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ISDA Survey on OTC Derivatives in Emerging and Developing Markets

ISDA published a whitepaper in May 2022 outlining key legal, regulatory and risk management issues for emerging market and developing economies (EMDEs). To complement that initiative, ISDA has conducted a survey of EMDE jurisdictions that looks at the steps that have been taken with regards to these issues. The survey involved legal counsel from 44 EMDE countries.

ISDA recognizes the EMDE classification includes a broad range and number of countries with economies, financial markets and regulatory and policy frameworks that are at different stages of development. For these reasons, it is important that a jurisdiction's policy and regulatory framework is aligned and evolves with the development of its capital and derivatives markets in order to foster growth and facilitate prudent risk management practices.

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EXECUTIVE SUMMARY

Derivatives play an important role in supporting economic growth and helping to develop capital markets in EMDEs[1]. To help establish a robust framework for safe and efficient derivatives activity in these jurisdictions, ISDA published a whitepaper in May 2022 that outlined key legal, regulatory and risk management issues for EMDE policymakers[2]. This survey complements that initiative by looking at the steps that have been taken or are underway with regards to these issues across EMDE jurisdictions.

ISDA recognizes the EMDE classification includes a broad range and number of countries with economies, financial markets and regulatory and policy frameworks at different stages of development. For these reasons, it is important that a jurisdiction's policy and regulatory framework is aligned and evolves with the development of its capital and derivatives markets in order to foster growth and facilitate prudent risk management practices.

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). However, not every global rule set can or should be implemented in every jurisdiction (eg, a clearing mandate in a market with few transactions or a closed currency).

Legal counsel in 44 EMDEs participated in the survey, including 12 respondents from Latin America and the Caribbean, 11 from Asia, eight from Sub-Saharan Africa, eight from Europe, and five from the Middle East and Central Asia[3].

ISDA also conducted follow-up interviews with some of the survey participants to gather more in-depth information and insights. These interviews offered further clarity on the survey responses and allowed ISDA to gain a more nuanced understanding of the various issues related to derivatives markets[4].

Some key highlights include:

- In emerging and developing jurisdictions, there usually isn't a specific regulatory body that solely supervises derivatives markets. Instead, regulators generally oversee derivatives by supervising the activities of participants that operate within those markets. All 44 jurisdictions covered by the survey have one or more regulatory authorities overseeing various financial institution segments. Typically, the central bank supervises banks and credit and deposit-taking institutions and their activities, while the securities market regulator oversees investment firms and their activities.

- Around half of the jurisdictions (20 out of 43) have some form of registration requirement for entities before they can engage in derivatives activity. These requirements do not appear to be tied to a specific threshold of derivatives activity, in contrast to registration practices in some advanced economies.

- A significant number of jurisdictions (19 out of 44) have restrictions on the types of entities permitted to use derivatives. In advanced economies, both financial and large corporate entities are generally allowed to use derivatives to manage their risks. However, some developed economies also have certain restrictions on which firms can participate in derivatives markets, which is intended to safeguard financial stability, ensure market integrity and reduce systemic risks.

[1] The term 'emerging and developing markets' as used in this paper refers to the International Monetary Fund's World Economic Outlook country classification system, which divides the world into two major groups: advanced economies and emerging markets and developing economies (EMDEs) www.imf.org/external/pubs/ft/weo/2021/02/weodata/groups.htm

[2] Policy Framework for Safe and Efficient Derivatives Activity in Emerging and Developing Markets www.isda.org/a/YHVgE/Policy-Framework-for-Safe-and-Efficient-Derivatives-Activity-in-Emerging-and-Developing-Markets.pdf

[3] Not all respondents answered all questions in the survey

[4] ISDA extends special thanks to its legal counsel in 10 jurisdictions that agreed to participate in follow-up interviews: Ghana, Jamaica, Malaysia, Mexico, Pakistan, Philippines, Serbia, Turkey, United Arab Emirates and Vietnam. Firms are listed on page 24

- Eighteen out of 43 jurisdictions limit or prohibit the use of certain types of derivatives. In many cases, derivatives can only be used to hedge underlying risk, and market participants are not allowed to use derivatives to gain exposure to underlying assets without owning those assets outright. Advanced economies typically don't have similar restrictions on such use of derivatives.

- Implementation of the Group-of-20 (G-20) reforms varies across emerging and developing jurisdictions that participated in the survey.

    - Nine out of the 44 jurisdictions have initial margin (IM) and/or variation margin (VM) requirements for non-cleared derivatives. Of these, three (Bulgaria, Hungary and Poland) are members of the EU, which has implemented margin requirements. Three other jurisdictions (Brazil, India and Mexico) are large economies with significant levels of derivatives activity. Policymakers provide certain exemptions and thresholds for entities that are not systemically important to reduce the burden of compliance.

    - Seventeen out of the 44 jurisdictions have capital requirements in place for over-the-counter (OTC) derivatives. The adoption of Basel III is not mandatory for most emerging and developing markets, and policymakers have highlighted the need for proportionality in how the standards should be applied in these jurisdictions.

    - Six out of the 44 jurisdictions have mandatory clearing requirements in place. Of these, three are EU members and three are large economies with significant levels of derivatives activity. Mandatory clearing requirements are also being considered or are pending in three other countries, but might not be appropriate in those jurisdictions with relatively small derivatives markets or exchange controls.

    - Seventeen out of the 44 jurisdictions have reporting requirements for OTC derivatives transactions. Regulatory reporting is important in emerging and developing markets to enable the appropriate monitoring of risk. Some EMDEs face challenges in putting in place a system that enables regulatory transparency in an efficient and meaningful way.

    - The majority of jurisdictions (39 out of 44) have no requirements to execute OTC derivatives on trading venues. In four jurisdictions, certain OTC derivatives are subject to electronic trading requirements. The liquidity of local OTC derivatives markets should be considered when determining whether it is feasible to mandate electronic trading and establish local trading venues.

- Thirty-two out of the 44 jurisdictions have mandatory risk management standards for regulated firms engaged in OTC derivatives. This is in line with common practice in advanced economies, where risk management standards are often codified into the regulatory framework for the largest market participants.

SURVEY PARTICIPANTS

ISDA conducted a survey of derivatives in emerging and developing markets at the beginning of 2023, and received responses from legal counsel in 44 jurisdictions, including 12 from Latin America and the Caribbean, 11 from Asia, eight from Europe, eight from Sub-Saharan Africa, and five from the Middle East and Central Asia (see Chart 1 and Table 1).

Chart 1: Regional Distribution of Survey Participants

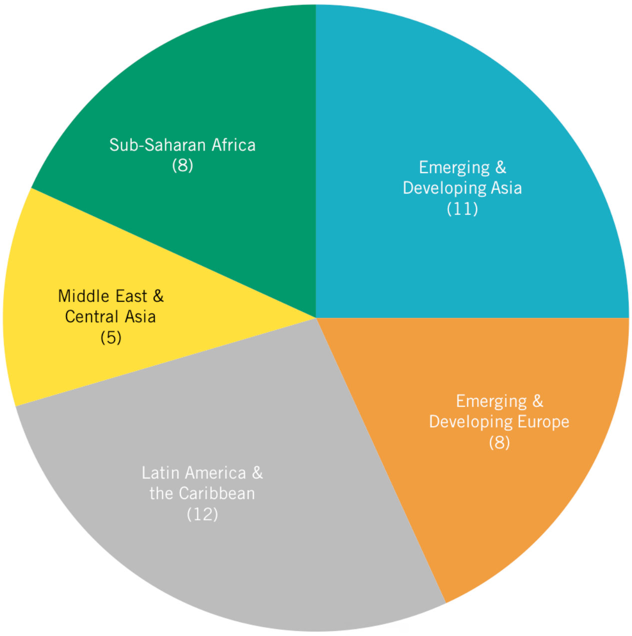


Table 1: Survey Participants by Region and Jurisdiction

Region	Jurisdictions
Emerging and Developing Asia	Brunei, Cambodia, India, Indonesia, Malaysia, Marshall Islands, Philippines, Sri Lanka, Thailand, Timor-Leste and Vietnam
Emerging and Developing Europe	Albania, Bulgaria, Croatia, Hungary, Poland, Romania, Serbia and Turkey
Latin America and the Caribbean	Curacao, Aruba and Saint Maarten, Argentina, Barbados, Bolivia, Brazil, Costa Rica, Ecuador, Guatemala, Honduras, Jamaica, Mexico and Peru
Middle East and Central Asia	Azerbaijan, Georgia, Pakistan, Qatar and the United Arab Emirates ((UAE) Federal)
Sub-Saharan Africa	Botswana, Ethiopia, Ghana, Mauritius, Namibia, Seychelles, Uganda and Zambia

LEGAL ISSUES

Netting and Collateral

Netting arrangements are widely used in financial markets as an important mechanism to manage the credit risk of counterparties. Regulatory authorities around the world strongly encourage the use of close-out netting provisions and collateralization because of their beneficial effects on the stability of the financial system.

