral applied

²⁰ The 2018 ISDA Model Netting Act and Guide, www.isda.org/2018/10/15/2018-model-netting-act-and-guide/

²¹ Details of netting opinions provided by ISDA are available on ISDA's website at www.isda.org/category/opinions/

²² After enactment of the relevant netting legislation, it may also be useful to inform the local judiciary about the new legislation and provide training in the event of litigation involving complex financial transactions arises at a later date

REGULATORY ISSUES

Appropriate derivatives regulation – including clarifying official sector responsibility for market oversight, setting suitable parameters for market participants and products, and effectively transposing global rule sets in a proportionate manner – is essential for enhancing capital markets and risk management.

Determining the Market Regulator

A fundamental consideration for each jurisdiction is ensuring a clear understanding of which entity has responsibility for the range of functions related to derivatives regulation and supervision. This might include which agency has authority to approve the scope and type of market activity within the jurisdiction, review risk management and governance processes, and track risk exposures of market participants.

Regulatory frameworks of developed markets with substantial derivatives activity (such as the EU, Japan, UK and US) have several common threads in how market activity and key market participants are supervised. Each has a market regulator charged with overseeing market activity and regulatory reporting (or, in the case of some jurisdictions, such as the US, multiple market regulators). Each also has prudential supervisors or regulators tasked with overseeing specific types of institutions (such as banks, securities dealers and insurers) and setting capital and margin rules for those firms. Despite these common themes, there are some significant differences, including which regulators supervise which segments of the market (as in the US) and whether firms should be required to register with regulators.

Emerging and developing markets jurisdictions will have their own approaches – there is no single standard for supervising derivatives activity. While a single regulator may help a jurisdiction avoid gaps in coverage, it may be difficult or even undesirable to have the scope of expertise required for effective supervision under one roof. In such cases, an oversight body that effectively coordinates the work of individual regulatory agencies may be preferable. This oversight body's role would be to ensure seamless and efficient regulation and avoid regulatory gaps.

Scope of Market Activity

Another regulatory area that emerging and developing markets policymakers need to address is whether it is appropriate, by law or regulation, to limit certain types of financial activity to particular categories of market participant, subject to appropriate conditions and limitations.

One of the drivers behind such an approach may be the desire by policymakers to restrict derivatives activity to hedging and not allow it for 'speculation'. Under this approach, transactions that hedge and offset the risk of an underlying exposure are considered acceptable, but transactions that enable a market participant to synthetically take an exposure (that does not directly hedge an underlying risk) are not.

The major issue with this approach is that it does not consider how many market participants – including different types of financial institutions, such as pension funds, asset managers, insurers and banks – look at and manage their risks. An investment manager, for example, may find it can only obtain the exposure it wants to a particular asset – as part of its overall portfolio management approach – through a derivative.

In addition, the imposition of overly restrictive regulations on banks and other financial institutions – for example, only allowing derivatives on a back-to-back basis to offset an existing risk – may result in the opposite of what such a rule is intended to accomplish. That is to say, restricting the use of risk management instruments for institutions that have a business model based on managing risks on a portfolio rather than back-to-back basis may serve to increase rather than reduce risk. It could restrict financial institutions from using derivatives (which can be more efficient than using a cash instrument) in the normal course of their treasury asset-liability management to reduce outstanding risks on their balance sheets (for example, interest rate risk incurred because of fixed-rate bonds or loans).

It is also important to understand that without an ability for market participants to take ‘open’ positions, it is highly unlikely a market will ever develop. The ability to warehouse risk acts like the oil in an engine – without it, the engine won’t start or function smoothly. In addition, financial institutions already have mismatch and interest rate risk through their cash-based instruments. Derivatives can and will be risk managed in the same way that cash-based instruments are risk managed.

There are understandable concerns among emerging and developing markets policymakers about firms in their jurisdictions managing risks prudently and having the appropriate risk management capabilities to do so. If such concerns exist, it is important policymakers and market participants work together to develop these capabilities, or these jurisdictions could face adverse consequences to their growth and development potential. Risk governance and management issues are further discussed in a subsequent section. It is nonetheless important to remember that risks will already be reported under Basel capital ratios and will therefore be monitored at all times.

Ideally, professional financial intermediaries would not be limited to domestic banks. It is important to allow diverse types of counterparties with different business models and risk exposures to participate (including foreign counterparties), as this will increase the chances for transactions to occur and the market to develop. It will also allow a smoother reallocation of risk in the system between institutions.

One way in which some developed economies choose to address this issue is by allowing only more sophisticated market participants to engage in derivatives transactions. In the US, for example, only ‘eligible contract participants’ (entities that meet certain financial criteria) can engage in derivatives activity. The US derivatives market is not available to retail market participants.

Policymakers may wish to continually review the parameters of the regulations to ensure their financial markets develop and firms within their jurisdictions are able to optimize how they manage their risks as development continues.

