



CISI Global Securities Operations



Exam



Duration = 1 hour



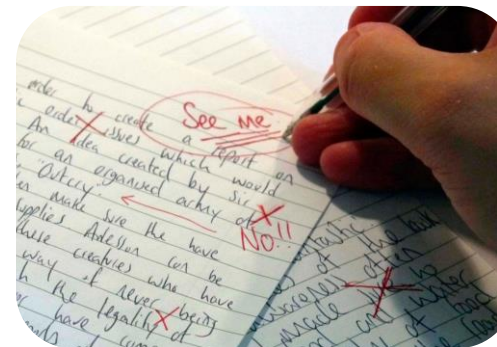
50 Multiple Choice Questions



Pass Mark = 70%



Pass Rate = 55%



No Negative Marking

Exam Specification

| Chapter | Subject | No of Questions |
|-----------------|----------------------------|-----------------|
| 1 | Securities | 11 |
| 2 | Main Industry Participants | 10 |
| 3 | Settlement Characteristics | 11 |
| 4 | Other Investor Services | 10 |
| 5 | Aspects of Taxation | 3 |
| 6 | Risk | 5 |
| Total Questions | | 50 |



Chapter 1 - Securities

11 Questions

Companies need to raise funds to finance new developments in their business.

Here are some examples:

| Why do companies need to raise funds? |
|---|
| Purchase new equipment |
| Hire and train new staff |
| Modernise their infrastructure and technology |
| Acquire other companies |
| Expand into other markets |
| Research and development |

What options are available to a company looking to raise funds?

1. Bank Loan

Company pays back the principal on the loan and an agreed rate of interest, at an agreed date in the future.

2. Equity Financing

Company issues and sells share of its company via a stock exchange.

3. Debt Financing

Company can generate funds through the capital markets by issuing bonds and other debt-related securities.

Why Do Investors Buy Securities?

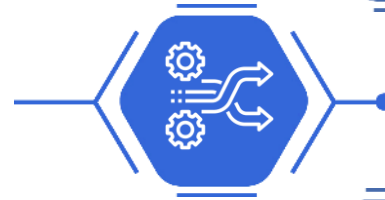
Superior Performance

Potentially offer higher long-term returns than bank cash deposits



Regulatory Oversight

Regulated markets provide protection against malpractice and systemic risks



High Volume & Low Relative Costs

High trading volumes keep trading costs relatively low



Diversification

Investing in a variety of securities, sectors, and asset types helps spread risk



Liquidity

Buyers can be found quickly without suffering a significant effect on market price (and vice versa)



Capital Appreciation

Investors aim to buy securities at a market price and sell them later at a higher price to achieve capital gains.

Buying 100 shares at £0.50/share and selling at £1.50/share results in a profit of £100.

Income Payments



Investors may be paid an income on the securities that they have bought.



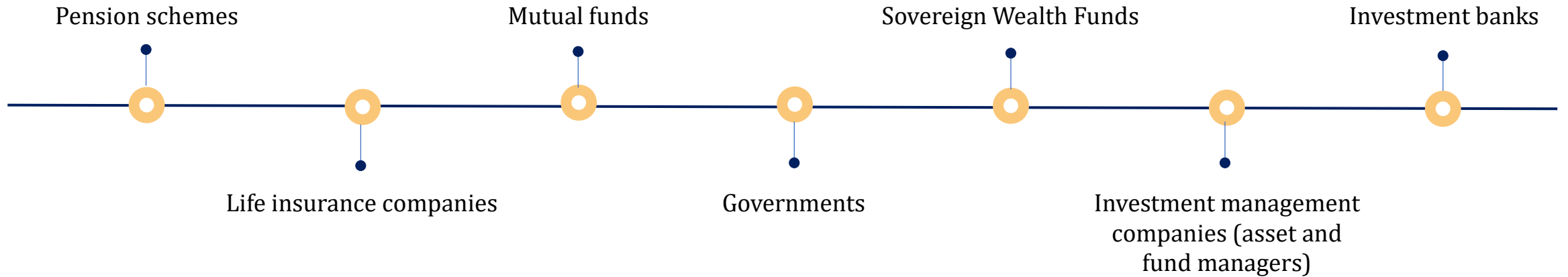
Dividends for Equity investors



Interest Payments for Bondholders

Who Invests in Securities?

Institutional Investors



Individual Investors

Types of Shares (Equities)

Ordinary Shares

Deferred Shares



Preference Shares

Ordinary Shareholders shareholder rights:

Attend and vote at
meetings (E.g.
AGM & EGM)

01

Receive annual
reports and accounts

02

Receive dividends
(if declared)

03

Participate in
appointment and
removal of company
directors

04

Share in remaining
assets if the company
liquidates

05

Participate in
bonus issues and
rights issues

06

Be consulted on
special circumstances
(E.g. Mergers)

07

Additional perks
based on shareholding
(E.g. discounts on
company services)

08

Share Registration

The shareholder's name and address will be recorded in the issuer's register of shareholders.

In the UK, the issuer register is in two parts.

01

Physical -
maintained by the
issuer registrar

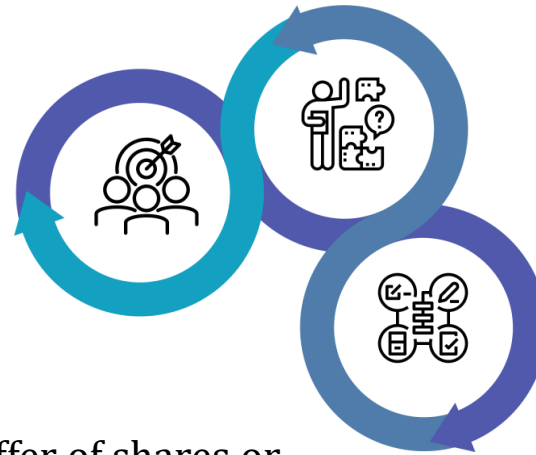
02

Dematerialised -
maintained in the
CREST system

*The CREST system is the securities settlement system of Euroclear UK & International.

Listed and Unlisted Securities

Listed securities are those that have been accepted for trading on a recognised investment exchange (RIE).



Unlisted securities will be traded off-exchange or over-the-counter (OTC).

Private Placing an offer of shares or bonds that is issued privately and not on the open market – it is an alternative to an initial public offering (IPO).

Bearer Securities & Transfer Restrictions



Ownership tied to the physical possession of certificates – this is now rare due to high risk of loss and misappropriation.



Restrictions on how, and to who, securities can be transferred varies based on different jurisdictions

E.g. Issuer can be prohibited from transferring securities if they are subject to bankruptcy.

Preference Shares

Preference shares allow companies to raise capital without diluting ordinary shareholders' ownership.

Key Characteristics include:



No Voting Rights

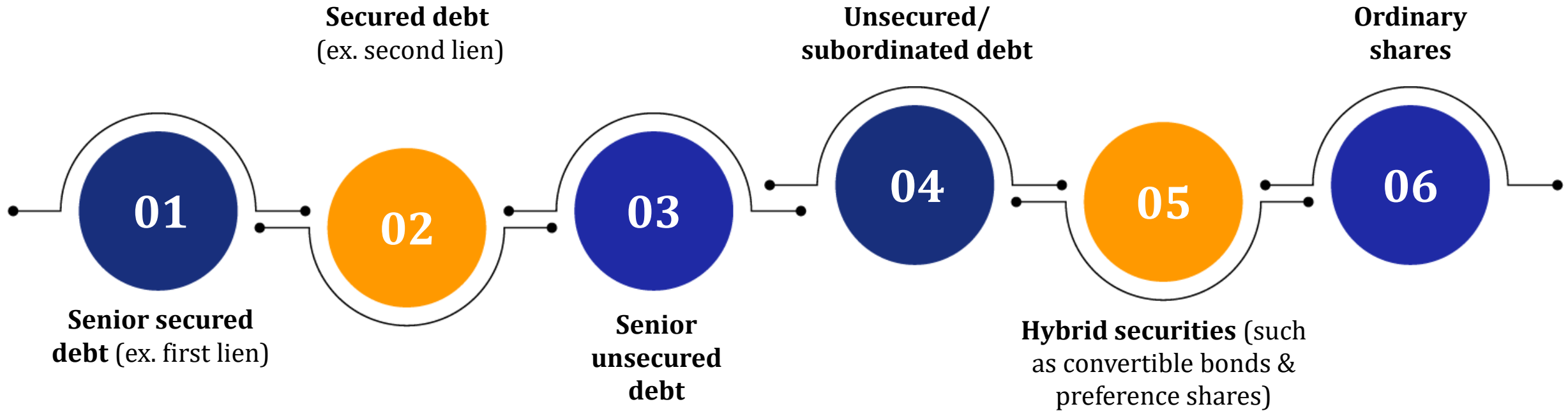


Fixed dividend per share established at the time of issue

Preference shareholders **take priority over ordinary shareholders** for dividend payments and payments following liquidation.

Preference Shares

Payment of Obligations After Liquidation



*may be slightly different for certain companies

Preference Shares

Types of Preference Shares



Cumulative:

Unpaid or missed dividends are carried over to future years.



Non-Cumulative:

Missed dividends are lost – similar to a normal shareholder.



Redeemable:

Company will buy back the shares at a future date.



Participating:

Shareholder can receive additional dividends over the fixed percentage dividend



Convertible:

Shareholder has to option of converting their shares into ordinary shares.

Debt instruments are interest-bearing securities issued when a borrower wishes to raise a specified amount of cash in a specified currency.

Bonds carry lower risk than equities for the following reasons:



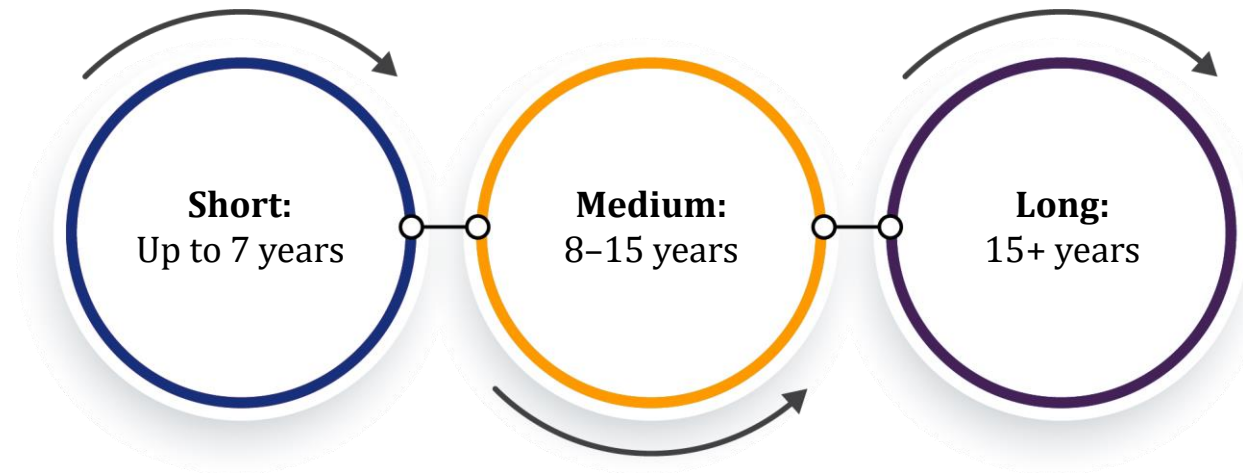
Bondholders take priority over shareholders in the event of a liquidation



Bondholders will a fixed and predictable return until the redemption date – shareholders may not receive any dividend as it is voluntary

Debt Instruments

Bonds are classified as short, medium and long maturity.



The coupon rate is the rate of interest paid on the nominal value of the bond – this can be paid semi-annually, annually, or even quarterly.

The repayment of the principal of the loan at maturity is not subject to withholding tax (WHT).

Government Bonds

The bonds issued by politically stable and economically strong governments are among the most secure marketable investments.

The risk of default in developing economies, and struggling economies, is significantly higher.

→ **Exam Note:** Familiarize with the government bonds listed below:

01

US – Treasury Bonds/Notes

02

UK – Gilts

03

Japan – Japanese Government Bonds

04

Germany – Bunds, Bobl and Schatz

05

France – OATs and BTANs

Other Types of Fixed Income Instrument



Domestic
Bonds/Corporate
Bonds



Foreign Bonds



Eurobonds



Convertible Bonds



Discount Securities



Floating-Rate Notes
(FRNs)



Asset-Backed
Securities (ABSs)



Mortgage-Backed
Securities (MBSs)



Index-Linked Bonds



Green Bonds



Sustainability-Linked
Bonds

Why do bonds generally carry lower risk than equities?