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.

Market participants in legally enforceable netting jurisdictions also enjoy greater access to international derivatives markets – 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.

As a further benefit, local entities within a netting jurisdiction have a lower cost of funding relative to entities in non-netting jurisdictions. Reliable netting can also enable the development of more liquid and standardized derivatives markets in emerging and developing jurisdictions.

Netting Legislation

To benefit from close-out netting provisions, firms need to be sure these provisions will be enforceable, including in the event of an insolvency of one of the parties to the transaction.

For example, financial institutions require a high degree of legal certainty over the enforceability of close-out netting to ensure safe and sound management of credit risk and to consider netting risk reducing for the purposes of bank regulatory capital requirements under international standards.

The primary purpose of netting legislation is to ensure the enforceability of close-out netting and related collateral arrangements under the law of a jurisdiction following an event of default or termination.

Legislators 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 addressed in local legislation. Netting legislation should deal not only with close-out netting, but also with financial collateral.

Once netting protections are in place, an opinion needs to be obtained from a local law firm confirming that close-out netting is enforceable in that jurisdiction. These netting opinions provide legal certainty, create efficiencies in transacting derivatives and help increase the confidence of international firms that trade with counterparties in emerging markets.

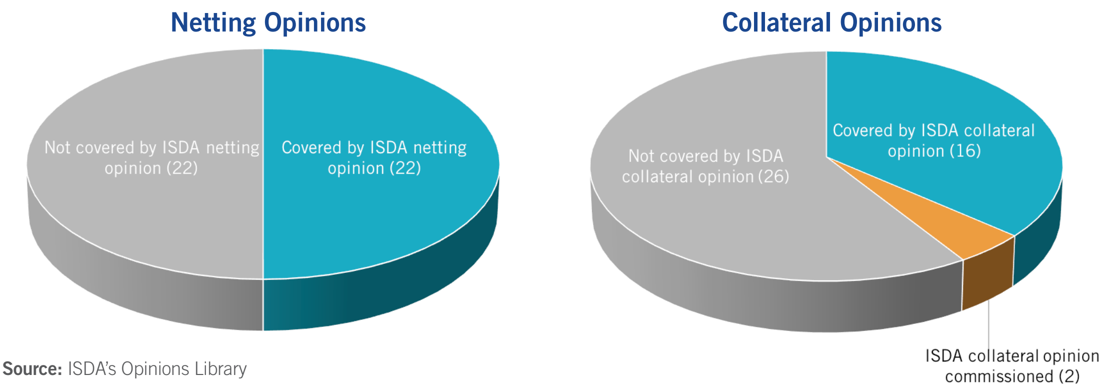
ISDA's Netting and Collateral Opinions

ISDA's netting opinions address the enforceability of the termination, bilateral close-out netting and multibranch netting provisions of the 1992 and 2002 ISDA Master Agreements. ISDA has also published collateral opinions on the enforceability of its credit support documents[5].

ISDA has published netting opinions on 22 of the 44 jurisdictions included in the survey. Collateral opinions have been published for 16 of the jurisdictions, and another two have been commissioned (see Charts 2 and 3).

[5] ISDA Opinions Overview www.isda.org/opinions-overview/

Charts 2 and 3: ISDA's Netting and Collateral Opinions on Surveyed Jurisdictions



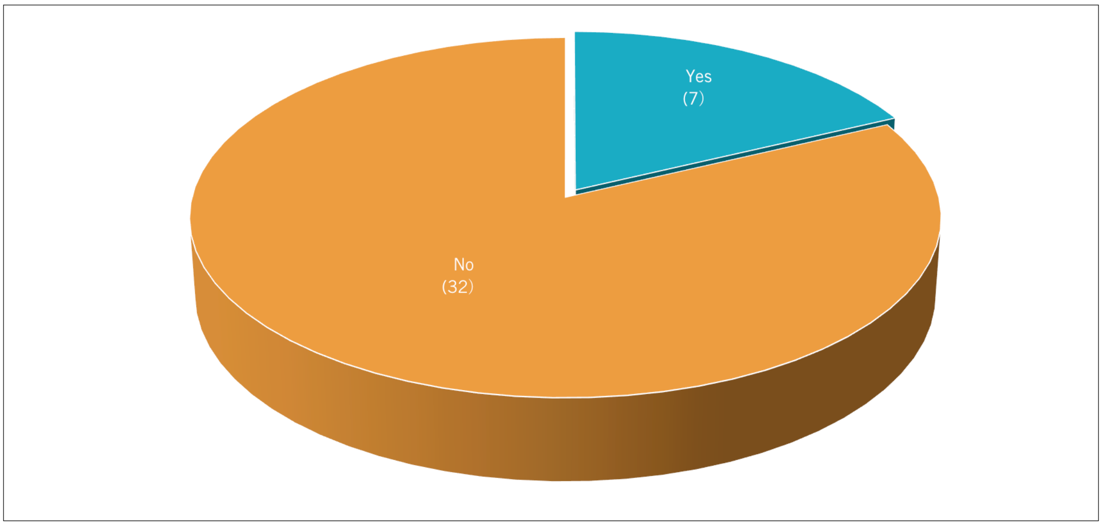
Source: ISDA's Opinions Library

Some jurisdictions still require legislative changes before netting and collateral opinions can be obtained. For example, Uganda has only implemented central bank regulations so far, which is a precursor to proper netting legislation. Regulators are currently working on primary legislation and, once that legislation recognizing the enforceability of close-out netting has been adopted, then a positive legal opinion can be obtained.

Potential Legislative Changes

Counsels in seven out of 39 responding jurisdictions reported that legislative changes are expected that could positively impact netting or collateral arrangements. Most of these countries (Bulgaria, Ethiopia, Marshall Islands, Pakistan and Seychelles) currently have netting legislation under consideration.

Are you aware of any potential or expected legal, regulatory or legislative developments in your jurisdiction that could impact netting or collateral?



Bulgaria is the only EU member state that has not adopted comprehensive legislation confirming the enforceability of close-out netting. The country's Ministry of Finance has started the process of setting up a legal and regulatory framework for close-out netting for derivatives and repurchase agreements, which is expected to be completed by November 2023[6].

[6] The Ministry of Finance Has Started Two Projects for the Development of Financial Markets www.minfin.bg/en/news/11633

In Pakistan, a netting bill based on ISDA's model netting legislation has been developed by the Securities and Exchange Commission of Pakistan (SECP) and the State Bank of Pakistan (SBP). The legislation is pending in parliament and is ready for adoption, but there is no guidance on the timeline for the bill to be promulgated.

In Ethiopia, some preliminary regulations have been published, but there is currently no primary netting legislation (ie, proper netting legislation that would allow a netting opinion to be issued). In Seychelles, there is no draft bill, but the authorities have been discussing legislation internally.

Recommendation: *Legal certainty over the enforceability of close-out netting is an important prerequisite for robust, liquid derivatives markets. Legislators should identify the relevant areas of local law that could potentially conflict with the effectiveness of netting agreements, so all relevant issues are adequately addressed in local legislation. Netting legislation should not only deal with close-out netting, but also with financial collateral.*

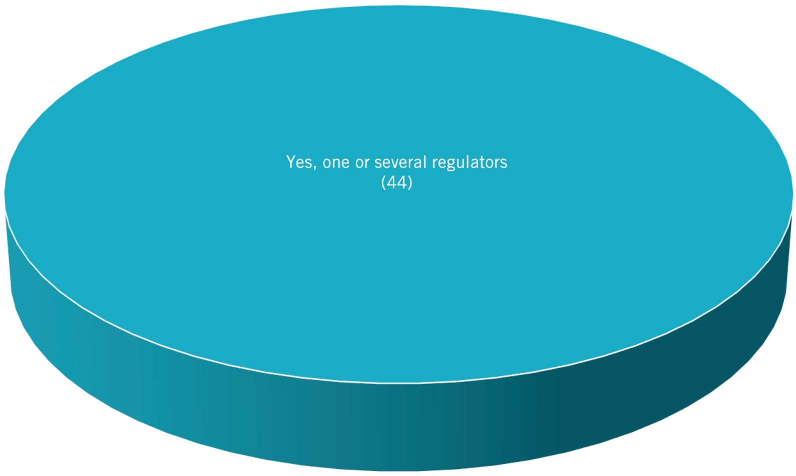
REGULATORY ISSUES

Market Regulators

All 44 jurisdictions covered by the survey have one or more regulatory authorities overseeing various financial institution segments. Typically, the central bank supervises banks and credit and deposit-taking institutions and their activities, while the securities market regulator oversees investment firms and their activities.