Conduct Standards

Large derivatives market jurisdictions, including the EU and US, have implemented internal and external business conduct rules for derivatives dealers. These rules generally apply to derivatives dealers and cover issues including conflicts of interest, establishment of a compliance function, records and record-keeping, compliance, maintaining appropriate risk management policies and procedures, business continuity policies, know-your-counterparties policies and procedures, confidentiality standards and suitability criteria.

While the low level of derivatives dealing activity in emerging and developing markets makes it unlikely the implementation of business conduct standards is necessary, this does not mean local counterparties will be unaffected by such standards. This is because compliance with business conduct standards by a foreign dealer will require action by local counterparties (eg, consent to reporting and providing information necessary for counterparty classification).

Registration Requirements

Some jurisdictions have adopted rules requiring market participants above a certain level of derivatives activity (as measured by notional outstanding) to register with the appropriate regulatory authority. The goal behind these regulations is to ensure a comprehensive supervisory framework covers derivatives dealers and other market participants with significant derivatives activity.

Given the low level of derivatives activity in emerging and developing markets, registration requirements could have the unintended consequence of decreasing liquidity and stability by causing already-regulated derivatives dealers and advisors to withdraw from, or substantially limit their exposure to, the emerging and developing market. Policymakers may wish to avoid such an impact and should consider aligning their approach with jurisdictions of comparable size and with similar counterparty types.

Accounting and Disclosure Standards

High-quality accounting standards are important to all counterparties trading derivatives. Dealer firms and counterparties generally follow the accounting standards required in their home jurisdictions. According to the International Accounting Standards Board²³, 144 of 166 profiled jurisdictions (87%) require the use of International Financial Reporting Standards (IFRS) and approximately 47% of world GDP is from jurisdictions that use this framework (with the US representing about 16%, using US Generally Accepted Accounting Principles).

Hedge accounting is intended to require firms to represent in their financial statements the impact of using financial instruments to manage exposures from particular risks that could affect the profit-and-loss statement (P&L). It therefore deals with the accounting mismatch between debt (accounted at amortized cost – the hedged item) and derivatives (accounted at fair value – the hedging instrument) used to manage the risk.

Hedge accounting modifies the normal basis for recognizing gains and losses (or revenues and expenses) on associated hedging instruments and hedged items, so both are recognized in the P&L in the same accounting period. This accounting technique eliminates or reduces income statement volatility that otherwise would arise. Hedge accounting is optional, as there are costs and benefits to using it²⁴.

IFRS 7 Financial Instruments: Disclosures requires publication of information about an entity's financial instruments and the nature and extent of the resulting risks, both in qualitative and quantitative terms. Information required includes the significance of financial instruments to the reporting entity (those measured at fair value and/or amortized cost), as well as information on the nature and extent of the risks arising from them.

²³ The International Accounting Standard Board (IASB) provides detailed analysis and profiles for 166 jurisdictions around the world. See Who uses IFRS Standards?, www.ifrs.org/use-around-the-world/use-of-ifrs-standards-by-jurisdiction/#use-of-ifrs-standards-by-jurisdiction

²⁴ See PWC report, IFRS 9, Financial Instruments – Understanding the Basics, www.pwc.com/gx/en/audit-services/ifrs/publications/ifrs-9/ifrs-9-understanding-the-basics.pdf

IMPLEMENTING THE G-20 DERIVATIVES REFORMS

In response to the 2008/2009 global financial crisis, the G-20 nations initiated a global reform initiative for OTC derivatives markets. The reform proposed five major commitments²⁵:

- Mandatory margin requirements for non-cleared derivatives;
- Clearing of standardized OTC derivatives through central counterparties (CCPs);
- Trading of cleared, standardized derivatives on electronic platforms, where appropriate;
- Mandatory reporting of derivatives trade information to regulators; and
- Higher capital requirements for non-cleared derivatives.

This section covers each of these areas and explores whether and how they should be appropriately transposed by emerging and developing markets.

Margin

Background

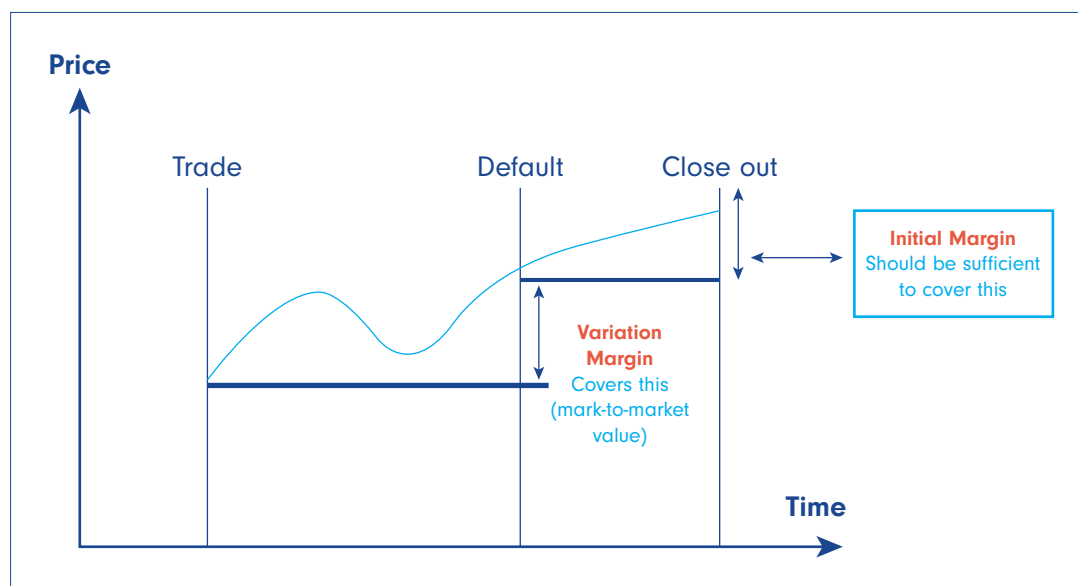
The main role of margin is to mitigate counterparty risk – the risk that a counterparty to a transaction or contract will default (fail to perform) on its obligation under the contract. Many financial institutions and other derivatives dealers have historically required their counterparties to post margin to mitigate credit risk, but the financial crisis exposed gaps and flaws in the approach. As part of the G-20 reforms, the BCBS and the International Organization of Securities Commissions (IOSCO) established the Working Group on Margining Requirements to formulate global margin standards for derivatives transactions, with a phased implementation plan.