- A. Bonds are not affected by market interest rates
- B. Bondholders have a prior claim on the company's assets relative to shareholders
- C. Bondholders are entitled to vote in company decisions
- D. Bonds have no risk of default

Clean and Dirty Prices

The Concept of Accrued Interest

Stakeholders may prioritize financial returns over sustainability

If the security is sold, the seller has an entitlement to the accrued interest **since the last coupon date**



Interest builds daily until the next coupon date – known as **accrued interest**

Clean Price excludes accrued interest while the Dirty Price includes it.

Accrual Conventions

Methods for calculating interest payable on bonds vary by market and bond type.

Exam Note: Familiarize with the conventions listed below:

01

UK Corporate Bonds:
Actual/365day
convention.

02

US Corporate Bonds:
Actual/360day
convention.

03

Eurobonds:
30/360day
convention.

04

Government Bonds:
Actual/Actual
convention.

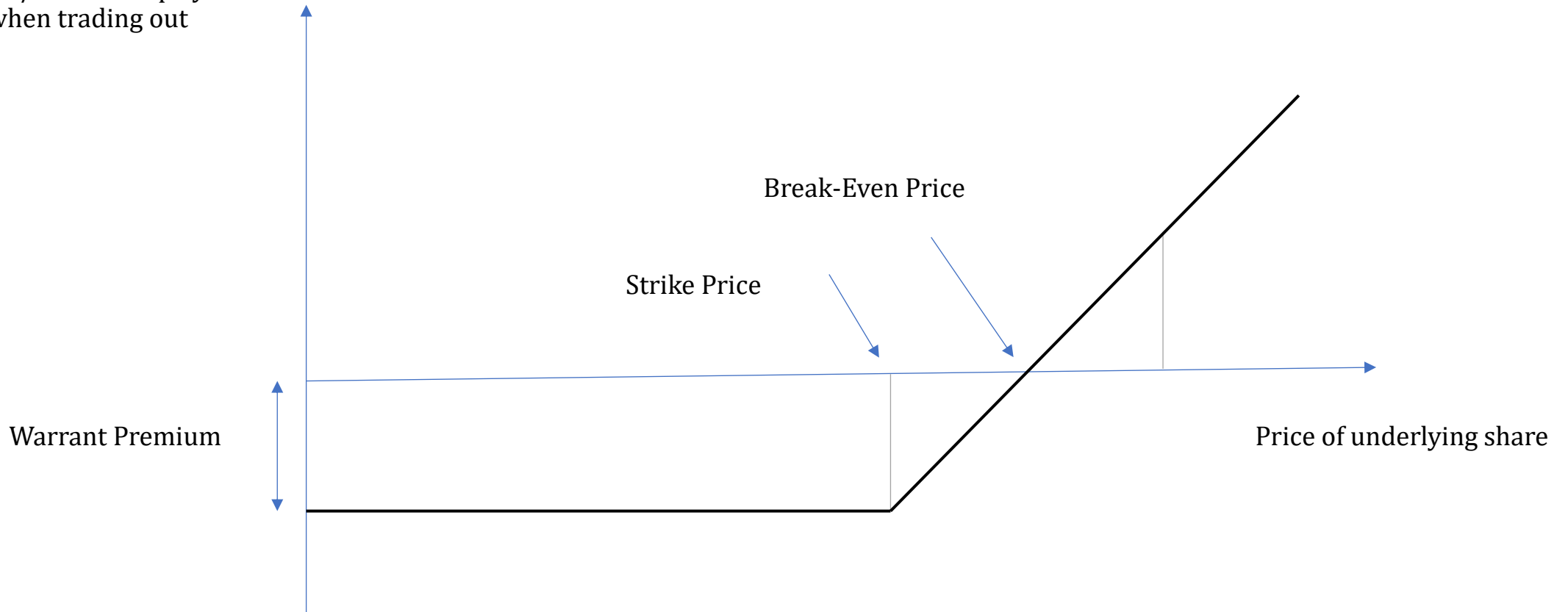


Warrants give holders the right, but not the obligation, to buy an ordinary share or bond at a specific price by a set date.

The price paid for the warrant is called the premium and is a fraction of the underlying asset's value.

Warrants

Profit/Loss on Expiry
or when trading out



American-style - Warrants can be exercised at anytime on or before their expiry date

European-style - Warrants may only be exercised on the expiry date of the warrant

Warrants

Covered Warrants are a synthetic product structured by an investment bank or other FI over a range of possible underlying assets.

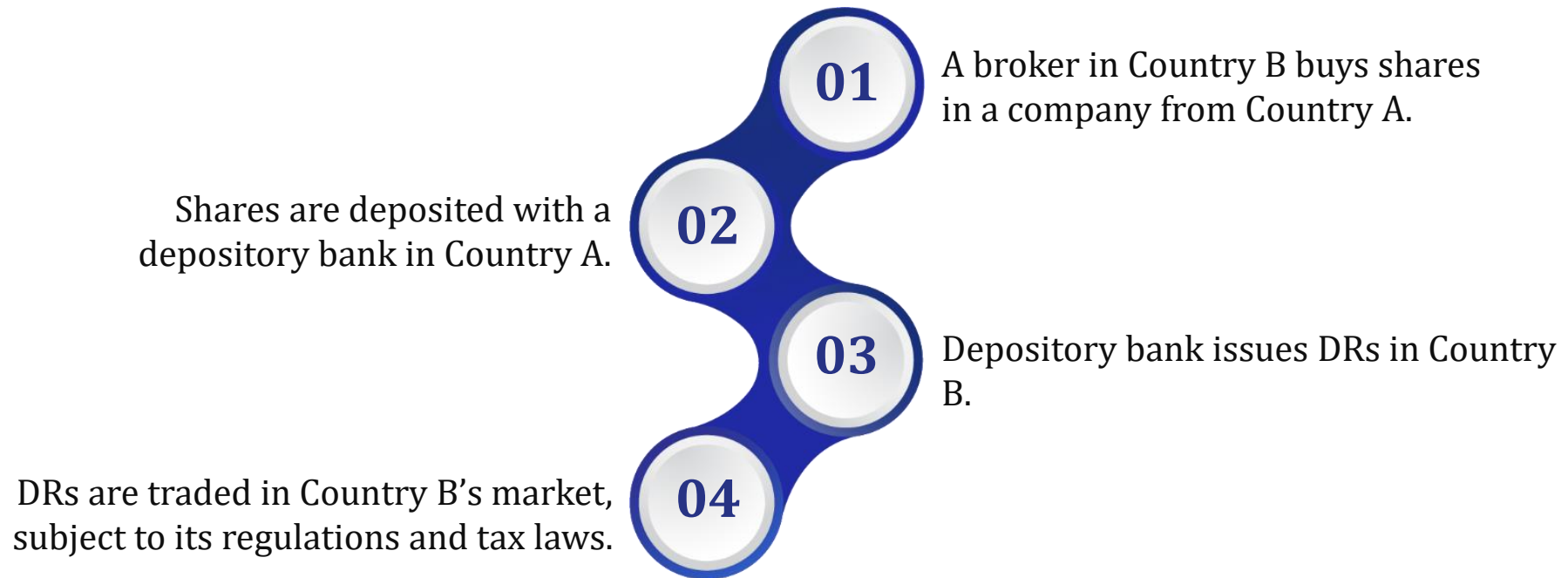
The difference can be summarized in the table below:

| Traditional | Covered |
|---|--|
| Issued by a company over its own shares | Issued by an investment bank or other FI over other assets (E.g. company shares, currency, commodities etc.) |
| New shares issued upon exercise | No new shares on exercise Equivalent value payment made to warrant holder in cash |
| Longer maturities | Shorter maturities (1 to 2 years) |

Depository Receipts (DRs)

Depository Receipts (DRs) are financial instruments representing shares of a foreign company, traded in a local market.

Creation Process:



American Depositary Receipts (ADRs)



American Depositary Receipts (ADRs) are a type of depositary receipt issued in the US and denominated in US dollars.

ADRs allows US investors to invest in non-US companies with reduced costs and risks.

American Depositary Receipts (ADRs)

| Issue | Holding Foreign Shares | Holding an ADR |
|--|--|--|
| Foreign ownership restrictions | Certain countries prohibit foreign ownership of local companies | ADR is not subject to local ownership restrictions (it is a US security) |
| Settlement procedures | Ordinary shares traded in the local market may be subject to extended settlement cycles and inefficient settlement procedures. | ADRs settle according to a T+1 settlement cycle, just like any other US-listed share |
| FX | Shares have to be paid for in the foreign currency, requiring an FX transaction. | ADRs settle in US dollars. |
| Dividend payments | Dividends are paid in foreign currency, requiring periodic FX transactions | ADRs pay dividends in US dollars. |
| Rights issues/corporate actions | Shareholders have the right to vote and to participate in rights issues and other corporate actions. | ADRs typically provide the holder with the right to vote, but not to participate in rights issues. |
| Liquidity | Possible lack of liquidity in foreign market | ADRs trade on US stock exchanges and OTC (higher liquidity) |
| Transfer taxes | UK share purchases = 0.5% charge Irish share purchases = 1% charge | UK and Irish securities = 1.5% tax rate* <i>*where 'chargeable securities' are transferred to a DR issuer in return for the issue of a DR by the depositary</i> |
| Legal framework | Legal framework in the foreign country may offer limited protection to the investor. | ADRs comply with US securities legislation and accounting principles. |

Depositories can issue DRs before the actual shares are deposited, with the shares required to be delivered within a specified time period.

This is allowed under the following conditions:

01

DR issuer confirms ownership of the shares in writing

02

Collateral is provided

03

The depository can close the pre-release within the notice period

04

Other required indemnities are given

Global Depository Receipts (GDRs)

- GDRs help companies raise capital in multiple markets and expand their investor base
- Settled outside the market of issue, commonly in Euroclear Bank or Clearstream
- Used by emerging market companies to reach global investors.
- Less demanding listing requirements compared to regular shares.

Depository Interest (DI)

01

DIs are issued for foreign securities traded in a different market

02

Held and settled electronically at local CSD (CREST in the UK)

Collective Investment Vehicles

Collective Investment Vehicles are investment funds that pool money from multiple investors, managed by a professional to grow the value of the funds.

Examples include:

01

Mutual funds/
Unit trusts

02

Open-ended
investment companies
(OEIC)

03

Exchange traded
products (ETPs)

04

Investment
Trusts

05

Hedge
Funds

06

Real Estate
Funds (REITs)

07

Private Equity
Funds

08

Tax Transparent
Funds (TTFs)

09

Cryptocurrencies

10

Special Purpose
Acquisition
Company (SPAC)

11

Long Term
Asset Funds

Collective Investment Vehicles

Actively Managed Funds:

Aim to achieve higher returns compared to passive funds



Fund managers aim to outperform similar funds using research, stock-picking, and market timing

Involve higher charges, including an initial fee and an annual management fee

Index Tracking Funds (Passive Funds):



Designed to replicate the performance of a market index

Mutual Funds/Unit Trusts

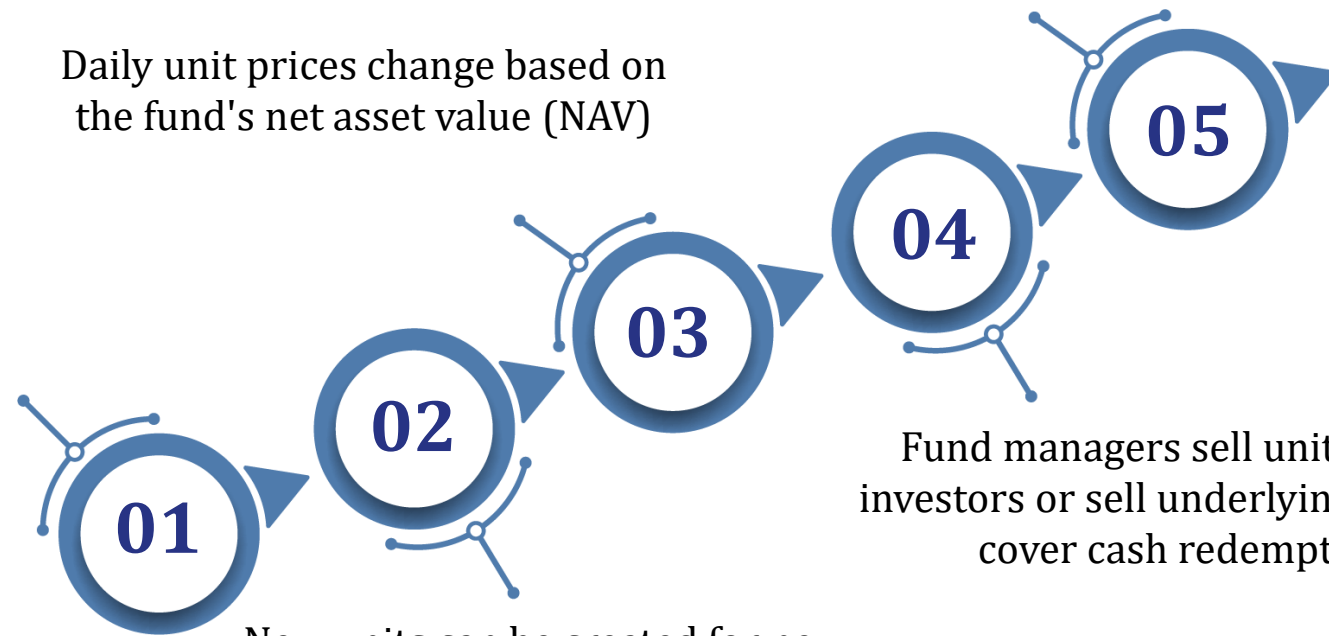
Mutual Funds or Unit Trusts manage securities on behalf of investors which offers investors diversification and cost-effectiveness.