There are some significant differences among emerging and developing countries in how market activities and key market participants are supervised and what regulators supervise which segments of the market. There usually isn't a specific regulatory body that solely supervises derivatives markets, which is generally the case in more advanced economies with significant derivatives activity. Instead, regulators in most jurisdictions oversee derivatives markets by supervising the activities of market participants that operate within those markets.

Is there a regulatory authority authorized to oversee the derivatives market in your jurisdiction?



Multiple jurisdictions have several regulators charged with overseeing derivatives markets activity and market participants. In Malaysia, for example, the regulatory power is shared between the Securities Commission Malaysia (SC) and Bank Negara Malaysia (BNM).

The SC regulates all OTC derivatives other than those referencing foreign exchange (FX) and derivatives entered with certain entities, and licenses market participants that deal in derivatives. The SC also regulates exchange-traded derivatives (ETDs), derivatives exchanges and derivatives clearing. BNM regulates the FX market, its participants and all FX derivatives.

In the United Arab Emirates (UAE), the Central Bank of the United Arab Emirates (CBUAE) has supervisory authority over most OTC derivatives activities. The UAE's securities regulator, the Securities and Commodities Authority (SCA), has supervisory jurisdiction over ETDs and derivatives that reference local securities.

The CBUAE supervises banks, finance companies, payment services providers, money changers and, since the merger of the CBUAE with the Insurance Authority of the United Arab Emirates in 2021, insurance companies. These entities comprise the vast majority of regulated market participants that enter into OTC derivatives in the UAE.

The SCA supervises securities and commodities brokers, funds that are offered in the UAE, commodities exchanges, securities exchanges, central counterparties (CCPs) for trades executed through commodities and securities exchanges, clearing members at those CCPs and central securities depositories for securities that are listed on securities exchanges.

There is no specific regulator that oversees the derivatives markets in Ecuador. However, the Financing Board (Junta de Política y Regulación Monetaria y Financiera) and the Superintendency of Banks (Superintendencia de Bancos) can issue regulations on derivatives as banking activities. The Superintendency of Banks also supervises banks and may review their derivatives activities and operations.

Recommendation: *There is no single standard for supervising derivatives activity in emerging and developing markets. While a single regulator may help a jurisdiction avoid gaps in coverage, it may be challenging to have the scope of expertise required for effective supervision under one roof.*

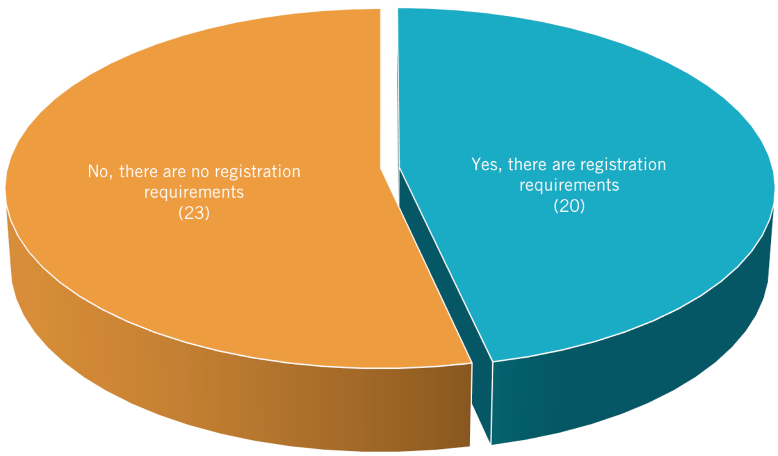
Registration Requirements

Some jurisdictions have implemented requirements for dealers and market participants to register with a regulatory authority. These requirements are intended to ensure comprehensive regulatory oversight over entities with significant derivatives activity.

About half of the surveyed jurisdictions (20 out of 43) have registration requirements in place for market participants that want to engage in derivatives activity. These requirements do not appear to be tied to a specific threshold of derivatives activity, in contrast to registration practices in some advanced economies.

More advanced economies generally do not have registration requirements as a precursor to using derivatives, although the US does require firms that make markets and exceed a certain notional amount of derivatives to register as swap dealers and comply with specific swap dealer regulations.

Does your jurisdiction have registration requirements before market participants can engage in OTC derivatives activity?



In Jamaica, any person or entity that engages in the trading or brokering of OTC derivatives must first register with the Financial Services Commission (FSC) as a securities dealer. Securities dealers must maintain minimum capital requirements that are determined by the FSC based on the size and complexity of their business operations and are subject to ongoing reporting and compliance requirements.

Derivatives business operators (derivatives dealers and brokers) in Thailand must register with the Securities and Exchange Commission. Registration requirements differ for domestic and foreign applicants[7].

Domestic commercial banks, financial companies, securities companies and financial institutions are required: to be capable of operating the derivatives business of the category under the relevant supervisory law; to be capable of maintaining capital and reserves; not to be restricted, suspended or restrained in their operations by the regulator; and not to show any indications that it has financial difficulty.

[7] Thailand Securities and Exchange Commission Dealer Registration https://capital.sec.or.th/webapp/nrs/nrs_search_en.php?chk_frm=1&ref_id=9907&cat_id=1131&topic_desc=Derivatives%20Dealer

Foreign applicants must have shareholders' equity not less than $50 million or equivalent; have been operating a derivatives business in their home country continuously for at least 10 years; and be compliant with International Organization of Securities Commissions (IOSCO) standards, among other requirements.

In Pakistan, entities that engage in derivatives activities are required to register with the SECP and the SBP. The SECP requires firms to submit a detailed application that includes information about their ownership structure, management team, financial resources and risk management policies and procedures. Applicants must also demonstrate that they have adequate systems and controls in place to ensure compliance with regulatory requirements.

The SBP requires applicants to submit a copy of the Derivatives Selling Policy Manual, prepared in accordance with the Financial Derivatives Business regulations. They must also provide details of the accounting treatment and policies for derivatives transactions, the risk measurement and management framework, and the organization structure of the derivatives trading unit, including names, qualifications and experience of the personnel trading derivatives.

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

Scope of Derivatives Market Activity

Policymakers in some emerging and developing markets limit certain types of financial activity in derivatives markets to specific categories of participants.

In some jurisdictions, policymakers allow firms to use derivatives for hedging but not 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 imposition of overly restrictive regulations may significantly limit the ability of firms to manage risks effectively. Hedging can only occur when there is a willing counterparty available to take the other side of the trade. Restricting the risk-taking capacity of domestic market participants hampers liquidity supply, therefore limiting the availability of hedging opportunities.

Allowing financial institutions to take open positions (ie, take on new risks they do not currently have, rather than just using derivatives to offset existing risks) is essential for the development of derivatives markets.

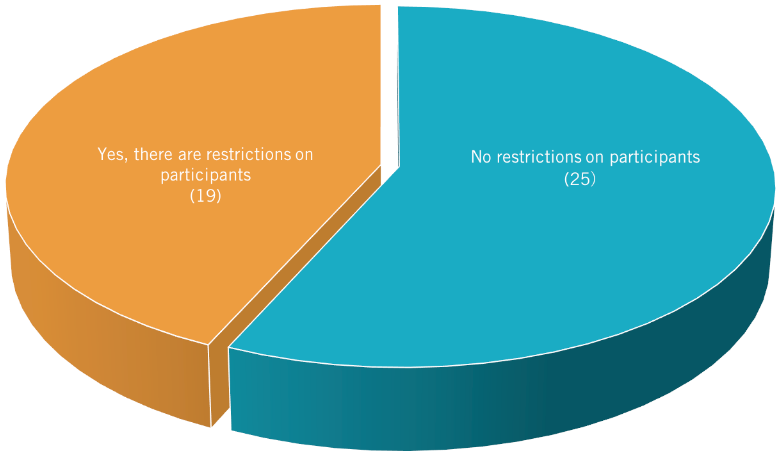
By taking positions via derivatives, investors can gain exposure to underlying assets or markets without needing to own those assets outright. Derivatives can be used as part of a broader portfolio management strategy – for example, investors can use derivatives to adjust the risk exposure of their portfolios by taking new long or short positions that offset the risk of other assets in the portfolio or enhance returns by taking additional risk.