Under this framework, mandatory regulatory margin for non-cleared derivatives comprises two components: IM and VM. VM is required to be posted daily and reflects the current exposure (profit or loss) of each counterparty compared to the previous valuation. These daily valuations (also known as mark-to-market) reduce counterparty risk by collecting liquid assets to cover the exposure.

Counterparties are also required to calculate applicable IM amounts on a regular basis for each relevant trading relationship. IM is posted to cover the potential for increased credit exposure to a counterparty (gains in the net value of derivatives, also known as potential future exposure) during the expected time between the last VM exchange and the liquidation of positions on the default of a counterparty (see Chart B).

²⁵ Margin requirements for Non-centrally Cleared Derivatives, BCBS and the International Organization of Securities Commissions, www.bis.org/bcbs/publ/d317.pdf

Chart B: Understanding IM and VM



The margin regulations only require parties to post or collect IM once a certain consolidated threshold for IM at a legal entity group level is reached. IM must be posted to a segregated account, such as a third-party custodian, and cannot be rehypothecated (ie, used by the receiving party).

VM is predominantly provided in cash, while IM is largely in government bonds. Transfers of IM and VM that are below a minimum transfer amount (MTA) are not required, and MTA limits have been set by major jurisdictions. Under the EU regime, for instance, there is a maximum permitted MTA of €500,000 covering both VM and IM. Parties may agree how to allocate the MTA in practice – for example, it may all be allocated to VM if IM is not applicable. They may also agree to use an MTA that is less than the maximum permitted. In other words, entities may set a lower MTA when the rules of multiple jurisdictions apply in order to comply with various MTA limits expressed in different currencies.

Under the regulatory margin framework, two-way posting of margin between most counterparties is required, so both parties would post gross IM to each other and then exchange VM as market conditions dictate, with one party always ‘in the money’ and receiving and the other counterparty ‘out of the money’ and posting. Previously, only the non-dealer counterparty commonly posted IM (depending on the dealer’s perception of its credit risk) and both parties would post VM in line with valuation changes.

According to the FSB’s most recent progress report on the implementation of derivatives markets reforms²⁶, 16 out of 24 FSB member jurisdictions have requirements for margining of non-cleared derivatives in place.

²⁶ See FSB, OTC Derivatives Market Reforms Implementation Progress in 2021, www.fsb.org/2021/12/otc-derivatives-market-reforms-implementation-progress-in-2021/. According to the FSB report, the 16 jurisdictions to implement margin reforms include Australia, Brazil, Canada, the EU (including France, Germany, Italy, Netherlands and Spain, which are counted individually). Argentina, China, India, Indonesia, Mexico, Russia, South Africa and Turkey have not implemented a margin regime

Margin in Emerging and Developing Markets

In considering the implementation of margin rules in emerging and developing markets, several key issues are worth noting. These include the scope of applicability of the rules and issues related to the posting of collateral in countries where the netting of exposures is not legally enforceable.

On scope of applicability, the BCBS-IOSCO framework applies largely to financial firms and systemically important non-financial entities²⁷. 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. Also excluded are sovereigns, central banks, multilateral development banks and the BIS.

Importantly, the framework sets a floor (€8 billion in average aggregate notional amount of non-cleared derivatives) below which the exchange of IM is not required. Both provisions were largely incorporated into the rules adopted by individual jurisdictions with significant levels of derivatives activity.

Margin rules typically apply to cross-border transactions, so an entity subject to margin requirements in its home jurisdiction will need to comply when entering into derivatives with a counterparty in a different jurisdiction. This typically also includes transactions conducted by a foreign branch of a domestic entity. Many jurisdictions go further and apply the rules to a foreign entity that is guaranteed by, or in some cases owned by, a domestic institution. Given the number of margin regimes in place and the cross-border nature of derivatives markets, it is likely that many transactions with entities in emerging and developing markets are already subject to regulatory margin requirements.