Characteristics include:

The selling price (offer price) is higher than the buying price (bid price) due to the manager's commission

Daily unit prices change based on the fund's net asset value (NAV)

Fund buys shares and issues units based on this portfolio



New units can be created for new investors, and units can be sold back at any time

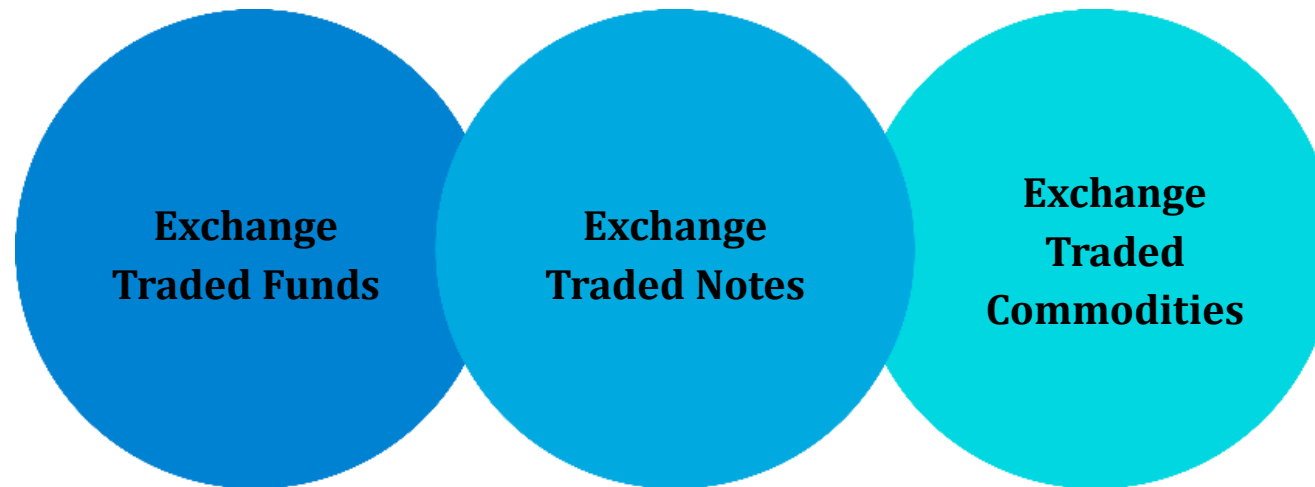
Fund managers sell units to new investors or sell underlying shares to cover cash redemptions

Exchange-Traded Products (ETPs)

ETPs are traded on global stock exchanges like shares. They hold assets and are priced close to the NAV of its underlying assets.

ETPs are attractive because of their low costs, tax-efficiency, and equity-like features.

There are 3 types of ETPs:



Investment Trusts

Investment Trusts is a company investing in other company shares. They pool investor funds and employ a fund manager – similar to Unit Trusts and OEICs.

Key Characteristics include:

| Characteristics | Description |
|---------------------------------------|---|
| Close-ended | Fixed amount of money is raised at launch by issuing shares. |
| Pricing | Market determines the share prices, not the value of the underlying assets . Therefore, price can be above or below NAV. |
| Different share classes | Certain investment trusts issue different classes of shares to meet different investors' needs (split capital investment trusts). |
| Independent board of directors | Have their own board of directors to protect shareholder interests. |
| Gearing | They can borrow to purchase additional investments (known as Gearing). |

Hedge Fund

Hedge funds pool investor money and employ a fund manager to invest this money using strategies aimed to profit in both rising and falling markets.

Investment strategies include:

| Hedge Fund Strategy | Description |
|-------------------------------|--|
| Short Selling | Selling an instrument on the premise that it is overvalued, and its price will fall. If the price goes down, the investor can then buy the security back at the lower price to realise a profit. |
| Distressed Securities | Purchasing equity or debt at big discounts in companies facing bankruptcy/restructuring. |
| Special Situations | Investing in event-driven situations such as mergers, hostile takeovers, reorganisations or leveraged buy-outs. |
| Convertible Arbitrage | Buying undervalued and selling overvalued securities of the same issuer |
| Fixed Income Arbitrage | Exploiting interest rate opportunities by taking offsetting positions in fixed-income securities and their derivatives |
| Statistical Arbitrage | Using quantitative criteria, the hedge fund manager selects a portfolio of undervalued stocks and an equal-sized short portfolio of overvalued stocks. |

Other Types of Collective Investment Vehicles

| Collective Investment Vehicle | Description |
|-------------------------------|---|
| OEICs | Similar to unit trusts but operate as companies, issuing shares instead of units. |
| REITs | Listed investment trusts through which investors purchase exposure to investments in the real estate sector. |
| Private Equity Funds | Invest in unlisted assets or take public assets private. Focus on buyouts, improving companies, or financing emerging businesses for profit through exit strategies. |
| Tax Transparent Funds | Introduced in 2013 in the UK, allowing investors to be taxed on their fund interest rather than underlying assets. Mainly targeted at institutional investors like pension funds and insurance companies. |
| Cryptocurrencies | Digital assets using blockchain technology for financial transactions. Not controlled by any central authority. |
| SPACs | Company set up by investors to raise capital through an IPO, which it eventually uses to acquire another existing company. |
| Long Term Asset Funds | New category of open-ended authorised fund designed to invest efficiently in long-term, illiquid assets |

Treasury notes, Gilt-edged securities, and OATs are considered:



- A. Government bonds
- B. Corporate bonds
- C. Municipal bonds
- D. Convertible bonds

Securities Identification Numbers

ISIN (International Securities Identification Number) is a globally standardized code for securities identification.

Total of 12 characters

Next 9 characters represent the local number of the security concerned



01



02



03



04

First 2 characters represent the ISO two-letter country code

Final check digit so that systems can validate the number

**E.g. Ryanair Holdings (Irish Security)
ISIN of IE00BYTBXV33**

Other Identification Numbers include:

1. Local Securities Identifiers

- CUSIP (US and Canada)
- SEDOL (UK and Ireland)
- SVM (Belgium)
- WKN (Germany)
- Valoren (Switzerland)
- ASX (Australia)

2. **Stock Tickers** are used to identify a security when it trades on a stock or OTC market.

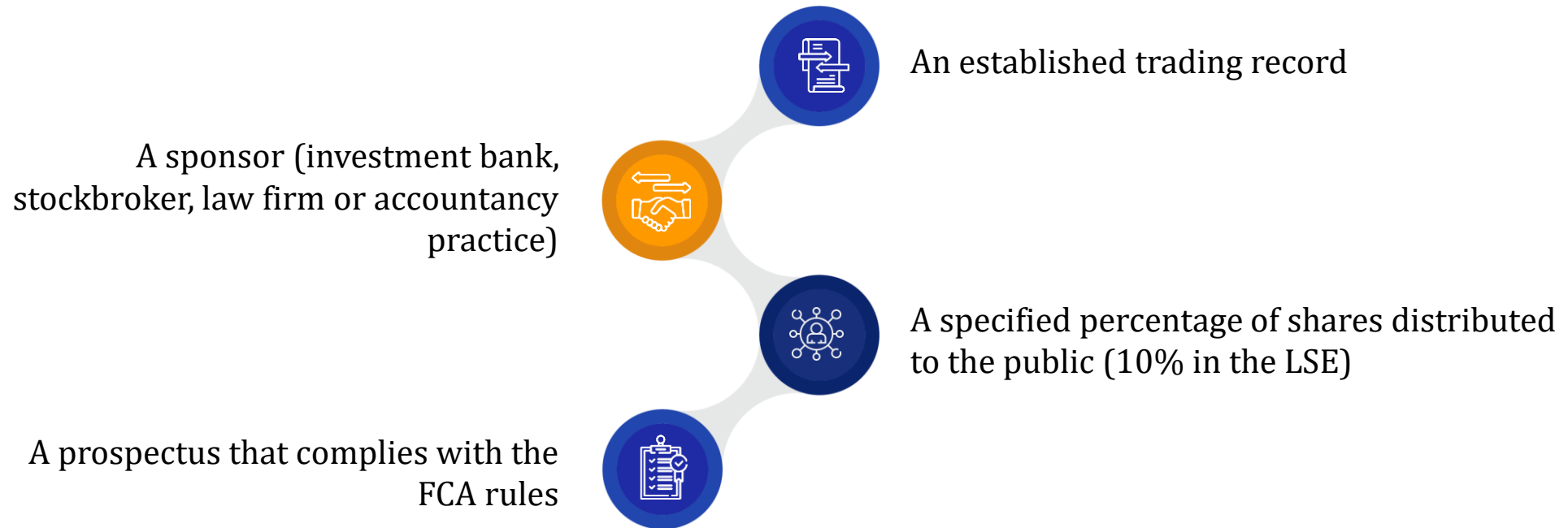
IBM Stock on the **NYSE Euronext**: **IBM-N**

3. **Market identifier codes (MIC)** are used to identify securities trading exchanges, regulated trading venues and non-regulated trading venues.

Issue Methods in the UK – Equities: Listing

Private companies may list on a stock exchange to raise capital through public share issuance. Listing on the UK market is managed by the FCA.

To list shares on a recognized exchange, a company must have:



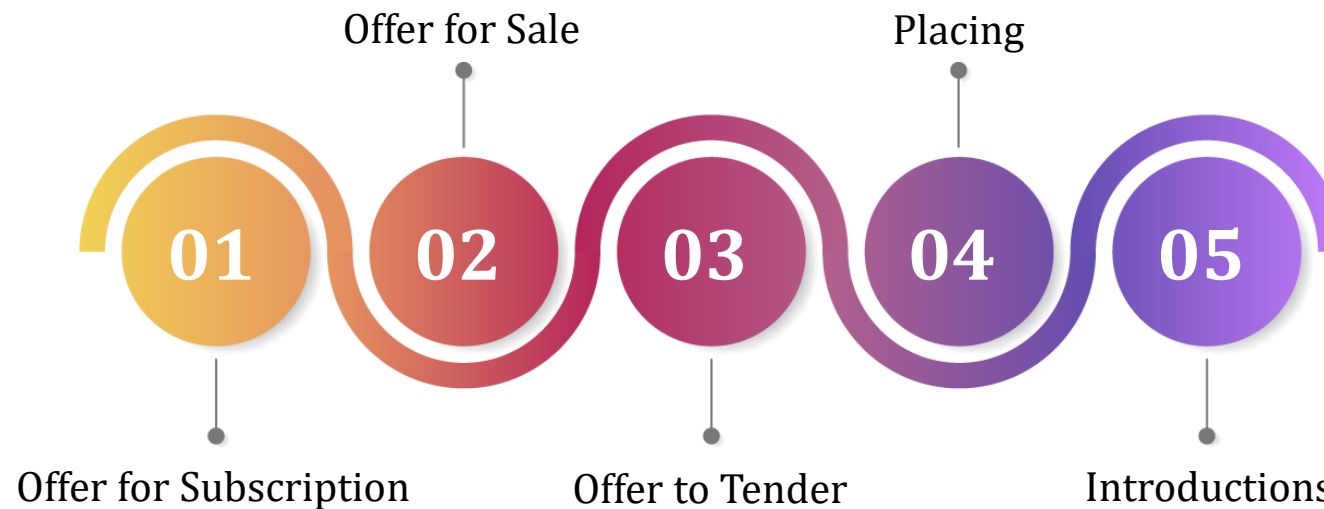
Once the company is listed, it must adhere to the disclosure requirements by producing timely financial reports and notifying the market of price-sensitive information.

Procedure for a Public Issue of Shares

A public company releases a prospectus inviting investors to apply for shares where successful applicants are granted shares in return for payment.