Derivatives can also provide investors with access to markets or assets that might otherwise be difficult or expensive to trade. This can be useful for institutions that have limited access to certain markets or want to diversify their portfolios without incurring high transaction costs.

Restrictions on Market Participants

The survey results show that there are restrictions on the types of market participants allowed to use derivatives in 19 out of 44 jurisdictions. There are no restrictions in 25 jurisdictions. Some developed economies also have certain limitations on participants using derivatives to safeguard financial stability, ensure market integrity and reduce systemic risks.

Are there restrictions on the types of market participants permitted to use derivatives in your jurisdiction?



In Thailand, corporates are permitted to enter into derivatives transactions for hedging purposes only. Hedging is defined as the use of derivatives to offset or reduce the risk of loss arising from changes in the price, exchange rate or interest rate of an underlying asset that a corporate entity holds or expects to acquire or incur in the future. The hedge should be directly related to the corporate's underlying assets, liabilities or anticipated cashflows.

Commercial banks are allowed to enter into derivatives transactions to the extent permitted under their supervisory laws and regulations. Insurance companies are currently not permitted to enter into derivatives with offshore counterparties. Under the Derivatives Act, one party is generally required to be a licensed or registered derivatives dealer under Thai law and can enter into OTC derivatives with eligible counterparties[8].

According to the Serbian Financial Collateral Act, close-out netting is recognized and protected following the insolvency of certain eligible Serbian counterparties, such as banks, investment firms/broker-dealers, investment funds, insurance firms and other financial sector entities. However, corporates are not covered by the netting act, which limits their ability to participate in derivatives transactions.

As corporates are not eligible counterparties under the Financial Collateral Act, they are not able to rely on the Financial Collateral Act's provisions on financial collateral (including securities/cash transfers) and their counterparties don't have termination/close-out netting protection (including in an insolvency scenario) under the Financial Collateral Act.

The Serbian FX rules also set a less liberal legal regime for derivatives transactions with residents (including corporates and investment firms) than the one applicable to Serbian banks. Residents may enter into OTC financial derivatives for the purposes of hedging against FX risk, interest rate risk, securities fluctuation risk, commodities fluctuation risk and stock exchange index fluctuation risk.

In the Marshall Islands, financial institutions are permitted to enter into derivatives with non-resident domestic entities, many of which are located in the jurisdiction because of its favorable investment climate. Resident domestic entities are not permitted to enter into derivatives transactions.

In Ghana, pension funds, unit trusts and mutual funds are prohibited from participating in derivatives markets. The restriction is intended to protect funds under management.

[8] Derivatives Act (Translation) www.sec.or.th/EN/Documents/ActandRoyalEnactment/Act/act-derivatives2003-amended.pdf

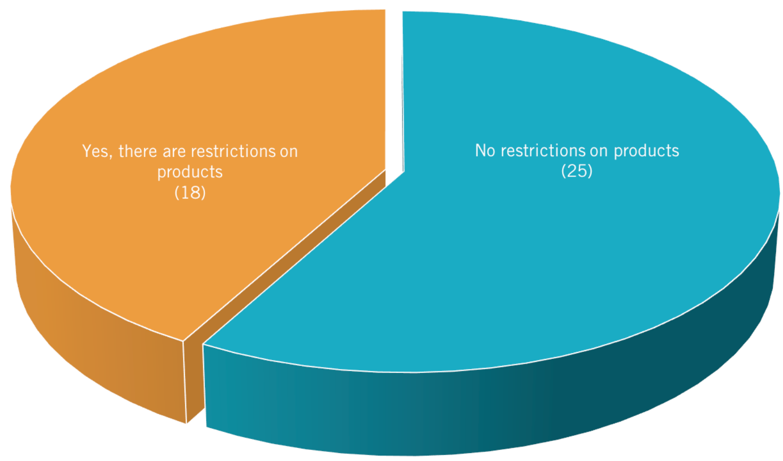
In Ecuador, public entities, public enterprises and other institutions belonging to the public sector (unless they are state banks or state-owned banks) can use derivatives only for hedging purposes and not as investments. These entities must participate in derivatives transactions through the country's Ministry of Finance.

Restrictions on Derivatives Products

Along with restrictions on market participants, some jurisdictions limit or prohibit the use of certain types of derivatives. The survey results show there are restrictions on the types of derivatives products in 18 out of 43 jurisdictions.

In many cases, derivatives can only be used to hedge an underlying risk, and market participants are not allowed to use derivatives to gain exposure to underlying assets or markets without owning those assets outright.

Are there restrictions on the types of derivatives products market participants can transact?



In Pakistan, the central bank only allows four types of OTC derivatives transactions: interest rate swaps, forward rate agreements, third-currency options and cross-currency swaps. Other derivatives must be traded on a securities or commodities exchange.

In Malaysia, market participants may be restricted in the asset classes they can trade by their regulator. If the regulator restricts investment or dealing in a particular asset class, then entering into derivatives referencing that asset class will likely also not be allowed.

In Mexico, the Banco de Mexico and other Mexican regulators issued regulations that prohibit certain regulated entities (including broker-dealers, pension funds and insurance companies) from entering into credit derivatives transactions. This includes credit default swaps, total return swaps and any other financial instruments with a debt instrument as an underlying asset. However, regulations published by the Comisión Nacional Bancaria y de Valores (CNBV) allow these entities to engage in these types of transactions if they are necessary for hedging or investment purposes.

The Reserve Bank of India (RBI) regulates India's OTC derivatives market. Commodities (other than bullion) are regulated by the capital markets regulator, the Securities and Exchange Board of India. Banks are allowed to transact only in bullion, while other types of commodity derivatives are not permitted for trading by banks in India. On the other hand, corporates can engage in OTC commodity derivatives trading on a cross-border basis, subject to certain conditions.

Recommendation: *Policymakers should allow diverse types of counterparties with different business models and risk exposures to participate in derivatives markets, including foreign counterparties. A wider range of participants and broader availability of derivatives products will help financial market development. It will also allow a smoother reallocation of risk in the system between institutions.*

IMPLEMENTATION OF G-20 DERIVATIVES REFORMS

In response to the 2008/2009 global financial crisis, the G-20 countries agreed a series of reforms to make OTC derivatives markets more resilient and transparent. This included mandatory central clearing of standardized OTC derivatives, margining of non-cleared derivatives, exchange or electronic trading of standardized OTC derivatives where appropriate, reporting of all OTC derivatives to data repositories, and higher capital requirements for non-cleared derivatives.

Rollout of the G-20 reforms varies across emerging and developing jurisdictions that participated in the survey. Implementation has generally been more advanced in Financial Stability Board member jurisdictions (Argentina, Brazil, India, Indonesia, Mexico and Turkey) and by EU member states (Bulgaria, Croatia, Hungary, Poland and Romania).