However, policymakers in major derivatives markets have introduced either partial or full exemptions from margin requirements for transactions with counterparties in non-netting jurisdictions (those where netting is not legally enforceable). In some cases, this has resulted in exemptions from the mandatory margin rules, which may only apply in limited circumstances. In other jurisdictions, it has led to more onerous requirements – for example, a requirement to collect gross margin from a counterparty organized in a non-netting jurisdiction. This treatment is likely to result in a dramatic reduction in trading activity with counterparties in non-netting jurisdictions until they adopt legislation ensuring the enforceability of close-out netting.

Under the EU margin rules, covered counterparties are exempt from posting margin to non-netting counterparties. If certain additional requirements are met, the covered counterparty is also exempt from collecting margin from the non-netting counterparty. Under Japan's margin rules, OTC derivatives transactions with non-netting counterparties are fully exempt from margin requirements.

Before the exchange of bilateral IM is considered, certain conditions need to 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 for bilateral IM arrangements;
- 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.

²⁷ Derivatives dealers often required margin from their counterparties prior to the imposition of the regulation and may look to mitigate credit risk from counterparties excluded from the requirements

Once policymakers have ensured the enforceability of close-out netting in their jurisdiction, they may also wish to consider imposing margin requirements along the lines of the BCBS-IOSCO policy framework – for example, if there is a domestic derivatives market to which international standards would not apply.

In the meantime, derivatives market participants that enter into transactions with counterparties in non-netting emerging and developing markets typically include an agreement on margin practices in their counterparty relationships. Even prior to the imposition of the global margin framework, dealers routinely exchanged VM with client firms, even on cross-border transactions.

Capital

Background

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. Bank capital has subsequently increased by some \$2 trillion over the past decade (measured by common equity tier one capital).

A main goal of the G-20 reforms was to ensure capital levels required for non-cleared transactions are greater than those for cleared trades, thereby facilitating a migration to clearing. The main avenue for implementing the goal was the development of Basel III, which overhauls the treatment of market risk, counterparty credit risk and the treatment of exposure to CCPs. With the implementation of the capital and margin requirements, most derivatives in major jurisdictions are now centrally cleared.

Capital in Emerging and Developing Markets

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 assets²⁸. 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.

Policymakers and other participants have highlighted the need for proportionality in how emerging and developing markets should apply the standards in their jurisdictions. As the BCBS and Basel Consultative Group²⁹ 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.

Emerging and developing jurisdictions are, of course, committed to preserving financial stability, while maintaining access to international capital markets and fostering the growth of local economies. As a report from the Center for Global Development notes³⁰:

²⁸ See Finance and Economics Discussion Series (Divisions of Research & Statistics and Monetary Affairs Federal Reserve Board, Washington, DC), www.federalreserve.gov/econres/feds/files/2019005r1pap.pdf, for a discussion of US banking sector trading assets

²⁹ See Joint BCBS-BCG statement on proportionality, www.bis.org/publ/bcbs_nl23.htm

³⁰ See the Center for Global Development's Task Force Report on Making Basel III Work for Emerging Markets and Developing Economies, www.cgdev.org/sites/default/files/making-basel-iii-work-emerging-markets-developing-economies.pdf

“The ability to hedge risks is of great value for banks providing funding for infrastructure. Therefore, access to derivative markets is key, and regulatory reforms in this domain can have an important impact. While the possible effect of Basel III and other regulatory reforms on the role of banks in derivative markets has been widely discussed, no clear consensus has arisen. We therefore encourage more research in this area and careful tracking of developments.”

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.

A 2018 paper by the Financial Stability Institute at the BIS³¹ surveyed 100 jurisdictions that are not part of the BCBS to see how far they have adopted key prudential requirements of the Basel framework and how and whether they apply proportionality. It found that all 100 jurisdictions have adopted some iteration of the risk-based capital regime (Basel I, III or III). Fifty-four adopted the liquidity coverage rules, while 27 implemented domestic liquidity rules. The report noted there is demand from non-BCBS jurisdictions for additional clarity on the application of proportionality.

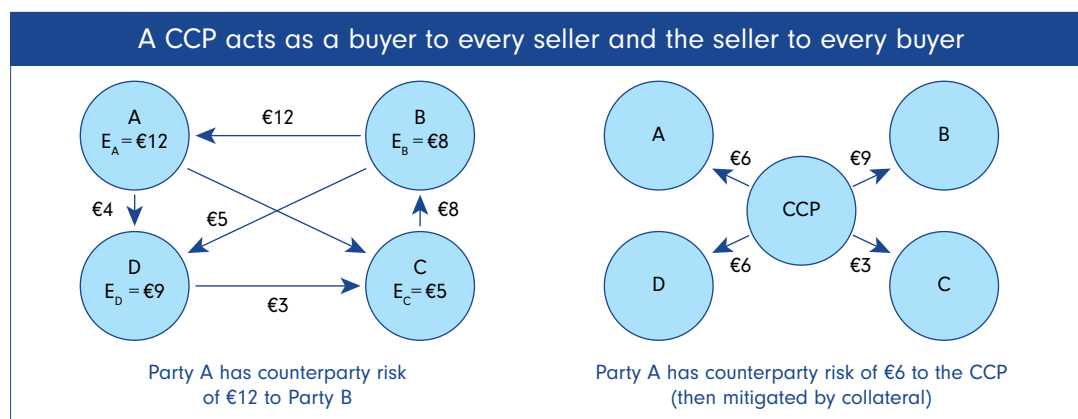
Clearing

Background

Another reform introduced by the G-20 was the requirement to clear standardized derivatives through CCPs. Today, most derivatives are cleared in major jurisdictions³².