If demand exceeds available shares (oversubscribed), the excess funds are refunded to unsuccessful applicants.

The share issue may proceed through the following methods:



Eurobonds

Eurobonds are international bonds issued in markets outside the domestic market of the issuer.

The key participants include:



Lead Manager
and Syndicate



Underwriter,
Advisers, Trustees,
and Paying Agents

Eurobonds may follow two issuance methods:

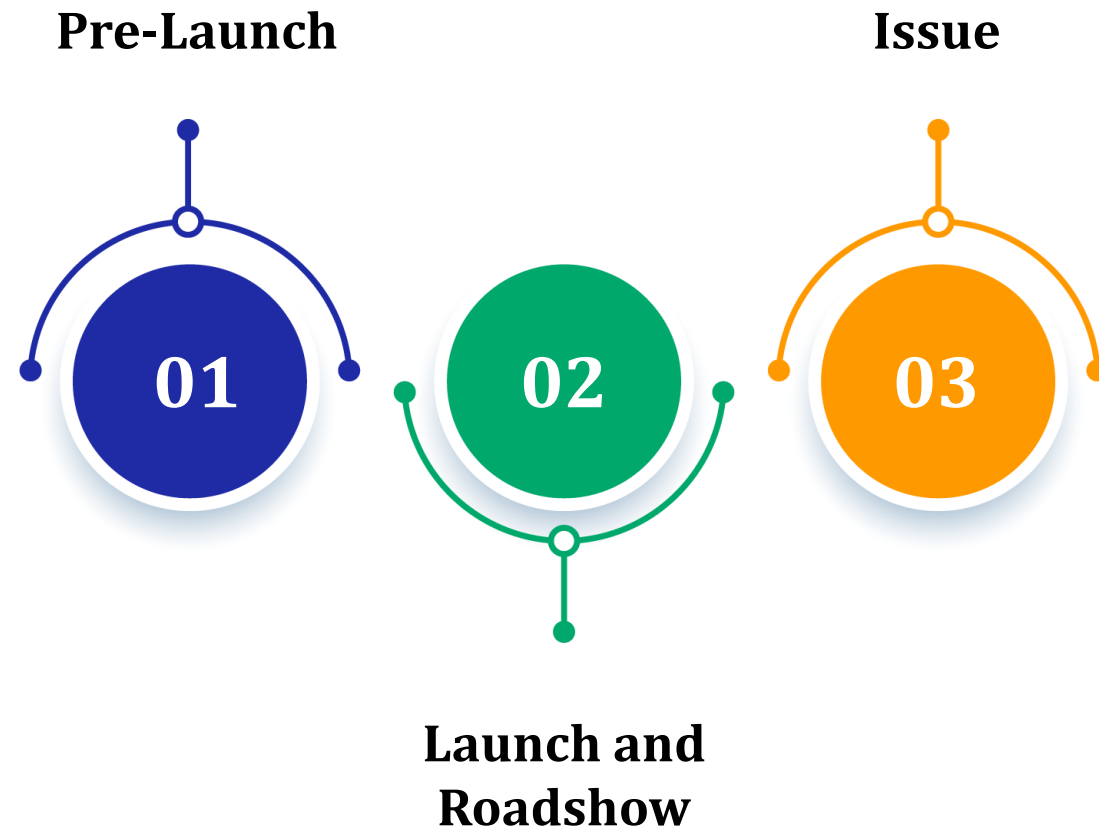
Bought Offer – Lead manager purchases all bonds and places them with its own clients



Fixed Price Re-offer
– Lead manager distributed bonds to the syndicate

Corporate Bonds

The stages followed by a Corporate Bond issue are as follows:



Regulated Markets and MTFs

The Markets in Financial Instruments Directive (MiFD) was Launched in 2007 to unify the European Economic Area financial market

It aims to promote competition between trading venues based on market transparency and a level regulatory playing field.

Key Execution Venues include:

Regulated Markets:

Traditional exchanges
(e.g., NYSE, LSE).

01

Multilateral Trading Facilities (MTFs):

Alternative platforms
for matching and
executing orders.

02

Exchange-Traded and Over-the-Counter (OTC)

| Exchange-Traded | OTC |
|---|---|
| High liquidity | Low liquidity |
| Exchange regulations specify trading procedures | Legal agreements around an OTC trade must be negotiated directly between the trade counterparties. |
| Clearing is facilitated by CCP | Higher risk due to lack of CCP – exposure is directly related to the OTC counterparty chosen |
| Pricing of exchange trades are relatively transparent | Pricing is complex. Immature markets lack price-discovery mechanisms which investment banks can exploit to make large profits. |
| Trading participants must publish the trade details on a stock exchange after the transaction | Reporting on OTC trades varies across jurisdictions. The MiFD requires trading participants to publish trade details even if executed outside a regulated market. |
| Trading is limited to the specific trading hours of the stock exchange | Trading can take place 24 hours a day |

Order-Driven Market

01

Brokers act as agents for buyers and sellers, matching orders on an exchange floor or computerized system

02

Brokers charge commissions for arranging deals

03

Price movement is governed by supply and demand

04

Computerized systems allow anonymous orders, with strategies like “iceberg orders” to manage large trades

05

Good liquidity is essential for efficient order matching

Quote-Driven Market

01

Market Makers provide liquidity by quoting bid and offer prices and maintaining a two-sided market

02

Market makers earn profit from the spread between buy and sell prices

04

Brokers arrange trades with market makers instead of finding matching orders

04

Examples: Nasdaq, SEAQ, and Eurobond markets

Programme Trades are used by fund managers to buy or sell large blocks of shares in a single transaction
– orders are sent electronically.

This can be used to mirror financial indexes or specific share baskets

Key Challenges include:



Algorithmic Trading and HFT

Algorithmic Trading uses computer-based algorithms to execute trades, often splitting them into smaller orders to reduce market impact and maintain anonymity

High-Frequency Trading (HFT) utilizes highspeed computers and algorithms to identify and capitalize on trading opportunities within milliseconds.



Uses co-location services to minimize network delays



Enhances the firms arbitrage capabilities by exploiting small pricing differences for a quoted instrument or capture liquidity rebates

MiFID II provisions to protect market quality or integrity from HFT



Order to trade ratios
(OTRs)



Minimum tick sizes



Controls on the fees
charged by trading
venues to HFT firms



HFT firms using market
making strategies are required
to sign agreements to ensure
they provide liquidity on a
consistent basis

Multi-Listed Shares

Companies may list shares on multiple exchanges, known as globally registered shares (GRSs).

The main characteristics of DRs and GRSs can be compared:

| Depository Receipts (DRs) | Globally Registered Shares (GRSs) |
|---|---|
| Shares listed on a single exchange in a single currency | Listed on multiple exchanges and multiple currencies |
| Not transferable across markets | Transferable across markets |
| Less stringent listing requirements | Must meet all listing requirements of each exchange |
| Does not need cooperation of the underlying company | Creation is driven by the issuing company |
| Expands the potential investor community | Expands the potential investor community, increases global reach, and the reputation of the issuing company |

Under the ISIN, what do the first two letters of the code represent?



- A. Local number of the security concerned
- B. Final check digit
- C. Stock exchange
- D. ISO country code



Chapter 2 – Main Industry Participants

10 Questions

Institutional Investors

Pension schemes

Sovereign Wealth Funds

Governments

Investment banks



Life insurance
companies

Mutual funds

Investment management
companies
(asset and fund managers)

Individual Investors

→ Let's take a deeper look...



Individual investors invest their own money, either managing investments independently or with the help of financial advisers...

Self-certified sophisticated investors

- Company directors with annual turnover of min. £1 million
- Experience in the private equity sector, or financing SMEs
- Experience making min. 1 investment in an unlisted company

High Net Worth Individuals (HNWIs)

- Min. net annual income of £100,000
- Min. net assets of £250,000 (excluding their primary residence)

Client Categories

The MiFID identifies 3 main categories of clients – each have a **different** level of regulatory protection.

1. Retail Clients

2. Professional Clients

3. Eligible Counterparties (ECPs)



Investors may employ a custodian to keep their investment assets **secure** and to **administer** them on its behalf.

| Custodian Key Responsibilities |
|--|
| Provide safekeeping in the local market |
| Support settlement of the investor's trading activities |
| Provide market information within that local market |
| Collect income payments |
| Manage client cash flows |
| Manage entitlements through corporate events |
| Manage tax services |
| Ensure securities are registered and manage transfer of titles |
| Reconciliation of assets |
| Maximize portfolio return through stock lending programmes |
| Meet reporting obligations to regulatory authorities |

→ These will be explored in depth in this chapter...

Custody Services

Investors can manage their custody arrangements in foreign markets in 3 ways



Appoint multiple Local Custodians for each foreign market

Appoint one Global Custodian to manage the full range of foreign markets

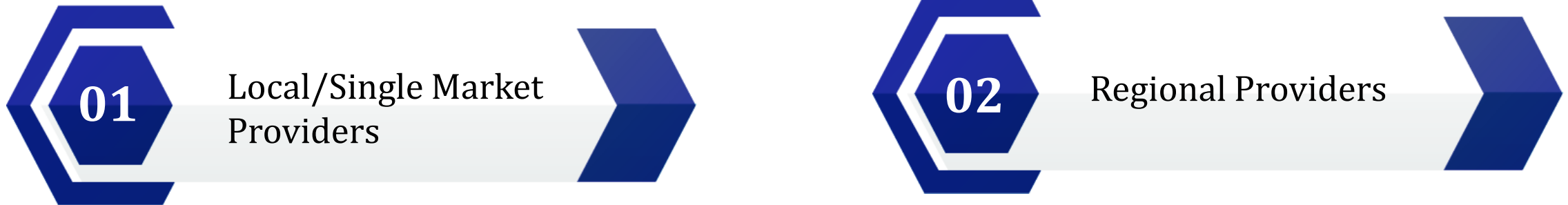
Use CSDs or ICSDs to settle trades and hold securities and cash

Custody Services

Global Custodians maintain an extensive network of branches globally and employ these as local custody providers.

In locations where a global custodian does not have its own branch, it may appoint an external agent bank or **Sub Custodian**.

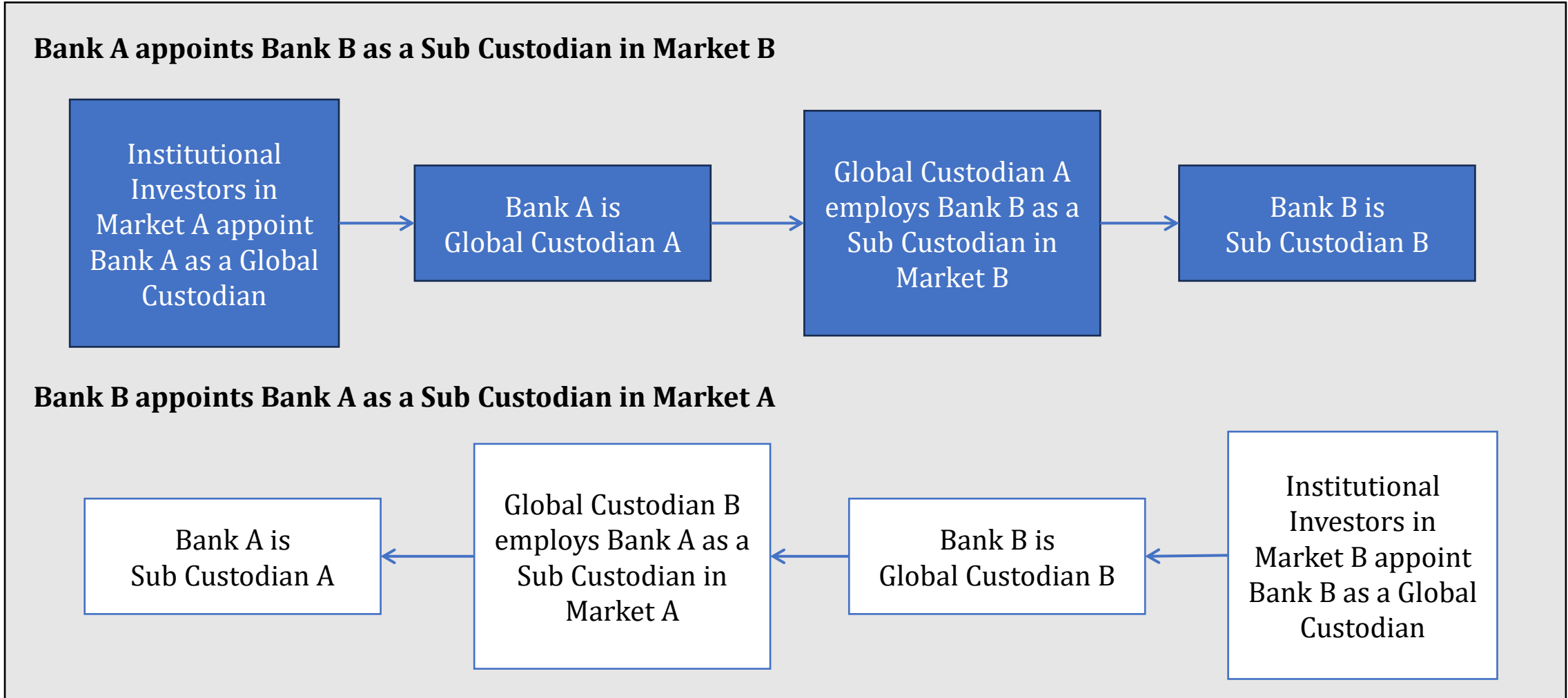
Sub Custodians can be:



The advantageous features of both Local and Regional providers can be outlined as follows:

| Local Provider | Regional Provider |
|---|---|
| Country specialists – especially on taxation | Higher credit rating |
| Act as eyes and ears that are focused on the local market | Lessons learnt in one market may be applicable in other regional markets |
| Regular dealings with local financial authorities and politicians | Ability to leverage innovation across markets and deliver economies of scale benefits |
| Expert knowledge on local market practice, language and culture | Standardised reporting |
| Longer track record, customer base and goodwill in the local market | Ability to reduce administrative burden for Global Custodians (since they have to deal with only one provider for multiple markets) |

Global and Sub Custodians may enter into **Reciprocal Arrangements**.