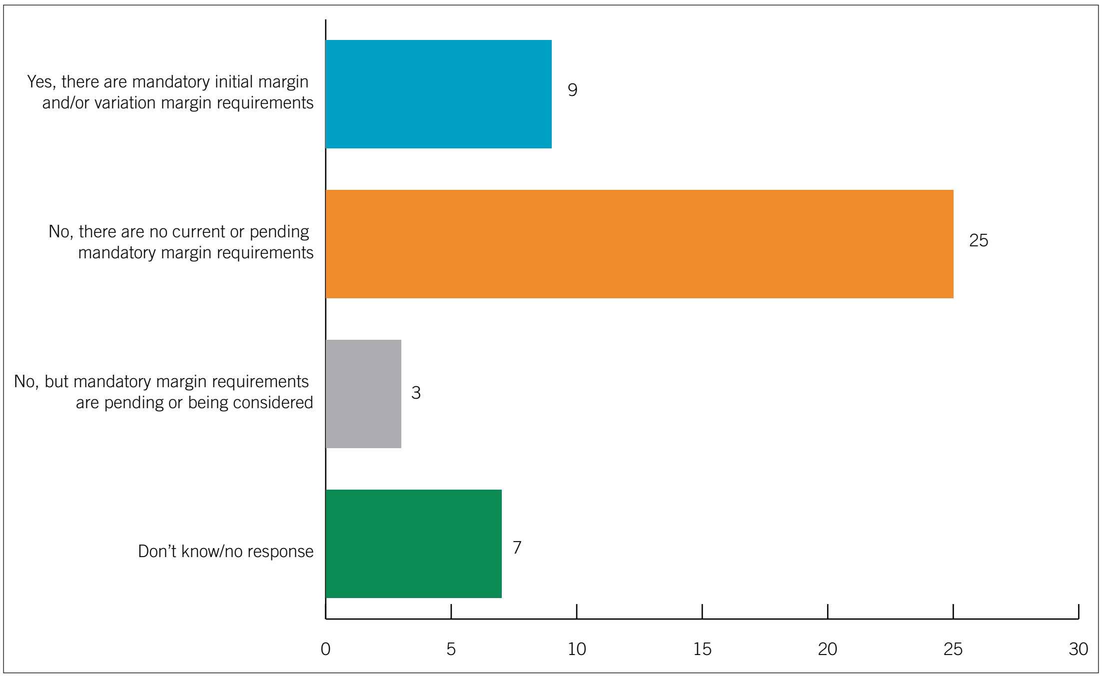
Margin Requirements for Non-cleared Derivatives

The margin rules for non-cleared derivatives developed by the Basel Committee on Banking Supervision and IOSCO require the mandatory posting of IM and VM for OTC derivatives that are not cleared through CCPs. IM requirements apply to most financial institutions and certain other entities with an average aggregate notional amount (AANA) of non-cleared derivatives above €8 billion (or similar amount in the currency of the relevant local rules).

Each in-scope counterparty pair is required to actually exchange IM once they exceed an IM exposure threshold of €50 million (or similar amount in local currency), calculated at a group level. Exemptions for the IM requirements exist for certain products (ie, physically settled FX swaps and FX forwards) and entities (ie, sovereigns and central banks).

Nine of the surveyed 44 jurisdictions have implemented IM and/or VM requirements for non-cleared derivatives, including Brazil, Bulgaria, Ecuador, Hungary, India, Jamaica, Pakistan, Poland and Mexico. Margin rules are pending or being considered in three other jurisdictions, while 25 have no current or pending mandatory margin requirements.

Are there any mandatory initial margin or variation margin requirements for non-cleared derivatives in your jurisdiction?



In India, domestic covered entities must exchange VM for non-cleared derivatives transactions with domestic and foreign covered institutions. Covered domestic entities are defined as firms regulated by a financial sector regulator, including branches of foreign banks operating in India, which have an AANA of outstanding non-cleared derivatives of ₹25,000 crore (INR250 billion/ approximately $6.25 billion) and above, measured on a consolidated group-wide basis. The rules also apply to other resident entities with an AANA of outstanding non-cleared derivatives of at least ₹60,000 crore (INR600 billion /approximately $7.31 billion) on a consolidated group-wide basis[9].

In Brazil, the margin requirements apply to non-cleared OTC transactions in which at least one of the parties is licensed by the Banco Central do Brasil. In-scope counterparties with an operational group AANA of in-scope transactions above BRL2,250 billion ($469 billion) must post and collect IM from September 1, 2019, while in-scope counterparties below that threshold must post and collect IM from September 1, 2020[10].

Recommendation: *When contemplating the implementation of margin rules in emerging and developing markets, regulators should consider the scope of the rules. Specifically, entities that are not systemically important should be exempt from margin requirements. Any new or revised margin requirements should be aligned with the Basel Committee/IOSCO standards.*

Importantly, enforceability of close-out netting is a necessary pre-condition to implement margin rules. Having a liquid and efficient collateral market without undue restrictions and the development of collateral management capabilities within local financial institutions should also be considered.

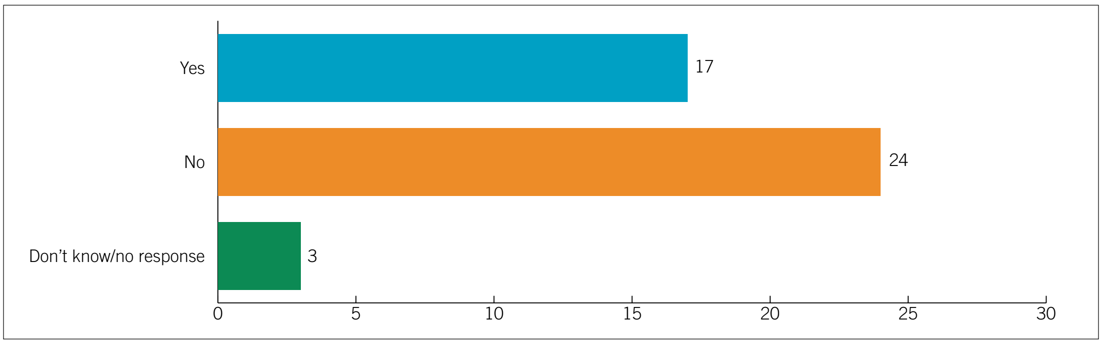
Regulatory Capital

In response to the financial crisis, the Basel Committee revised its minimum capital standards for internationally active banks. The Basel III reforms are focused on improving the amount and quality of capital that banks hold, enhancing the market risk framework, specifying leverage ratio requirements, and mitigating excessive liquidity and funding risk[11].

Alongside a new leverage ratio, liquidity coverage ratio and net stable funding ratio, standards for counterparty credit risk have been introduced, including a standardized approach for counterparty credit risk and capital requirements for credit valuation adjustment[12].

The adoption of the Basel III standards is not mandatory for most emerging and developing markets, but many of these countries have adopted or are in the process of adopting these standards. Seventeen out of the 44 surveyed jurisdictions have capital requirements for OTC derivatives in place[13], while 24 do not.

Are there capital requirements for OTC derivative transactions in your jurisdiction?



[9] Master Direction – Reserve Bank of India (Variation Margin) Directions, 2022 www.rbi.org.in/Scripts/BS_ViewMasDirections.aspx?id=12328

[10] Resoluçao CMN 4.662/18 and Circular BCB 3.902/18 www.bcb.gov.br/estabilidadefinanceira/exibenormativo?tipo=Resolu%C3%A7%C3%A3o&numero=4662

[11] Basel Committee on Banking Supervision, High Level Summary of Basel III Reforms www.bis.org/bcbs/publ/d424_hlsummary.pdf

[12] The Basel Framework www.bis.org/basel_framework/index.htm?m=3%7C14%7C697

[13] This includes jurisdictions that have adopted some iteration of the risk-based capital regime (Basel I, II or III)

In Jamaica, capital requirements for financial institutions that engage in OTC derivatives are outlined in the Bank of Jamaica's Capital Adequacy Framework, which is based on the Basel III framework[14].

Financial institutions are required to calculate the capital charge for OTC derivatives using the add-on method, which requires them to add a percentage of the notional amount of the derivatives contract to their credit risk-weighted assets. The percentage depends on the type of derivative and the residual maturity of the contract. However, the Bank of Jamaica allows financial institutions to use an internal model approach for calculating the capital charge for OTC derivatives if they meet certain requirements.

In the UAE, the CBUAE has set minimum capital requirements for banks and financial institutions that engage in OTC derivatives trading. Banks must hold a minimum capital requirement of AED500 million ($136 million) for trading OTC derivatives. This is in addition to their existing regulatory capital requirements.

The SCA has also implemented capital requirements for OTC derivatives trading by UAE licensed financial institutions. These institutions must maintain a minimum net capital requirement of AED2 million to engage in OTC derivatives trading. Additionally, financial institutions must hold an additional capital buffer based on the risk-weighted value of their OTC derivatives positions.

In Turkey, capital rules for OTC derivatives are governed by the Capital Adequacy Regulation, which is issued by the Banking Regulation and Supervision Agency (BRSA). Under the Capital Adequacy Regulation, banks and financial institutions are required to maintain sufficient capital to cover the potential credit risk arising from their OTC transactions. The amount of capital required is determined by a formula that considers the notional amount of the OTC derivatives, the credit risk of the counterparty and other factors.

In addition, banks and financial institutions are required to regularly report their OTC derivatives transactions to the BRSA, and to maintain adequate risk management systems to monitor and control the risks associated with these transactions.