A cleared derivatives transaction is one in which a transaction between two counterparties is transformed into one where each counterparty faces the CCP (see Chart C). Counterparties that are clearing members face the CCP directly, while those that are not (including end users) do so through an intermediary.

Chart C: Understanding Clearing



³¹ The Financial Stability Institute's paper is available at www.bis.org/fsi/publ/insights11.pdf

³² According to the FSB's OTC Derivatives Market Reforms Implementation Progress in 2021, 17 out of 24 FSB member jurisdictions have a framework in place requiring mandatory clearing. FSB member jurisdictions that are studying the imposition of a clearing framework or have developed policies on clearing include Argentina, India, Indonesia, Russia, Saudi Arabia and Turkey, www.fsb.org/2021/12/otc-derivatives-market-reforms-implementation-progress-in-2021/

Clearing provides a number of benefits: it results in less exposures, less complexity, more transparency and reduced counterparty risk. CCPs employ a variety of risk management and mitigation practices, including a requirement for margin to be posted and the holding of additional resources as a pool of funds in the event of default (the default fund).

In developed economies with significant derivatives activity, regulations stipulate the types of firms and range of products within the scope of mandatory clearing requirements. In both the US and EU, financial counterparties are generally subject to mandatory clearing. Small financial firms with less than \$10 billion in assets are exempt in the US, and there are currently exceptions in the EU for pension funds. Non-financial corporates are generally exempt from the clearing requirements unless their derivatives activity is above a certain threshold.

Clearing in Emerging and Developing Markets

Mandatory clearing requirements might not be an appropriate tool in jurisdictions with a relatively small derivatives market or exchange controls, as derivatives in these markets might not be sufficiently standardized. There may also not be adequate market depth to establish a well-managed, cost-efficient CCP. ISDA recommends these jurisdictions focus on enforceability of close-out netting prior to establishing any clearing mandate. Reliable netting will enable the development of more liquid and standardized derivatives markets³³.

The predominant aim of clearing and the exchange of IM is to reduce systemic risk, at the cost of implementing additional market infrastructure. Small derivatives markets are unlikely to pose systemic risk and might not be large enough to sustain a dedicated CCP. There are additional complications to clearing in small or closed derivatives markets. In some cases, the bilateral exchange of IM for non-cleared derivatives may be a more effective and efficient means to reduce systemic risk.

In its report *OTC Markets and Derivatives Trading in Emerging Markets*, IOSCO recommends that “jurisdictions which have relatively small and non-complex markets should not need to centrally clear the transactions, as it may impose a considerable cost in doing so”³⁴.

Jurisdictions with small or closed financial markets will not benefit from the efficiencies of using global CCPs for a number of reasons. These global CCPs would not be able to settle margin flows in the unconvertible local currency, local firms might be too small to meet access criteria and local collateral might not be eligible at the global CCP. Setting up a local CCP could be very inefficient for a small jurisdiction and causes issues for developing markets, such as high fixed costs.

Before clearing mandates are considered, certain necessary conditions need to be satisfied³⁵, including:

- Ensuring the legal framework supports clearing – for instance, by providing settlement finality for cleared trades;
- Developing derivatives markets with a sufficient amount of standardized products; and
- Having a liquid and efficient collateral market, without undue restrictions.

³³ See ISDA, Clearing in Smaller or Closed Jurisdictions, www.isda.org/a/tsvEE/ITC-Small-Jurisdictions-final.pdf

³⁴ See IOSCO, OTC Markets and Derivatives Trading in Emerging Markets, www.iosco.org/library/pubdocs/pdf/IOSCOPD330.pdf

³⁵ FSB, OTC Derivatives Market Reforms Implementation Progress in 2021, www.fsb.org/2010/10/fsb-report-on-implementing-otc-derivatives-market-reforms/

Risk management of a CCP is impossible without close-out netting, so it is imperative to have a clean netting regime in place.

While these points relate to derivatives, the same issues apply for repo clearing, especially relating to cost – there needs to be a large enough market to pay for the implementation of a CCP with a suitable risk management framework. Repo clearing has the following additional challenges:

- The CCP does not only have to safeguard mark-to-market movements, but also make sure the notional amounts and collateral are transferred at the outset and settlement of a transaction;
- Due to the settlement of notional amount, liquidity management of a repo CCP is more challenging than for derivatives. Ideally, a repo CCP will have access to central bank liquidity or at least be able to deposit cash IM at the central bank;
- Recovery and resolution are different and potentially more difficult for repos than for derivatives; and
- There could be wrong-way risk if repo market participants use collateral issued in their jurisdiction. Credit quality of collateral and market participants is likely to be very correlated.