Custody and Sub-Custody Agreements

Each party has to enter into an agreement outlining the legal conditions, responsibilities and procedures to follow.

Here is a list of agreements:



Custody Agreement –
Institutional
Investors & Global
Custodian



Service Level
Agreement (SLA) –
Institutional
Investors & Global
Custodian



Sub Custody
Agreement – Global
Custodian & Sub
Custodian
(Local/Regional)

Selecting a Custodian

When selecting a global custodian, an institutional investor will request candidates to complete a detailed request for proposal (RFP).

Here is the main selection criteria in the RFP:



Background of the Custodian



Service Capacity



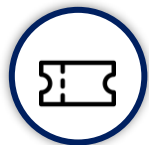
Account, Reporting,
and Settlement
Processing



Safekeeping



Value-Added Services



Cash Management
and FX



Sub Custodian
Network



Pricing Structure

A Global Custodian does not have its own branch in a foreign location. Which of the following entities would resolve their issue?

- A. Single Market Provider
- B. Hedge Fund
- C. ECPs
- D. Credit Union

EXAM FOCUS™

CSDs and ICSDs

What does a Depository like CSD or ICSD do?

Settles trades on a
delivery versus payment
(DvP) basis



Allows members to hold
book-entry accounts for
dematerialized securities

Provides basic
custody services

The instruments deposited in a CSD or ICSD include equities, government bonds, corporate bonds and money market instruments.

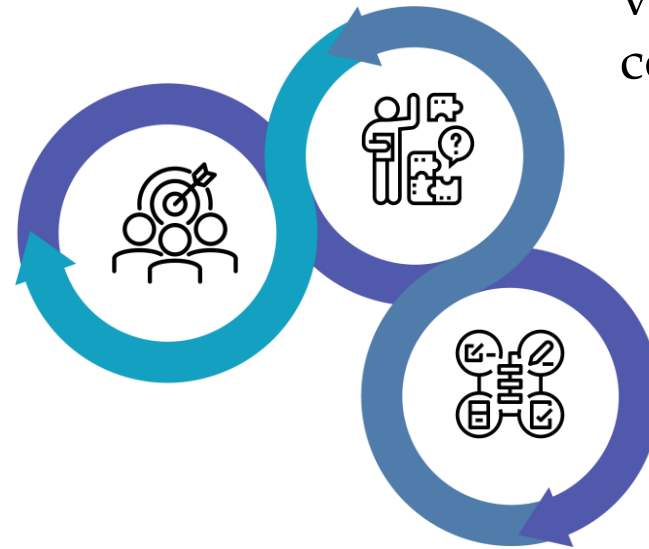
These securities can be held in 2 formats: **Certificated** or **Dematerialized**.

Depository Arrangements in Selected Markets (Summary)

| Country | Depository | Depository Arrangement |
|--------------------|------------------------------|---|
| UK | Euroclear UK & International | Facilitated by the CREST system. Full dematerialized with book-entry transfers. Firms looking to settle securities transactions in CREST can become a user or a sponsored member through another CREST user. |
| US | DTC & Federal Reserve | DTC handles corporate stocks and bonds, municipal bonds, MM instruments, ADRs and certain mutual funds. DTC uses book-entry transfers. Federal Reserve manages US government bonds and MBS. |
| Europe | <i>Multiple</i> | Euroclear France is the CSD for France. Interbolsa is the CSD for Portugal. Euroclear Bank is the CSD for Ireland. The NYSE Euronext-zone CSDs are supported by an integrated settlement solution known as ESES. LCH.Clearnet SA is the CCP for all NYSE Euronext European markets. |
| Germany | CBF | CASCADE for domestic securities and CREATION for international settlement with book-entry transfers. |
| Spain | Iberclear | Maintains the book entry register and manages securities and cash transfers |
| Australia | CHESS | All securities traded on the ASX are cleared and settled CHESS. |
| Japan | JASDEC | Settlement is by book-entry transfer. Stock certificates are dematerialized. |
| Hong Kong | HKSCC & CMU | HKSCC for equities. CMU for corporate and government debt securities. |
| Singapore | CDP | Provides clearing, settlement, and depository services, with CCP functions. |
| India | NSDL & CDSL | Mandatory dematerialized settlements. Book-entry transfers. |
| South Korea | KSD | Book-entry transfers on a multilateral netting basis. Partial settlement is not allowed. |
| Brazil | CBLC, SELIC & CETIP | CBLC for equities. SELIC for government debt. CETIP for corporate debt and OTC derivatives, all dematerialized and issued in book-entry form. |

ICSDs

Initially created to provide integrated clearing, settlement, and custody services for the Eurobond market



ICSDs now offer a range of value-add services which compete with custodians

Euroclear Bank and **Clearstream Banking** are the 2 main ICSDs that will be discussed in this chapter.

Characteristics

Securities held in immobilised form with book-entry transfer

Settlement Services

Provides DvP settlement with simultaneous and irrevocable transfers

- Batch Process: Runs Overnight
- Real-time Process: Runs between 1:30 and 19:30 CET

Provides 3 distinct ways for settlements

- Fully automated overnight & daytime DvP processing is through CreationOnline
- Handles all steps in the transaction life-cycle on a real-time basis
- Daytime processing window: 21:30 (SD-1) to 20:00 CET
- Settlement extension has moved the deadline to 21:30 CET

Clearstream Banking

Characteristics

Access Channels are Creation Connect, SWIFT, and Creation Online

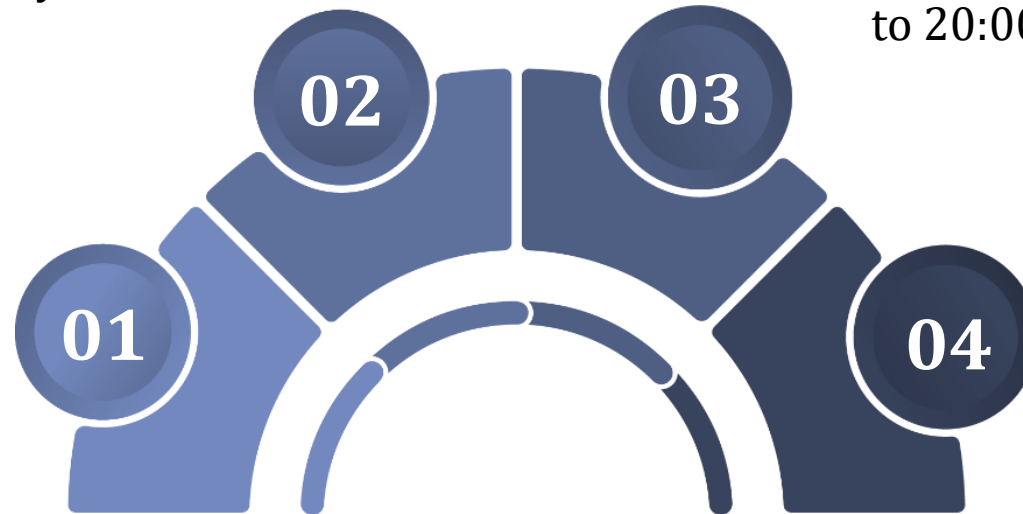
Bridge settlement support exchange of messages with Euroclear Bank

Settlement Services

Handles all steps in the transaction life-cycle on a real-time basis

Daytime processing window from 21:30 (SD-1) to 20:00 CET

Settlement is fully automated overnight and daytime DvP processing is through CreationOnline



Settlement extension has moved the deadline to 21:30 CET

The Giovannini Barriers (Summary)

| Barrier | Description |
|------------|--|
| Barrier 1 | Need to eliminate connectivity problems from national differences in IT and technology |
| Barrier 2 | Need to remove national restrictions on the location of clearing and settlement |
| Barrier 3 | Need to harmonise national rules relating to corporate actions processing |
| Barrier 4 | Need to guarantee intra-day settlement finality in all links between settlement systems |
| Barrier 5 | Need for national governments to create conditions that enable remove access to national clearing and settlement mechanisms to be guaranteed |
| Barrier 6 | Need for settlement periods for all equity markets to be harmonized |
| Barrier 7 | Need for operating hours for national clearing and systems to be standardised |
| Barrier 8 | Need for securities issuance practices to be harmonized |
| Barrier 9 | Need to remove national restrictions on the location of securities |
| Barrier 10 | Need to remove restrictions on the activity of primary dealers and market makers |
| Barrier 11 | Need to allow all financial intermediaries (est. in EU) to offer withholding agent services in each of the EU member states |
| Barrier 12 | Need to remove any provisions that require the collection of taxes on securities transactions to be done via local systems |
| Barrier 13 | Need to establish an EU-wide framework for the treatment of ownership of securities |
| Barrier 14 | Need to address inconsistencies across EU states in the legal treatment of netting procedures |
| Barrier 15 | Need to address inconsistencies in conflict of law rules applicable across EU states |

The 2001 Giovannini Report highlights 15 factors that prevent efficient cross-border clearing and settlement services in the EU.

TARGET2-Securities (T2S)

TARGET2-Securities (T2S) is a centralised settlement platform for the settlement of euro-denominated securities transactions (& some non-euro-denominated) in central bank money (ECB).

Objectives include:

01

Integrations and harmonization of the diverse settlement structures in Europe

02

Reduce the costs of cross-border securities settlement

03

Increase competition among providers

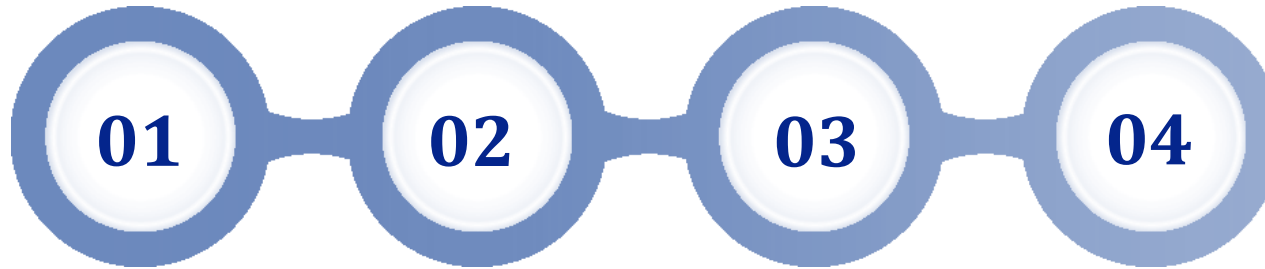
At the time of writing (January 2024), there were **24 CSDs** connected to T2S.

The CSD Regulation in the EU

The CSD Regulation (CSDR) aims to create a unified regulatory framework for securities infrastructure.