Recommendation: *Regulators in emerging and developing markets should consider the size, risk and complexity of markets when setting capital standards in their jurisdiction, as well as the composition of banks' total assets. In particular, they should take into account the smaller share of trading book assets and larger proportion of banking book assets held by banks and financial institutions in developing and emerging markets.*

As derivatives markets develop further, there could be benefits to employing more advanced and risk-sensitive approaches compared to the current simplified regulatory-prescribed methodologies for the capitalization of market and counterparty credit risk. This could help better capture the risks associated with trading book activities and reduce the required capital for banks engaging in these activities.

Clearing Requirements

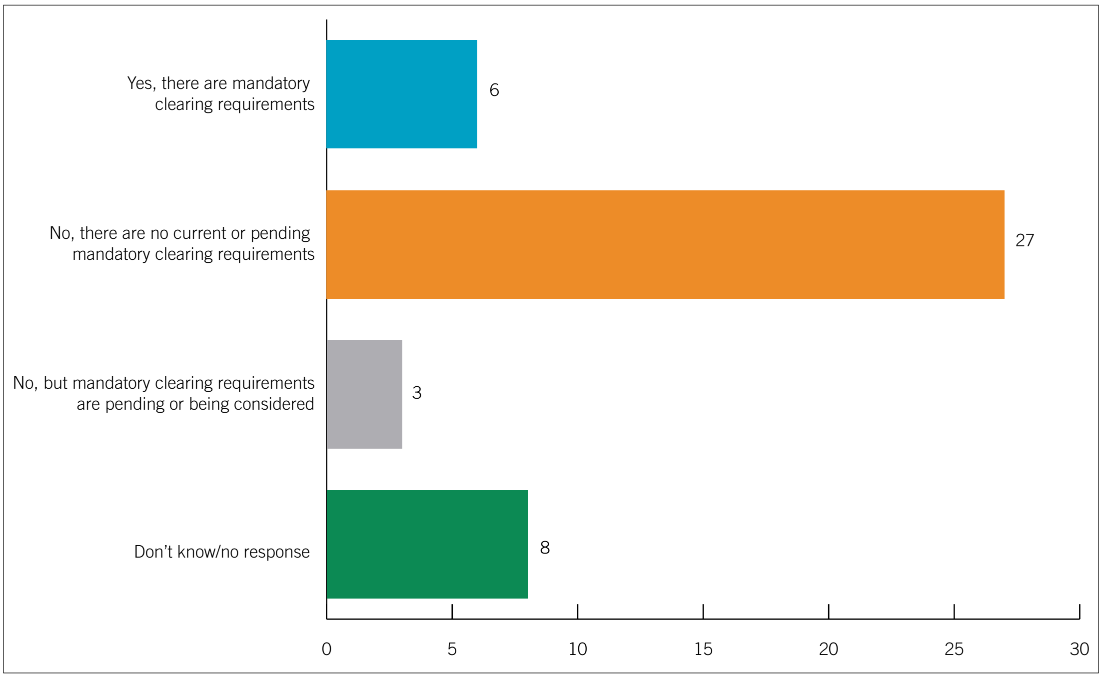
Central clearing rules require that specific counterparties must clear certain types of OTC derivatives through CCPs. The goal is to reduce counterparty risk and complexity and create more transparency. CCPs employ a variety of risk management and mitigation practices to ensure the safety and stability of their operations, including margin requirements, default funds, collateral management and close-out procedures.

Specific requirements for central clearing vary on the jurisdiction, with national regulations stipulating the types of firms and range of products subject to clearing requirements. Generally, derivatives need to be sufficiently standardized and liquid with reliable pricing sources. There also needs to be a large enough market to cover the cost of the implementation of a CCP with an appropriate risk management framework.

Six out of the 44 surveyed jurisdictions have mandatory clearing requirements, including Brazil, Bulgaria, Hungary, India, Mexico and Poland. Clearing requirements are being considered or are pending in three others, while 27 jurisdictions do not have any rules pending.

[14] Bank of Jamaica Basel III Capital Adequacy Framework https://boj.org.jm/wp-content/uploads/2021/12/Basel-III-Capital-Adequacy-Framework-Frequently-Asked-Questions.pdf

Are there any mandatory clearing requirements for OTC derivatives in your jurisdiction?



In Poland, the National Clearing House (KDPW_CCP) is authorized[15] by the Polish Financial Supervision Authority (Komisja Nadzoru Finansowego) to act as a CCP for OTC derivatives. The types of derivatives subject to mandatory clearing include interest rate derivatives denominated in złoty or a foreign currency, as well as certain types of credit derivatives. Market participants that are subject to mandatory clearing requirements are required to clear these transactions at a CCP that is authorized (KDPW_CCP or Eurex Clearing) or recognized[16] (LCH) and to comply with the related reporting, margining and other operational requirements.

In Mexico, banks and brokerage firms are required to clear certain standardized derivatives related to the interbank equilibrium interest rate with domestic or foreign banks, brokerage firms and institutional investors. Institutions with less than $3 billion in notional amount outstanding in standardized derivatives for three consecutive months are exempted from the clearing requirement. Under the rules, certain interest rate swaps denominated in Mexican peso and US dollar and certain types of credit derivatives are subject to mandatory clearing through a CCP that is authorized by the CNBV[17].

In Indonesia, the authorities are currently working to facilitate the establishment of CCPs for OTC FX and interest rate derivatives. OTC commodity derivatives have to be cleared through one of the two commodity clearing houses, Indonesia Clearing House or Kliring Berjangka Indonesia[18].

Recommendation: *Mandatory clearing requirements might not be an appropriate tool in jurisdictions with a relatively small derivatives market or exchange controls, as local derivatives markets might lack sufficient depth and liquidity. As a result, CCPs may not be able to effectively manage the risk of a portfolio of derivatives if a clearing member defaults. These jurisdictions should focus on enforceability of close-out netting prior to establishing any clearing mandate.*

15 Under the European Market Infrastructure Regulation (EMIR), EU central counterparties (CCPs) have to be authorized by their national competent authority before they can offer clearing services in the EU

16 Under EMIR, third-country (non-EU) CCPs have to be recognized by the European Securities and Markets Authority before they can offer clearing services in the EU

17 4/2012 Banco de Mexico

18 Peer Review of Indonesia www.fsb.org/wp-content/uploads/P260221.pdf

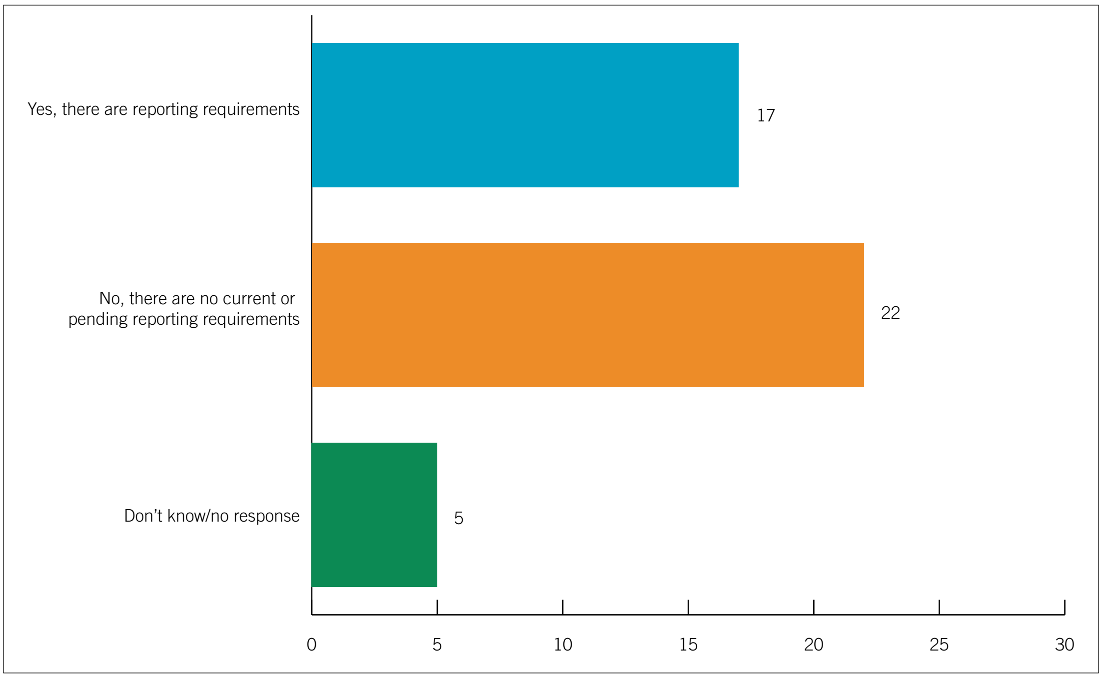
Regulatory Reporting

Reporting of derivatives transactions enhances market transparency and enables regulators to better identify and monitor risks. There are two types of derivatives reporting: regulatory and public reporting. The former involves the reporting of trade data to regulators, often via trade repositories. In public reporting, details of transactions (such as price, transaction size, tenor, etc) are made available to the public.