Reporting

Background

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. According to the FSB, 23 out of 24 member jurisdictions have implemented comprehensive reporting requirements³⁶.

There are two types of derivatives reporting. The first is regulatory reporting – the reporting of transactions by counterparties to the appropriate regulators or supervisors within the relevant jurisdiction. Over the past decade, jurisdictions have adopted derivatives transaction reporting requirements in different ways. Some require both counterparties to a trade to report the transaction, while others only require one (with the counterparty responsible for reporting specified in regulation).

The second is public reporting of transactions, along with the prices at which they are executed. This type of reporting has been implemented in several large jurisdictions with a significant number of transactions (such as the EU and US). However, the US permits deferral of public reporting for a period of time based on trade size in order to maintain and enhance liquidity provided by market makers.

In emerging and developing markets, the limited number of transactions executed, coupled with the bespoke nature of derivatives transactions (ie, size, tenor, reference rates and other factors are individually determined for each trade), means 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.

³⁶ FSB, OTC Derivatives Market Reforms Implementation Progress in 2021, www.fsb.org/2010/10/fsb-report-on-implementing-otc-derivatives-market-reforms/

Reporting in Emerging and Developing Markets

Regulatory reporting is important in emerging and developing markets to enable the appropriate monitoring of risk. The challenge is putting in place a system that enables regulatory transparency in an efficient and meaningful way.

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. One potential solution is for regulators in emerging and developing markets to 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.

In such a situation, local market participants would report their trades to an existing trade repository, which would then report the data back to the jurisdiction's regulators. Doing so would enable regulators and market participants to leverage a trade repository's existing infrastructure and systems. This would involve discussing which entity would provide the relevant data to the emerging and developing markets regulator (either the relevant trade repository or regulatory authority).

Emerging and developing markets regulators could also implement rules that require firms over which they have authority to report trades directly to them, avoiding the costs and complexity of establishing a trade repository. If emerging and developing markets regulators choose this approach, it will be important to specify the reporting counterparty(ies) and what data they must provide. They should also consider using global data standards, such as the critical data elements specified by the Committee on Payments and Markets Infrastructure and IOSCO³⁷.

Trade Execution

Background

The G-20 reforms also called for standardized OTC derivatives to be traded on electronic trading platforms or exchanges where appropriate to protect against market abuse and improve market transparency – both pre-trade transparency, which allows counterparties to better compare prices prior to executing a trade, and post-trade transparency, which enables parties to see prices at which trades have been executed.

The major derivatives markets have implemented trade execution mandates, typically for cleared transactions that are liquid and sufficiently standardized to allow for this method of trading. In the EU and US, approximately 50%-60% of overall interest rate derivatives activity (including both mandated and non-mandated transaction types) is currently traded on a platform. According to the FSB³⁸, 13 FSB member countries have trading platforms and exchanges operating in their jurisdictions. Generally speaking, these platforms and venues offer trading in certain types of instruments denominated in the most liquid currencies.

³⁷ See the Committee on Payments and Markets Infrastructure and IOSCO's Harmonisation of Critical OTC Derivatives Data Elements (other than UTI and UPI), www.iosco.org/library/pubdocs/pdf/IOSCOPD598.pdf

³⁸ FSB, OTC Derivatives Market Reforms Implementation Progress in 2021, www.fsb.org/2010/10/fsb-report-on-implementing-otc-derivatives-market-reforms/

The remainder of the derivatives market is executed bilaterally. This could include derivatives not subject to mandatory clearing requirements or not cleared at all. These derivatives might also not have sufficient trading liquidity to be subject to a trading mandate and/or involve counterparties exempt from trade execution mandates. For example, one leading US platform enables counterparties to trade derivatives in some two dozen currencies out of the approximately 180 currencies that currently exist.

Trade Execution in Emerging and Developing Markets

There are three major issues for emerging and developing markets policymakers when considering the trade execution mandate.

The first two concern the potential for mandating electronic trading (e-trading) within their jurisdictions. This would involve: a) specifying the product scope of the mandate; and b) the setting up of trading venues within their borders. Given the small amount of derivatives activity in emerging and developing markets jurisdictions, an electronic trading mandate may not be feasible. Not all G-20 jurisdictions currently have e-trading platforms and only six have determinations for specific products to be executed on those platforms.

The third issue is whether derivatives activity by an emerging and developing markets 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 rule book and does the platform list the type of derivatives the counterparty needs to engage in?

RISK GOVERNANCE AND MANAGEMENT

While derivatives enable market participants to more effectively manage the risks to which they are exposed in the ordinary course of business, they also require firms using them to understand, measure and manage the risks that these instruments present. This ability and the capacity to make continued improvements to risk management are important factors in driving capital markets development.

Ensuring the development, implementation and periodic benchmarking of risk management policies and practices at a level that is appropriate to the nature, size and complexity of a firm's risk management activities are among the most important issues that market participants and regulators should address.