Here are some key features:

Fixed the settlement period for securities transactions to **T+2**



Introduced ex ante measures to prevent settlement fails and ex post measures to address them

Introduced the right for issuers to record their securities in **any CSD** in the EU

Outlines **restrictions on the range of commercial** (value-added) **banking activities** a CSD can undertake:

- '1+2' model where a single legal entity provides both core CSD and commercial banking services
- '2+2' model where 2 legal entities provide each service separately

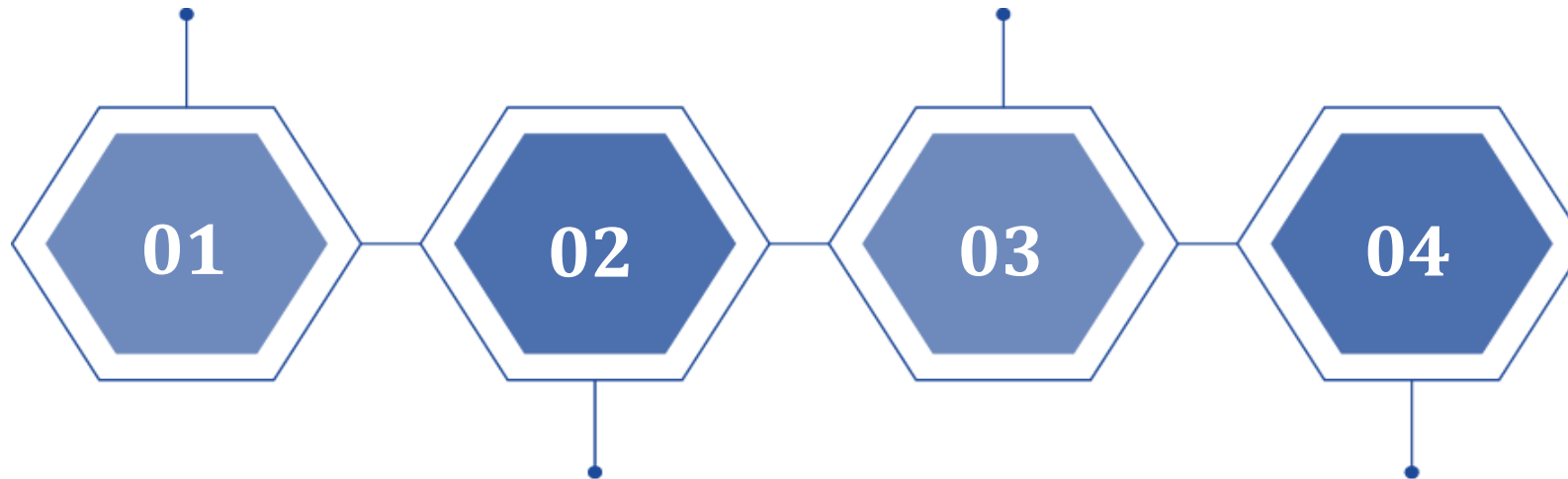
Straight Through Processing

Straight-through processing (STP) is the automated passage of a financial transaction from execution to settlement **without manual intervention**.

STP addresses 4 key concerns:

Some participants still use phone-based reporting, leading to rekeying errors and delays.

Lack of standardization of proprietary systems for holding data and communicating messages between process areas



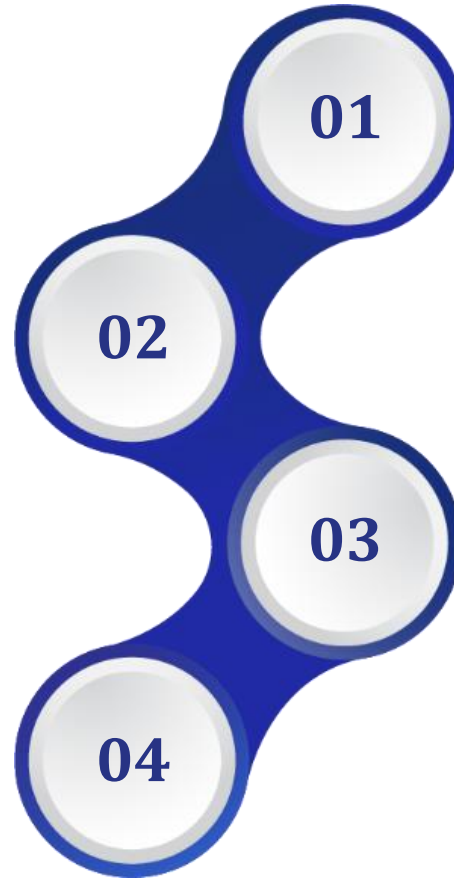
Front and back-office systems often lack integration, limiting automation

Mergers have led to poor connectivity between inherited systems.

Barriers to Promoting Straight Through Processing (STP)

Firms demand quick ROI for system automation investments

New standards like ISO 15022, ISO 20022, and FIX exist but require correct implementation for effective STP



Variations in tax regulations and corporate actions across jurisdictions hinder STP adoption

Smaller firms may prioritize front office tech upgrades over back-office automation

SWIFT promotes the use of standardised messaging services and interface software within the financial services sector

SWIFT adopts 3 key business objectives:

Provide low-cost, competitive financial processing and communications services



Greater automation of the end-to-end financial transaction process



Leverage international position to address industry-level threats, issues and opportunities

SWIFT's core activities include:

Payments

Supports bank instructions, statements, clearing, and settlement (payments account for **almost 60%** of message volume)

Securities

Facilitates trade confirmation, clearing, settlement, and custodial operations (securities account for **over 30%** of message volume)

FX & Treasury

Provides systems for trade confirmation messaging, matching, netting, and reporting of FX and treasury trades

Fintech

Banking & Insurance

- Mobile Banking
- Neobanks e.g. Monzo and Revolut
- Chatbots
- AI in payments, loans, and credit scoring

Financial Services

- Cryptocurrency
- Blockchain
- Electronic trading platforms
- Robo-advisors
- Big Data Analysis
- Robotic Process Automation
- Regtech

The Economy

- AI to predict market direction
- AI to analyse customer retail spending

Which country has implemented the CASCADE system and Clearstream Banking's CREATION platform for transfer settlement processes?

- A. France
- B. Germany
- C. Spain
- D. UK

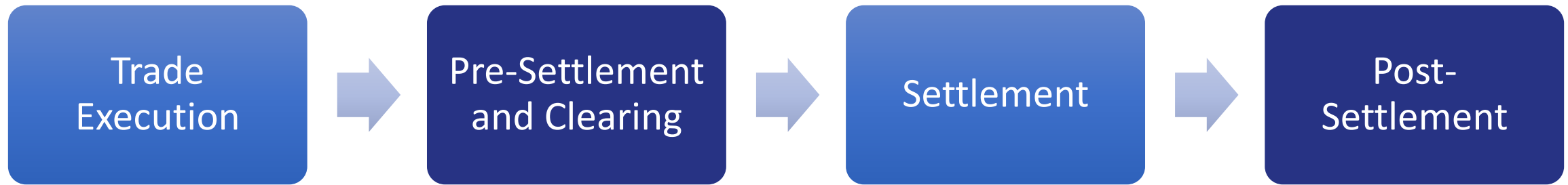
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Chapter 3 - Settlement Characteristics

11 Questions

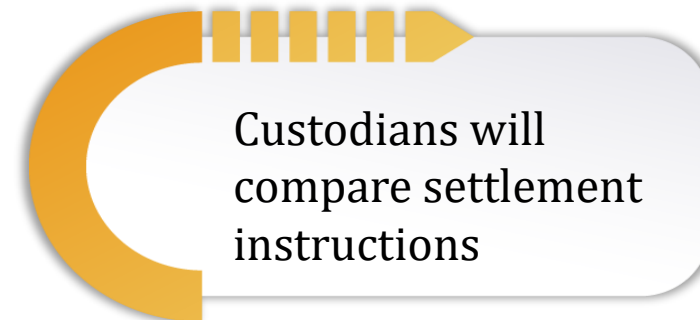
The Trade Cycle



Pre-Settlement

The Pre-Settlement stage is for the two sides to the trade to compare trade details and to eliminate any mismatches, prior to the exchange of cash and securities.

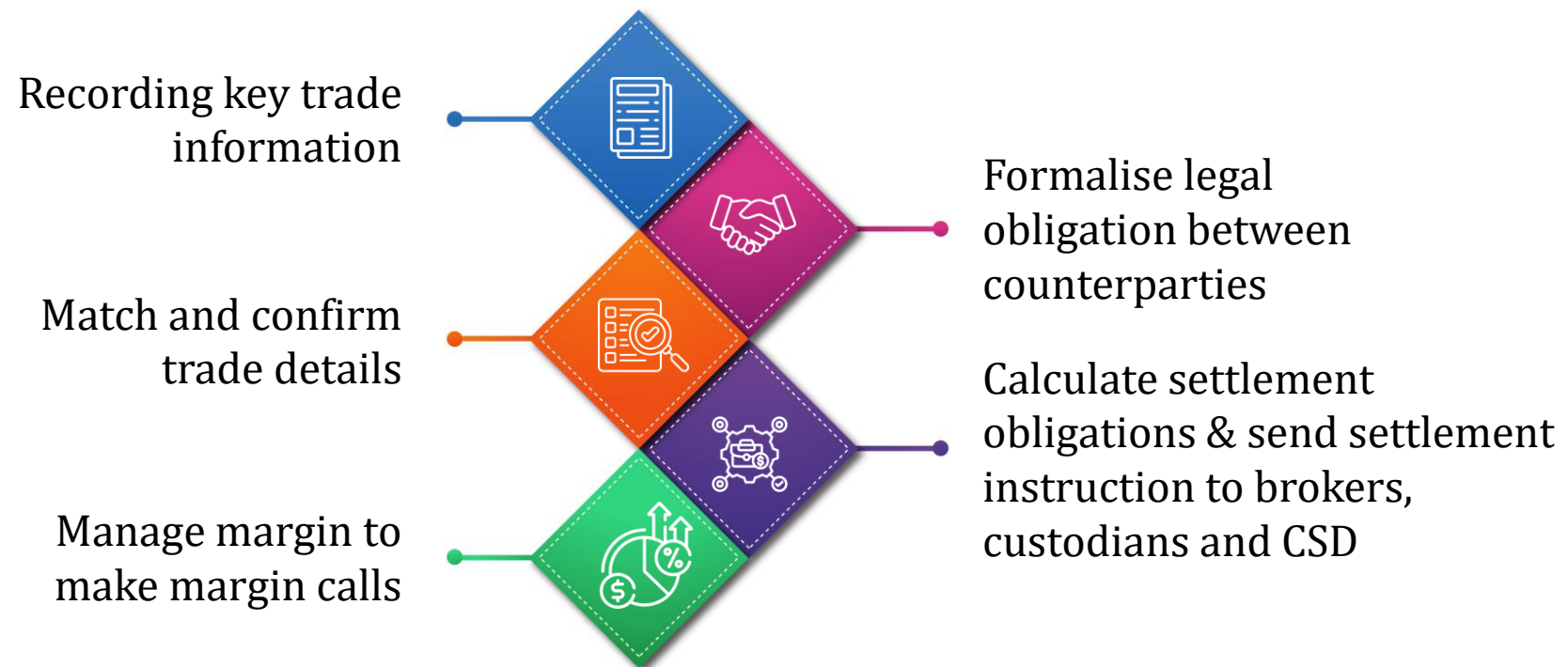
This is done on 2 levels:



Clearing

Clearing is the process through which the obligations held by buyer and seller to a trade are defined and legally formalised.

Clearing involves the following:



Clearing via a CCP

The buyer and seller can interact exclusively with a CCP and remain anonymous to each other – this is known as novation.

The benefits of Clearing with a CCP include:



Credit risk limited to the CCP only



Streamlines clearing relationships and reduces counterparty risk



Risk of default by the CCP is lower than that of individual counterparties



CCP is obliged to finalise the settlement between counterparties even if one party fails to meet its obligations

- The loss can be compensated with the defaulting party's property
- The loss may be met through mutual guarantee by other participants – this is only if the defaulting party's property is not enough

Netting involves offsetting positions or obligations between trading partners. This reduces multiple individual positions into fewer or a single position.