Given the limited volume of OTC derivatives trading in many emerging and developing markets, public reporting can be challenging and unlikely to provide meaningful data. Regulatory reporting entails either establishing local trade repositories or using existing trade repositories in other markets. Alternatively, market participants can be required to report transactions directly to their regulators.

Seventeen out of the 44 surveyed jurisdictions have reporting requirements for OTC derivatives transactions, while 22 do not have current or pending reporting requirements.

Does your jurisdiction have reporting requirements for OTC derivative transactions?



In Brazil, trade reporting requirements for OTC derivatives are set by the Brazilian Securities and Exchange Commission (Comissão de Valores Mobiliários (CVM)). All transactions must be reported to a registered trade repository. The obligations apply to all OTC derivatives entered into by Brazilian entities, as well as cross-border transactions where one of the counterparties is a Brazilian entity. Transaction details must be reported by both counterparties.

In India, the RBI has set out reporting requirements for specific types of transactions, such as rupee-denominated interest rate swaps, forward rate agreements, interest rate options, FX derivatives and credit default swaps. Parties involved in these transactions must report certain information to the Clearing Corporation of India Limited trade repository within specific time frames, ranging from 30 minutes to end of the business day or the following business day, depending on the type of transaction and the parties involved.

In Malaysia, there are legal provisions that require capital markets services license holders that deal in derivatives, registered persons or any other persons dealing in derivatives to report information specified by the SC to a trade repository – but no trade repository has been set up yet. BNM requires onshore banks to report ringgit FX transactions on the ringgit operations monitoring system as part of regulatory reporting.

Recommendation: *Establishing a trade repository in each emerging and developing market would be costly and duplicative and 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 major trading markets (where virtually all derivatives dealers are based) that would enable them to access derivatives trading information involving counterparties domiciled in their jurisdictions.*

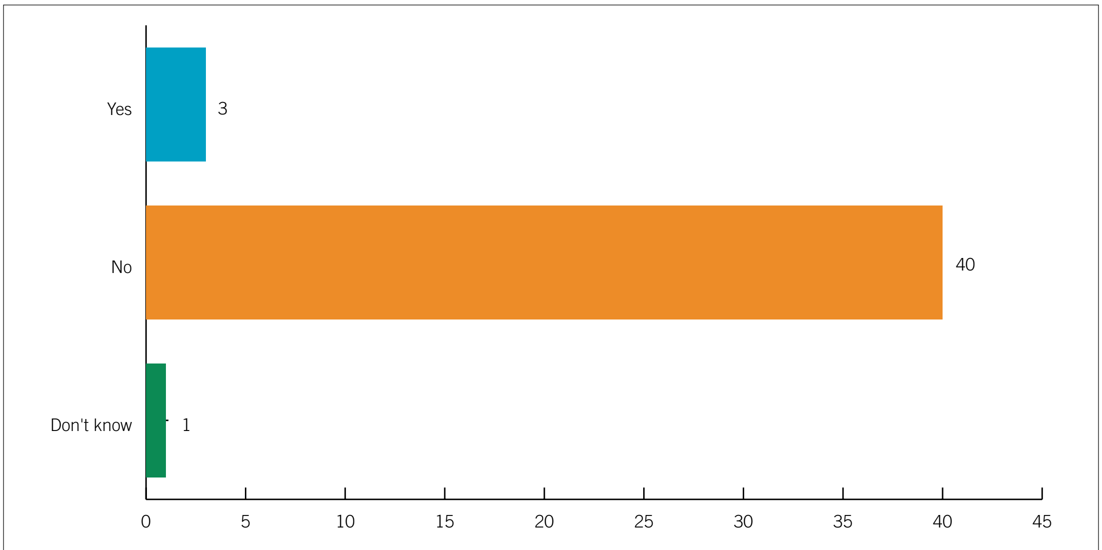
Regulators could also implement rules that require the firms over which they have authority to report directly to them, avoiding the costs and complexity of establishing a trade repository. In addition, they should consider using global data standards, such as the critical data elements specified by the Committee on Payments and Market Infrastructures and IOSCO.

Trade Execution

Trade execution rules require certain types of OTC derivatives to be executed on electronic trading platforms or exchanges that are authorized or regulated by the relevant authorities. This is intended to increase transparency and protect against market abuse. Trade execution mandates typically apply to cleared OTC derivatives that are liquid and sufficiently standardized, with the remainder executed bilaterally.

The majority of the surveyed jurisdictions (40 out of 44) have no requirements to execute OTC derivatives on trading venues. Three jurisdictions (Argentina, Indonesia and Mexico) require certain OTC derivatives to be transacted on electronic trading platforms.

Does your jurisdiction require OTC transactions to be electronically executed?



In Indonesia, OTC commodity derivatives are required to be traded on electronic trading platforms and all equity derivatives must be traded on exchanges. OTC FX and interest rate derivatives are not subject to trade execution requirements.

In Mexico, the CNBV permits electronic trading for certain OTC derivatives, including interest rate swaps, credit default swaps, FX forwards, options and swaps, and commodity swaps. The electronic platforms must be registered with the CNBV and meet certain criteria for transparency, fairness and risk management. The mandate applies to both interdealer and dealer-to-customer transactions.

Recommendation: *Regulators in emerging and developing markets should consider the liquidity of their local OTC derivatives market to determine whether it is feasible to mandate electronic trading and set up local trading venues. Regulators should also consider whether market participants should be required to execute transactions on existing platforms in other jurisdictions.*

RISK MANAGEMENT AND GOVERNANCE

Robust risk management and governance practices should be in place to ensure risks associated with OTC derivatives are identified, monitored and managed effectively. This includes establishing rules for risk management, reporting and disclosure.

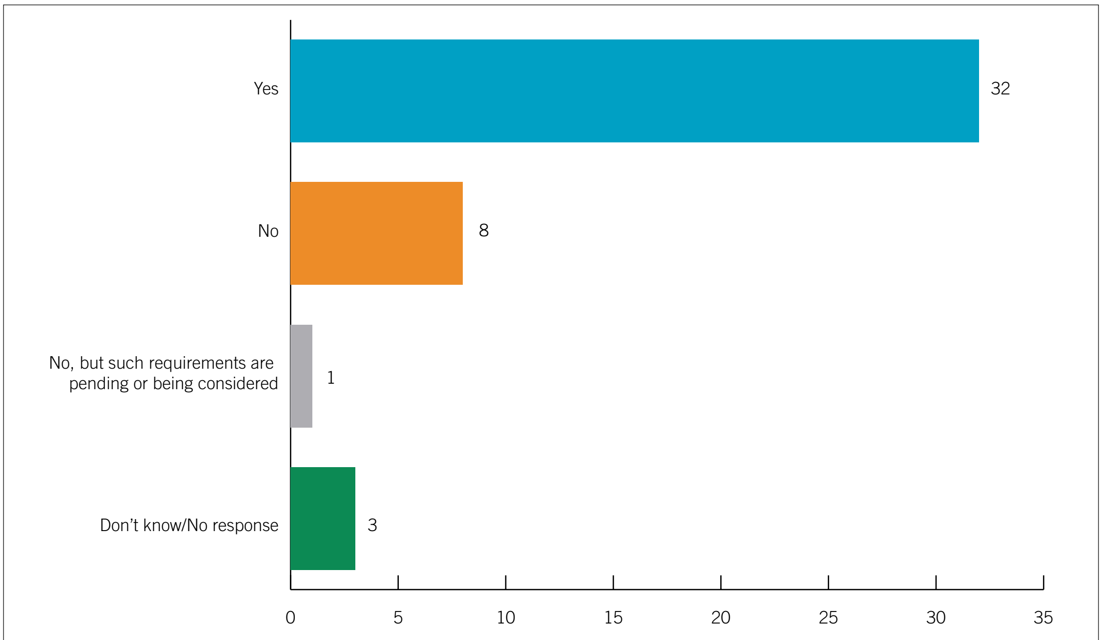
Risk management rules can cover counterparty risk, market risk and operational risk. Counterparty risk management involves assessing the creditworthiness of counterparties and implementing measures to mitigate the risk of default, such as collateralization, credit limits and exposure monitoring.