This involves the active engagement of a firm's board of directors, its senior management and the staff responsible for executing, valuing, reporting and auditing derivatives transactions and risk exposures.

The Role of the Board

A firm's board of directors should understand, approve and continually review its risk management policies. These policies should define the scope of the firm's derivatives activities, the reasons why it is undertaking those transactions, its permissible market and credit risk exposure, and its risk processes and controls.

As stated by the Business Roundtable in its Principles of Corporate Governance³⁹: “The board's oversight function encompasses a number of responsibilities, including...Setting the company's risk appetite, reviewing and understanding the major risks, and overseeing the risk management processes. The board oversees the process for identifying and managing the significant risks facing the company. The board and senior management should agree on the company's risk appetite, and the board should be comfortable that the strategic plans are consistent with it. The board should establish a structure for overseeing risk, delegating responsibility to committees and overseeing the designation of senior management responsible for risk management.”

Many companies handle these responsibilities through the audit or audit and finance committees of their board of directors. As a report from the Organisation for Economic Co-operation and Development⁴⁰ states: “Typically, the risk management function within the board is found within the audit committee, reflecting common practice and/or legislative requirements. The EU's Statutory Audit Directive requires audit committees to monitor the effectiveness of the company's internal control, internal audit where applicable, and risk management systems, and similar rules exist around the world.”

³⁹ See the Business Roundtable's Principles of Corporate Governance, <https://corpgov.law.harvard.edu/2016/09/08/principles-of-corporate-governance/>

⁴⁰ Organisation for Economic Co-operation and Development, Risk Management and Corporate Governance, www.oecd.org/daf/ca/risk-management-corporate-governance.pdf

In the US, the New York Stock Exchange's Listed Company Manual states⁴¹:

“While it is the job of the CEO and senior management to assess and manage the listed company's exposure to risk, the audit committee must discuss guidelines and policies to govern the process by which this is handled. The audit committee should discuss the listed company's major financial risk exposures and the steps management has taken to monitor and control such exposures. The audit committee is not required to be the sole body responsible for risk assessment and management, but, as stated above, the committee must discuss guidelines and policies to govern the process by which risk assessment and management is undertaken. Many companies, particularly financial companies, manage and assess their risk through mechanisms other than the audit committee. The processes these companies have in place should be reviewed in a general manner by the audit committee, but they need not be replaced by the audit committee.”

Policymakers, regulators, securities exchanges and other entities across the world have embraced similar approaches. For example, exchanges have adopted rules outlining standards for managing risk and also impose listing requirements, while many entities develop and implement internal risk governance and management frameworks and processes.

The Bank of China's risk management and internal control framework⁴² states its purpose is “to maximize shareholders' interests within the risk tolerance and on the premise of prudence compliance required by the regulator, depositors and other stakeholders”.

The Brazilian Development Bank⁴³ states it “has a specific division that centralizes matters regarding management of risks pertaining to credit, market and operational while making efforts to improve internal controls”.

In India, the Companies Act (2013) addresses board risk oversight responsibilities and the Securities and Exchange Board has issued regulations requiring the largest listed companies to form a risk management committee.

Larger financial institutions (such as those with more than \$10 billion in assets in the US) are also required to have a risk committee. These risk committees must have a written charter that is approved by the board, they must meet at least quarterly and fully document and maintain records of their proceedings, including risk management decisions.

The Role of Senior Management

Senior management has responsibility for developing the firm's risk policies, providing them to the board for approval and then overseeing their prudent implementation. The factors to consider include establishing an independent risk management function and implementing a clear process that allows only appropriately experienced staff to engage in derivatives transactions. It is the senior management's responsibility to put in place and maintain reporting and control capabilities, including valuation and management information systems for measuring and reporting exposures on a timely basis.

⁴¹ New York Stock Exchange Listed Company Manual, <https://nyseguide.srorules.com/listed-company-manual>

⁴² Bank of China's risk management and internal control framework, www.boc.cn/en/aboutboc/ab1/200808/t20080814_1601740.html

⁴³ The Brazilian Development Bank, www.bndes.gov.br/SiteBNDES/bndes/bndes_en/Institucional/Corporate_Governance/Risk_Management/

As the Business Roundtable states⁴⁴: “As part of [its] responsibility, management is charged with the following duties... Management identifies, evaluates and manages the risks that the company undertakes in implementing its strategic plans and conducting its business. Management also evaluates whether these risks, and related risk management efforts, are consistent with the company’s risk appetite. Senior management keeps the board and relevant committees informed about the company’s significant risks and its risk management processes.”

Understanding derivatives exposures and managing them as market conditions change are essential elements in a firm’s risk management program. That is why derivatives positions should be reported at fair value, even in jurisdictions that do not require it, as it appropriately reflects the current value of the cashflows and provides management with useful and timely information about market risks that accrual accounting does not. Firms should also seek to quantify their market risk under adverse market conditions and assess the credit risk arising from derivatives activities based on frequent measures of current and potential exposure against credit limits.