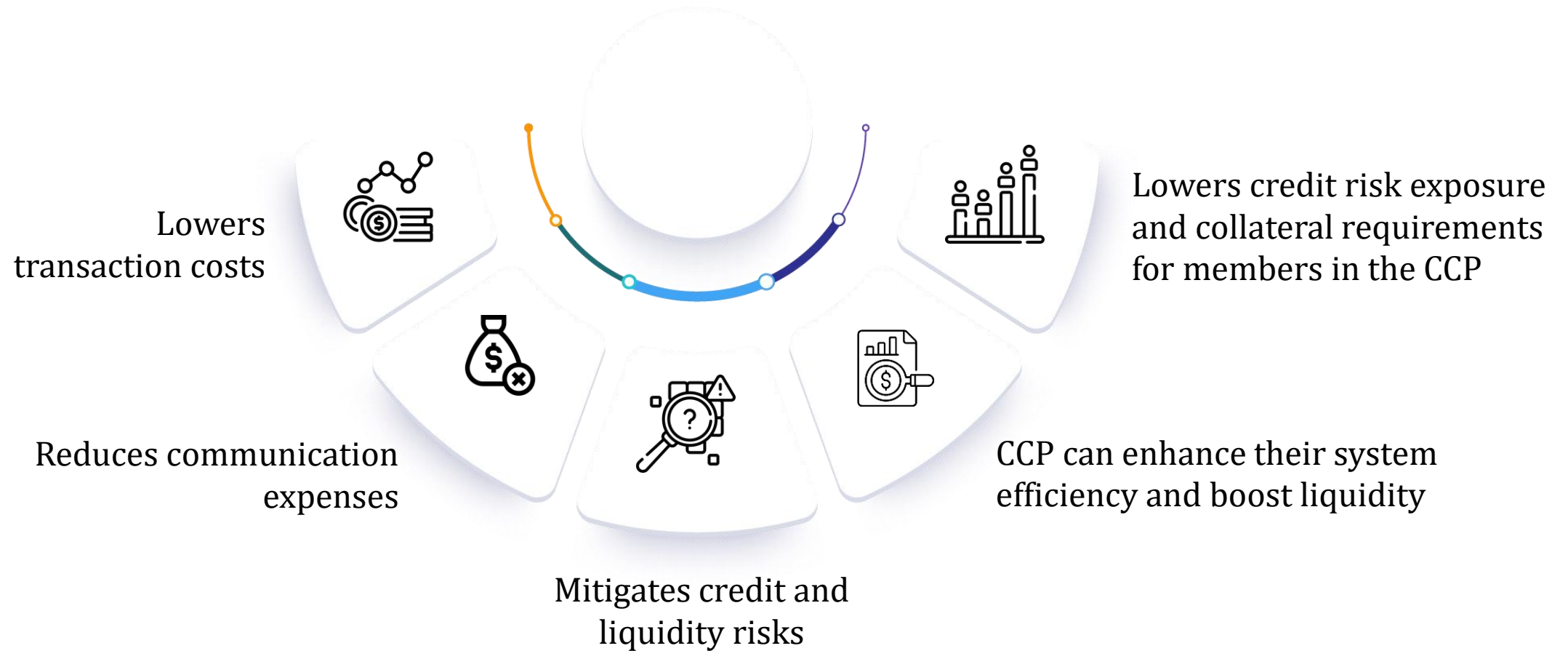
Example:

Company A will exchange US\$1 million to Company B while Company B is required to exchange US\$400,000 to Company A.

In a single transaction, Company A will exchange US\$600,000.

Benefits of Netting

Why would trading partners undertake Netting?



Automating the Functions Between Execution and Settlement

Firms have introduced facilities designed to centralise and automate trade processing in the post-execution and pre-settlement space.

Example:

Central Trade Manager
(CTM) by the DTCC

This has been made possible largely by key advances in messaging and communication.

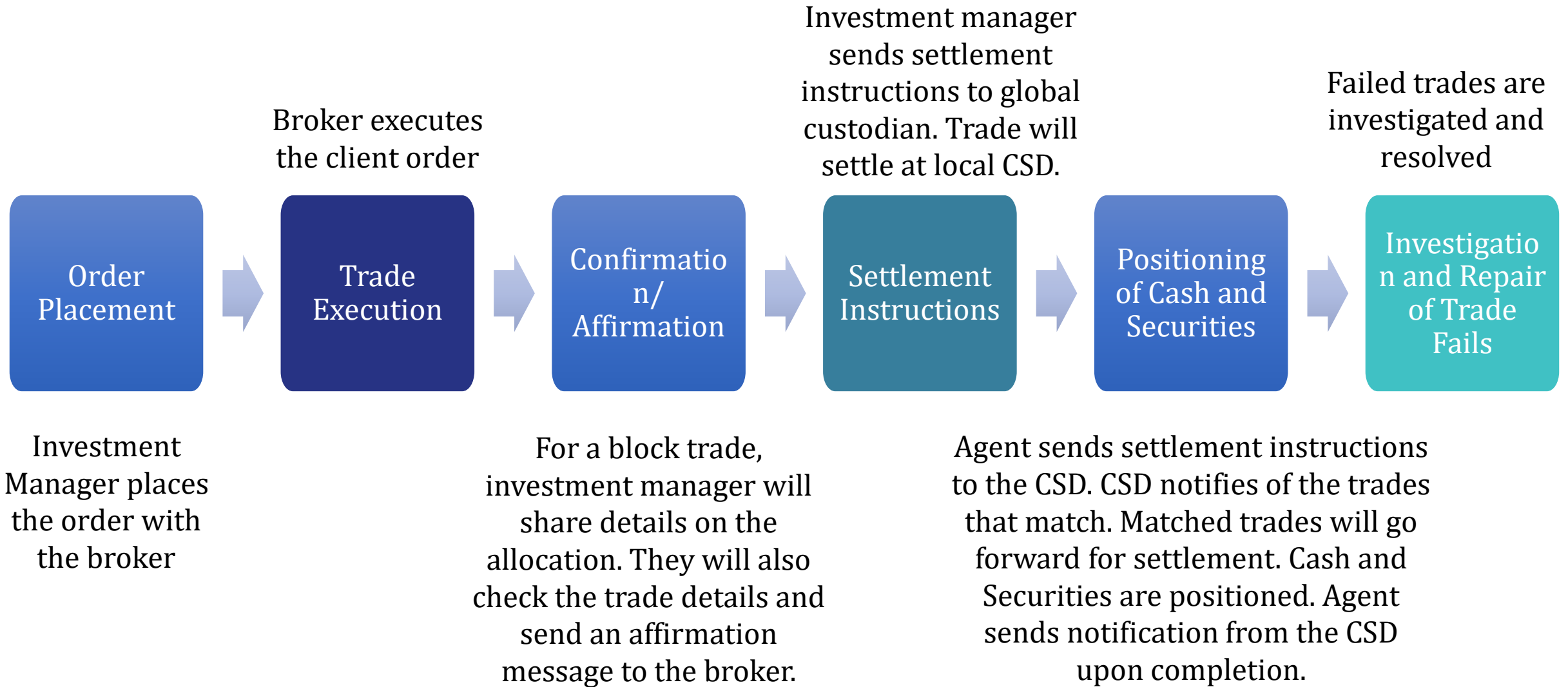
Example:

SWIFT and FIX Protocol

Settlement Periods in the Selected Markets (Summary)

| Country | Equities | Bonds/Debt |
|-------------|----------|------------|
| Australia | T+2 | T+2 |
| Brazil | T+2 | T+0 |
| France | T+2 | T+2 |
| Germany | T+2 | T+2 |
| Hong Kong | T+2 | T+0 |
| India | T+1 | T+1 |
| South Korea | T+2 | T+0 |
| Japan | T+2 | T+1 |
| UK | T+2 | T+1 |
| US | T+1 | T+1 |

Financial Institutions in the Settlement Process



Payments Systems (Summary)

Domestic and international systems provide finality of payment in central bank money. Here is a summary:

| Payment System | Country | Description |
|------------------------|-----------------|--|
| CHIPS | US | Computerised network for the transfer of US dollar payments. Provides intra-day payment finality through a real-time system. Each participant pre-funds its CHIPS account by depositing a quantity of funds to cover its intra-day exposures. Banks with positive closing positions at the end of the day are credited with the cash balance through the Fedwire. |
| Fedwire | US | Federal Reserve's electronic funds transfer system. It is an RTGS system where funds transfers are immediate, final, and irrevocable when processed. Transfers are completed on the same day. Fedwire operates as follows: Online transfers – 21:00 to 19:00 NY with 17:00 for foreign orders. Offline transfers – 09:00 to 18:00 NY with 16:30 for foreign orders. Instructions – 08:30 to 19:00 NY (online) and 09:00 to 16:00 NY (offline). |
| CHAPS | UK | UK's high-value payments system. Provides RTGS for credit transfers. |
| Faster Payments | UK | Handles the processing of internet, telephone and standing order payments in the UK market. All payments must reach the recipient's account by the next working day. Funds can be withdrawn on the same day. |
| TARGET | Europe | RTGS system for the Euro. Ensures same-day payment finality in central bank money. Migrated from TARGET to the TARGET2 platform. TARGET2 is open from 07:00 to 18:00 CET, with 17:00 for customer payments. |
| CLS Bank | <i>Multiple</i> | Supported by the largest FX banks to eliminate settlement risk and reduce systemic liquidity risk in the FX market. 18 central banks have currencies eligible for settlement in CLS. Reduces Herstatt risk with real-time PvP settlement between participating currencies. Banks can use CLS through direct membership, settlement member, or user (sponsored) member. |

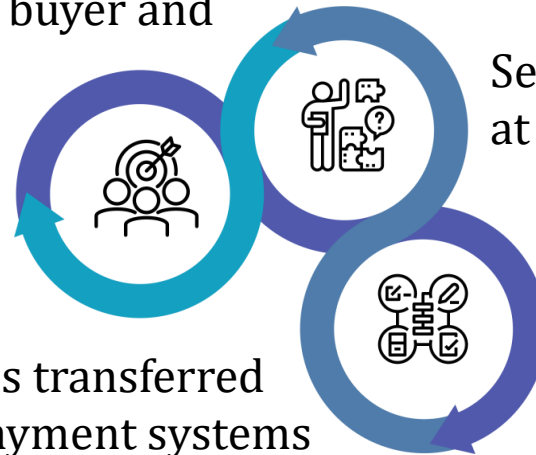
The Pre-Settlement stage focuses on:

- A. Executing the transfer of securities and cash between the parties
- B. Finalizing the ownership of securities in the central depository system
- C. Comparing trade details on the two sides and eliminate any mismatches
- D. Monitoring post-trade discrepancies and initiating penalties for failed trades



Recap: The Settlement Process

Settlement is the process of exchanging securities and cash between buyer and seller to fulfill obligations



Securities are delivered at a CSD/ICSD

Delivery of cash is transferred via banking or payment systems

→ Let's explore some of the different methods used for settlement...



Free of Payment (FOP) Settlement is where one or both parties deliver without immediate receipt of the corresponding asset.

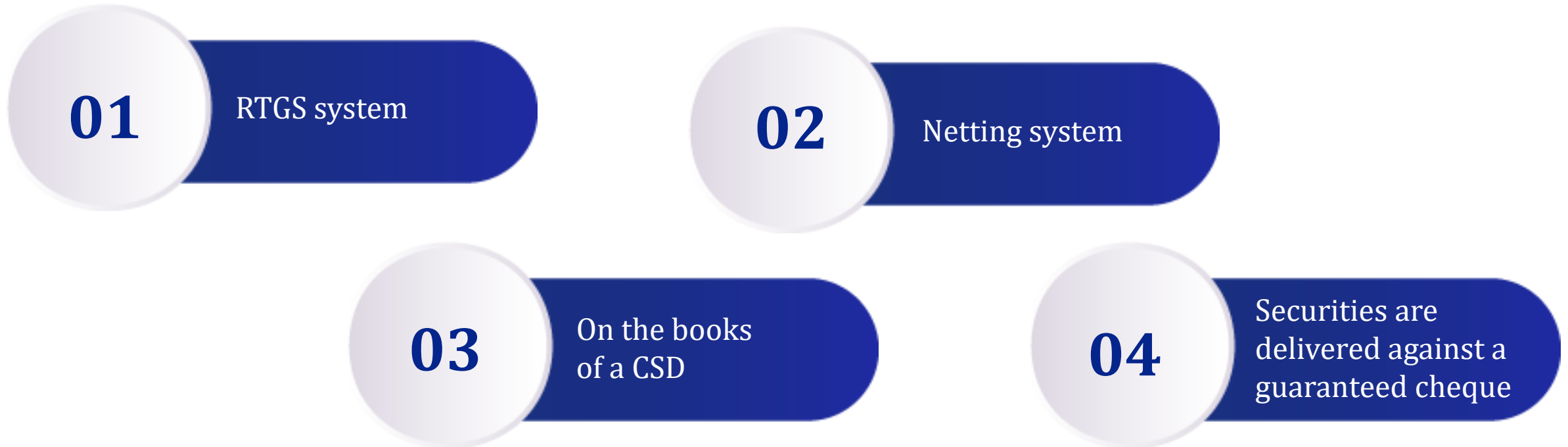
→ This leads to high counterparty default risk and is not recommended by regulatory authorities.

DvP Settlement

Delivery versus Payment (DvP) Settlement ensures simultaneous and final exchange of securities and cash between buyer and seller.

→ This reduces counterparty default risk and is preferred over the FOP Settlement method.