Market risk management involves managing risks associated with changes in market prices and other market factors. Operational risk management entails managing risks associated with systems, processes and people, as well as managing legal and compliance risks.

Regulators may conduct regular inspections, audits or other forms of oversight to assess the adequacy of risk management practices used by market participants. They may also require firms to submit regular reports on their risk exposures and risk management practices. Frequency of supervision varies among different jurisdictions.

Thirty-two out of the 44 jurisdictions have mandatory risk management standards for regulated firms engaged in OTC derivatives.

Does your jurisdiction have mandatory risk management standards for regulated firms engaged in OTC derivatives?



In Serbia, key risk management standards for banks are outlined by the Serbian Banking Act. Risk management practices are tailored to the size and structure of the bank, the volume of operations and the types of activities involved. Banks must also prescribe their risk management strategies, policies and procedures for identifying, measuring and assessing risks, as well as managing them in compliance with applicable regulations, standards and codes of practice.

The Banking Act specifically highlights the following risks for banks: liquidity risk; credit risk; interest rate risk, FX and other market risks; concentration risk, including risks of exposure of the bank to one person or a group of related persons; investment risks; risks relating to the country of origin of the entity to which a bank is exposed (country risk); and operational risk, including legal risk.

Malaysia's SC does not have a specific policy document on risk management for OTC derivatives on its website, but it does require licensees to have risk management policies in place, as outlined in its licensing handbook. Licensees are required to establish and maintain a risk management framework that covers all aspects of their operations, including OTC derivatives trading.

According to the licensing handbook, the risk management framework must include policies and procedures for identifying, assessing, monitoring and managing all types of risks, including credit risk, market risk, liquidity risk and operational risk. Licensees must also establish appropriate risk limits and controls to manage their exposure to OTC derivatives.

BNM has issued a risk governance policy to promote sound risk governance practices among banks and investment banks operating in Malaysia. The policy document requires these institutions to establish a risk appetite framework and a risk management strategy that aligns with their business objectives and risk tolerance. It also mandates the establishment of a comprehensive risk management framework that covers all aspects of their operations, including risk identification, measurement, monitoring and reporting.

The Securities and Exchange Commission (SEC) of Ghana has established guidelines for securities market operators, including operators in OTC derivatives markets. One key requirement is that securities market operators develop a comprehensive risk management framework that covers all aspects of their trading.

To manage their risk exposures, securities market operators are required to establish and enforce appropriate limits and controls. They must also submit regular reports to the SEC on their activities, including details of their risk exposures, trading volumes and counterparties.

Recommendation: *Regulators in emerging and developing markets should ensure that market participants have appropriate risk management policies and practices in place. This involves developing, implementing and periodically benchmarking risk management policies and practices at a level that is appropriate to the nature, size and complexity of firms and the level of derivatives activity among counterparties.*

CONCLUSION

Derivatives can play an important role in supporting economic growth and helping to develop capital markets in emerging and developing jurisdictions. To realize this potential, it is important for policymakers to address the key legal, regulatory and risk management issues that affect the use of derivatives by market participants.

Responses to the ISDA survey provided valuable insights into the current state of derivatives markets in EMDEs. Policymakers can leverage this information and ISDA's recommendations to create and implement policies that support the continued development of safe and efficient derivatives markets.

ISDA's Recommendations

- Legal certainty over the enforceability of close-out netting is an important prerequisite for robust, liquid derivatives markets. Legislators should identify the relevant areas of local law that could potentially conflict with the effectiveness of netting agreements, so all relevant issues are adequately addressed in local legislation. Netting legislation should not only deal with close-out netting, but also with financial collateral.

- There is no single standard for supervising derivatives activity in emerging and developing markets. While a single regulator may help a jurisdiction avoid gaps in coverage, it may be challenging to have the scope of expertise required for effective supervision under one roof.

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

- Policymakers should allow diverse types of counterparties with different business models and risk exposures to participate in derivatives markets, including foreign counterparties. A wider range of participants will help financial market development and also allow a smoother reallocation of risk in the system between institutions.

- When contemplating the implementation of margin rules in emerging and developing markets, regulators should consider the scope of the rules. Specifically, entities that are not systemically important should be exempt from margin requirements. Any new or revised margin requirements should be aligned with the Basel Committee/IOSCO standards. Importantly, enforceability of close-out netting is a necessary pre-condition to implement margin rules. Having a liquid and efficient collateral market without undue restrictions and the development of collateral management capabilities within local financial institutions should also be considered.

- Regulators should consider the size, risk and complexity of markets when setting capital standards in their jurisdiction, as well as the composition of banks' total assets. In particular, they should take into account the smaller share of trading book assets and larger proportion of banking book assets held by banks and financial institutions in developing and emerging markets.

- Mandatory clearing requirements might not be an appropriate tool in jurisdictions with a relatively small derivatives market or exchange controls, as local derivatives markets might lack sufficient depth and liquidity. As a result, CCPs may not be able to effectively manage the risk of a portfolio of derivatives if a clearing member defaults. These jurisdictions should focus on enforceability of close-out netting prior to establishing any clearing mandate.

- Establishing a trade repository in each emerging and developing market would be costly and duplicative and 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 major trading markets (where virtually all derivatives dealers are based) that would enable them to access derivatives trading information involving counterparties domiciled in their jurisdictions. Regulators could also implement rules that require the firms over which they have authority to report directly to them, avoiding the costs and complexity of establishing a trade repository. They should also consider using global data standards, such as the critical data elements specified by the Committee on Payments and Market Infrastructures and IOSCO.

- Regulators should consider the liquidity of their local OTC derivatives market when determining whether it is feasible to mandate electronic trading and set up local trading venues. Regulators should also consider whether market participants should be required to execute transactions on existing platforms in other jurisdictions.

- Regulators in emerging and developing markets should ensure that market participants have appropriate risk management policies and practices in place. This involves developing, implementing and periodically benchmarking risk management policies and practices at a level that is appropriate to the nature, size and complexity of firms and the level of derivatives activity among counterparties.

ANNEX

Counsels from the following jurisdictions participated in this survey. ISDA would like to thank all of them for their participation.

Jurisdiction	Counsel
Albania	Loloci & Associates
Argentina	O'Farrell
Azerbaijan	Dentons
Barbados	Chancery Chambers
Bolivia	Ferrere
Botswana	Minchin & Kelly (Botswana)
Brazil	Pinheiro Neto Advogados
Brunei	YC Lee & Lee
Bulgaria	Schoenherr
Cambodia	HBS Law
Costa Rica	Consortium Legal
Croatia	Schoenherr
Curacao, Aruba, Saint Maarten	Clifford Chance
Ecuador	Pérez Bustamante & Ponce
Ethiopia	BonelliErede
Georgia	Dentons
Ghana	Bentsi-Enchill, Letsa & Ankomah
Guatemala	Mayora & Mayora, S.C.
Honduras	García y Bodán Honduras S.A.
Hungary	Allen & Overy
India	Juris Corp
Indonesia	Armand Yapsunto Muharamsyah & Partners
Jamaica	Myers, Fletcher & Gordon
Malaysia	Shearn Delamore & Co
Marshall Islands	Campbell Johnston Clark
Mauritius	Appleby
Mexico	Ritch Mueller
Namibia	Engling, Stritter & Partners
Pakistan	Ijaz Ahmed & Associates
Peru	Baker & McKenzie
Philippines	Morales & Justiniano
Poland	Allen & Overy
Qatar (Qatar Financial Centre)	Simmons & Simmons
Romania	Leroy si Asociatii
Serbia	Schoenherr
Seychelles	Appleby
Sri Lanka	Nithya Partners
Thailand	Baker & McKenzie
Timor-Leste	Miranda & Associados
Turkey	Pekin & Pekin
UAE (Federal)	Clifford Chance
Uganda	ENS africa
Vietnam	Baker & McKenzie
Zambia	Corpus Legal Practitioners

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ABOUT ISDA

Since 1985, ISDA has worked to make the global derivatives markets safer and more efficient. Today, ISDA has over 1,000 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.