In its annual internal controls procedure update⁴⁵, a major European corporation sets out its management’s roles and responsibilities:

“Finance and Treasury are responsible for applying the Group’s financial policy, efficiently managing the balance sheet and financial debt, improving financial structure and executing a prudent policy for managing foreign exchange and interest rate risks, the primary objective of which is to mitigate all related risks that are directly or indirectly generated by Group companies.

Treasury focuses particularly on Group cash pooling, ensuring optimal efficiency and preparing forecasts on the basis of quarterly updates prepared by the companies involved. It is also responsible for applying a centralized foreign exchange and interest rate risk management strategy designed to limit the negative impact of foreign exchange and interest rate fluctuations on businesses and investments. To this end, a management policy and strict procedures have been established to measure, manage and consolidate these market risks. This organization relies on an integrated computerized system allowing real-time controls on hedging transactions. The hedging mechanism is periodically presented to the Performance Audit Committee. Hedging decisions are taken by means of a clearly established process that includes regular presentations to the Group’s Executive Committee and detailed documentation.”

A major US company⁴⁶ describes management’s approach in the following way:

“The Company is exposed to global market risks, including the effect of changes in interest rates and foreign currency fluctuations. The Company uses foreign currency denominated debt and derivative instruments to mitigate the impact of these changes. The Company does not hold or issue derivatives for trading purposes.

The Company documents its risk management objective and strategy for undertaking hedging transactions, as well as all relationships between hedging instruments and hedged items. The Company’s derivatives that are designated for hedge accounting consist mainly of interest rate swaps, foreign currency forwards, and cross-currency interest rate swaps, and are classified as either fair value, cash flow or net investment hedges...

⁴⁴ Business Roundtable, Principles of Corporate Governance, <https://corpgov.law.harvard.edu/2016/09/08/principles-of-corporate-governance/>

⁴⁵ LVMH, Report of the Chairman of the Board of Directors on Internal Control Procedures, www.lvmh.fr/wp-content/uploads/2014/10/report-on-corporate-governance-and-internal-control-procedures-2008.pdf

⁴⁶ US Securities and Exchange Commission, Form 10-K for McDonald’s Corporation, www.sec.gov/Archives/edgar/data/63908/000006390822000011/mcd-20211231.htm

The Company enters into certain derivatives that are not designated for hedge accounting. The Company has entered into equity derivative contracts, including total return swaps, to hedge market-driven changes in certain of its supplemental benefit plan liabilities...In addition, the Company uses foreign currency forwards to mitigate the change in fair value of certain foreign currency denominated assets and liabilities...

...All derivatives (including those not designated for hedge accounting) are recognized on the Consolidated Balance Sheet at fair value and classified based on the instruments' maturity dates. Changes in the fair value measurements of the derivative instruments are reflected as adjustments to AOCI and/or current earnings.”

These principles are generally in practice today in larger derivatives markets and are part of ongoing discussions between market participants and their regulators and supervisors. Some jurisdictions have codified them into their regulatory framework for the largest market participants.

As an example, the US Commodity Futures Trading Commission states in its regulations⁴⁷ that the risk management program of swaps dealers and major swap participants “should take into account market, credit, liquidity, foreign currency, legal, operational, settlement, and any other applicable risks together with a description of the risk tolerance limits...and the underlying methodology in written policies and procedures. The risk tolerance limits shall be reviewed and approved quarterly by senior management and annually by the governing body. Exceptions to risk tolerance limits shall be subject to written policies and procedures.”

Emerging and developing markets policymakers will want to weigh how they apply these principles to their regulatory and supervisory oversight in a manner consistent with the level of derivatives activity among counterparties.

⁴⁷ Code of Federal Regulations Title 17, Chapter 1, Part 23, Subpart J “§ 23.600 Risk management program for swap dealers and major swap participants, www.ecfr.gov/current/title-17/chapter-1/part-23/subpart-J

CONCLUSION

Derivatives are a vital risk management tool for thousands of international and regional banks, corporations, investment managers, government and supranational entities, insurance companies and energy and commodities firms in many countries around the world. Derivatives provide the means for the financial system to better manage financial risks and are therefore an important financial stability enhancing tool.

These financial instruments also have an important role to play in supporting the economic growth and development of capital markets in emerging and developing jurisdictions.

To achieve this potential, it is important for emerging and developing markets to address the key legal, regulatory and risk management issues that affect how and whether market participants can employ derivatives to manage their risks.

This paper seeks to help policymakers with this important task. ISDA looks forward to further discussions with regulators and supervisors across jurisdictions about this paper and to ensure the continued development of safe, efficient derivatives markets.

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. These members comprise a broad range of derivatives market participants, including corporations, investment managers, government and supranational entities, insurance companies, energy and commodities firms, and international and regional banks. In

addition to market participants, members also include key components of the derivatives market infrastructure, such as exchanges, intermediaries, clearing houses and repositories, as well as law firms, accounting firms and other service providers. Information about ISDA and its activities is available on the Association's website: www.isda.org. Follow us on [Twitter](#), [LinkedIn](#), [Facebook](#) and [YouTube](#).