DvP can be achieved in the following ways:



Netted Settlement



Bilateral Netting

Trades between two counterparties in the same security are netted to result in a single transfer



Multilateral Netting

Expands netting to include all trades in the same security among multiple counterparties

Let's go through a worked example...

Netting – Worked Example

Company A conducts trades in a specific share with 3 counterparties: C1, C2 and C3. Here are the trades:

Company A buys 10,000 shares
from C1 for £30,000

Company A sells 5,000 shares
to C2 for £18,000

Company A sells 2,500 shares
to C3 for £6,000

Multilateral Netting would allow each party to settle a single cash and securities balance with the CCP. For Company A, it would mean:

Company A receives 2,000
shares (6,000 / £3 per share)

Company A pays £6,000 in cash
(30,000 – 18,000 – 6,000)

Rolling Settlement

Rolling Settlement involves settlements occurring a specific number of business days after the trade date.

The US moved to T+1 settlement in May 2024



Most markets follow T+2 settlement for equities and fixed income securities

Shorter settlement cycles reduce the number of outstanding trades, minimizing aggregate market exposure

FX Transactions are used for 3 purposes:



Obtain currency to
fulfill immediate
payment obligations



To profit from
changes in exchange
rates through trading



Hedge against future
exchange rate
fluctuations

FX prices are quoted as follows:

GBP / USD 1.2988-92

Here is the breakdown:

GBP is the base currency

USD is the quoted currency

1.2988 is the bid price

- GBP 1 will buy USD 1.2988

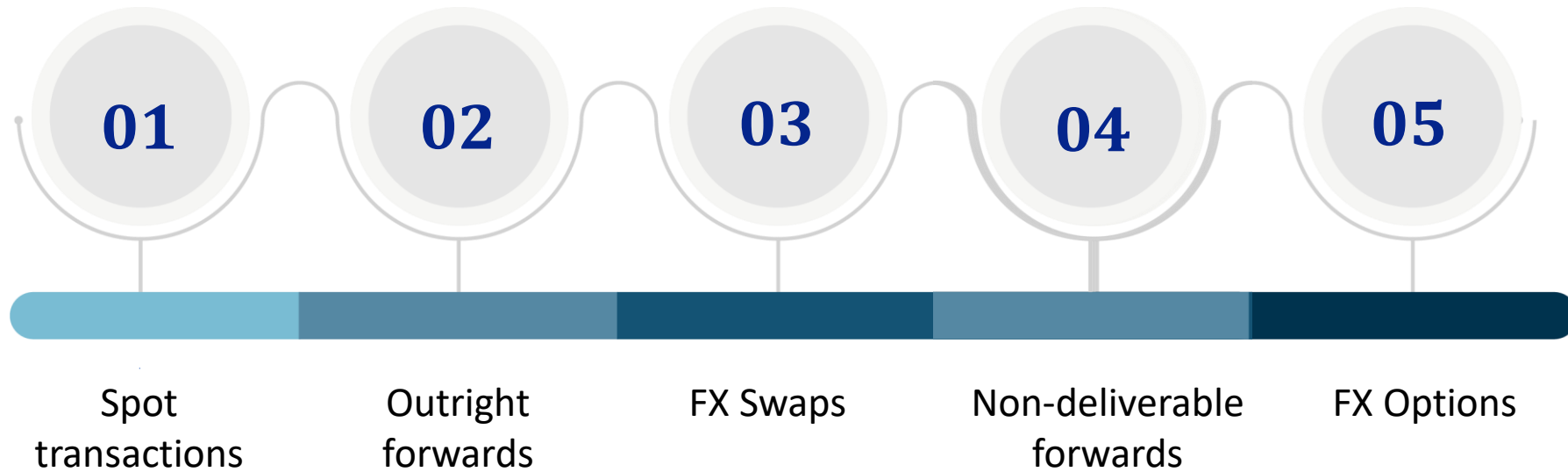
1.2992 is the offer price

- USD 1.2992 will buy GBP 1

The spread is the difference between the bid and offer prices. This is the trader's profit margin on the transaction.

Foreign Exchange (FX) Settlement

FX Transactions include:



Transfer of Title

When securities are sold or transferred to a new owner, the method for transferring legal title will depend on whether the security is in bearer, certificated or dematerialised form.

| | Bearer | Certificated | Dematerialized |
|---------------------------------------|----------------------------|-----------------------------|-------------------------------|
| Method for holding securities | Certificate and book entry | Register and certificate | Register and book entry |
| Method for securities transfer | Book-entry transfer | Transfer and reregistration | Book entry and reregistration |
| Holder name on register | No | Yes | Yes |

Contractual Settlement

Actual Settlement Date Accounting (ASDA)

Proceeds from a securities sale are credited to the seller, and purchase costs are debited from the buyer, on the actual settlement date

E.g. Trade is scheduled on T+1 but settles on T+4

01

Seller receives funds 3 days late

02

Sellers lose the opportunity to use or earn interest on funds during the delay period

03

Buyer will not need to pay cash to settle the transaction until 3 days after the originally scheduled settlement date (T+1)

Contractual Settlement Date Accounting (CSDA)



Funds will be credited or debited on the settlement date (or an otherwise pre-agreed value date), even if trade settlement is not yet final and irrevocable on that date

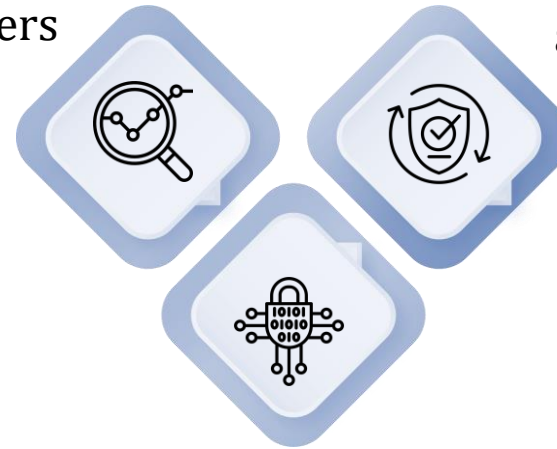
→ CSDA provides clients with greater certainty over their cash flows and is only offered in well-structured/liquid markets.

Distributed Ledger Technology (DLT)

DLT creates a shared, synchronized ledger across multiple sites or institutions without a central register

Each ledger is an exact copy and updates independently while synchronizing with others

Records are confirmed and updated without a central authority



Achieved through cryptographic keys and digital signatures

→ DLT could provide cost efficiencies, speed, and effectiveness to settlement and registration of transactions.

Failed Settlement

Settlement Failure could occur due to the following reasons:



Non-matching
settlement instructions



Insufficient securities



Insufficient funds



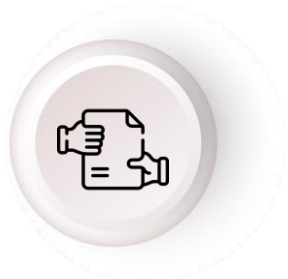
Corporate actions



Counterparty default

Buy Ins and Sell outs

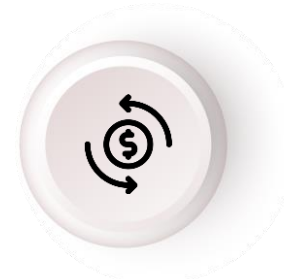
Seller fails to deliver securities → Buy-in



Buyer issues a notice to the seller with a deadline for delivery, warning of a buy-in if not met



If the seller fails to deliver by the deadline, the buyer purchases the securities from a third party at the current market price



Any additional costs from the buy-in are charged to the seller

Buy Ins and Sell outs

Buyer cannot deliver cash → Sell-out



Seller notifies the buyer with a deadline to provide necessary funds, warning of a sell-out if not met



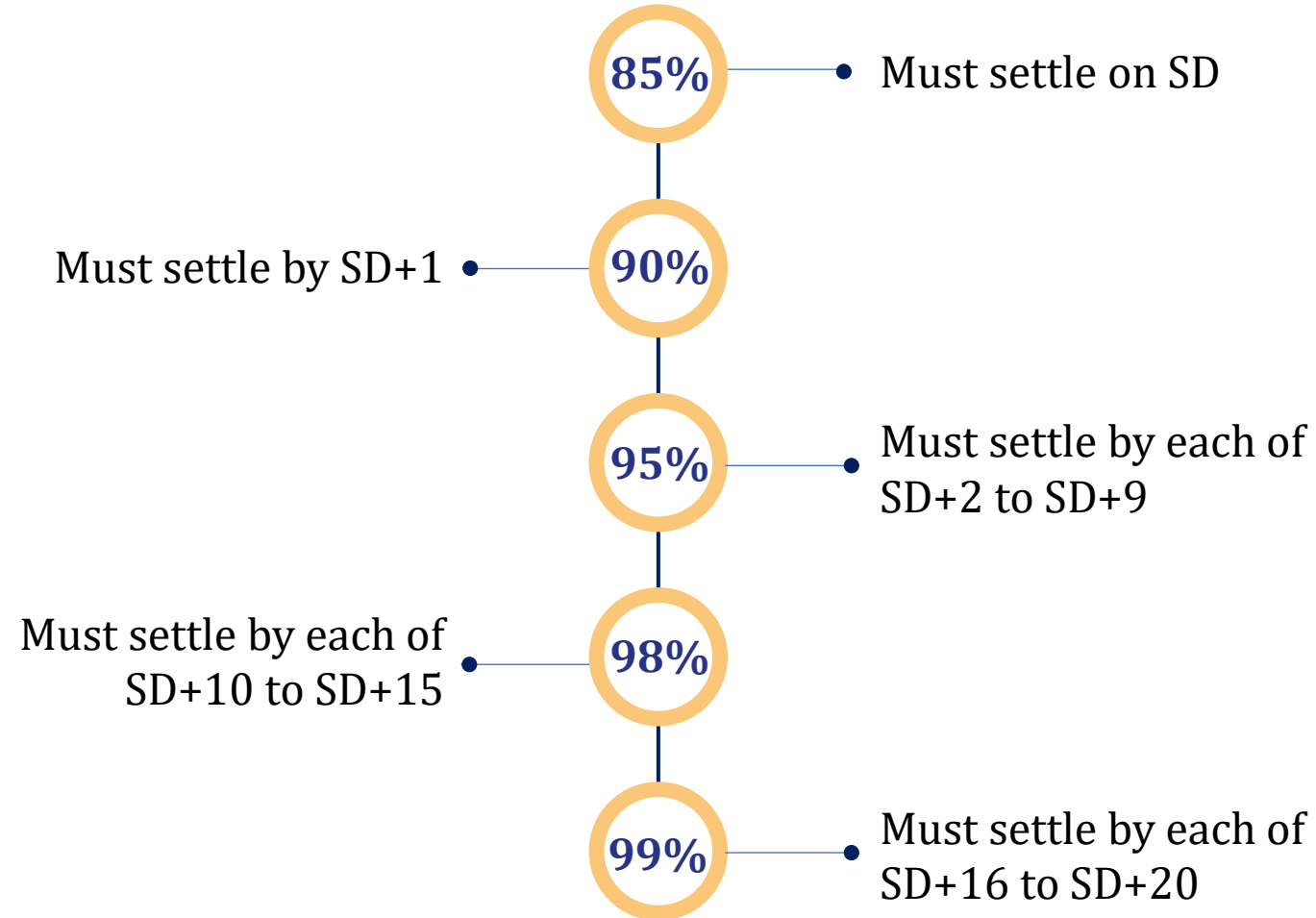
If funds are not received by the deadline, the seller sells the securities to another buyer to cover the cash leg



Additional costs from the sellout are passed on to the original buyer

Fines

EUI will impose a fine if a firm fails to meet the following targets for trade settlement during a two-month period.



If a buyer or clearing agent causes a settlement failure, the seller can claim interest for the loss on the amount they would have received.

The claim amount can be calculated as follows:

$$\text{Claim amount} = \text{Net amount} \times \frac{\text{overdraft rate}}{100} \times \frac{\# \text{ of calendar days}}{360 \text{ (or 365/366)}}$$

→ Let's go through a worked example...

Interest Claims

A buyer was due to pay £300,000 for a number of bonds.

The settlement was delayed by 5 days. The seller pays 2% on its overdraft.

Calculate the claim amount (use 365).

$$\text{Claim amount} = 300,000 \times \frac{2}{100} \times \frac{5}{365} = \text{£}82.2$$

CHAPS and CHIPS are payment systems operating in:

- A. Europe and US respectively
- B. US and UK respectively
- C. UK and Europe respectively
- D. UK and US respectively

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Chapter 4 - Other Investor Services

10 Questions

Safeguarding

Safeguarding is when firms hold and protect the client's assets in their care and ensure that they have effective arrangements to meet the responsibility.

Failure to do so may lead to:

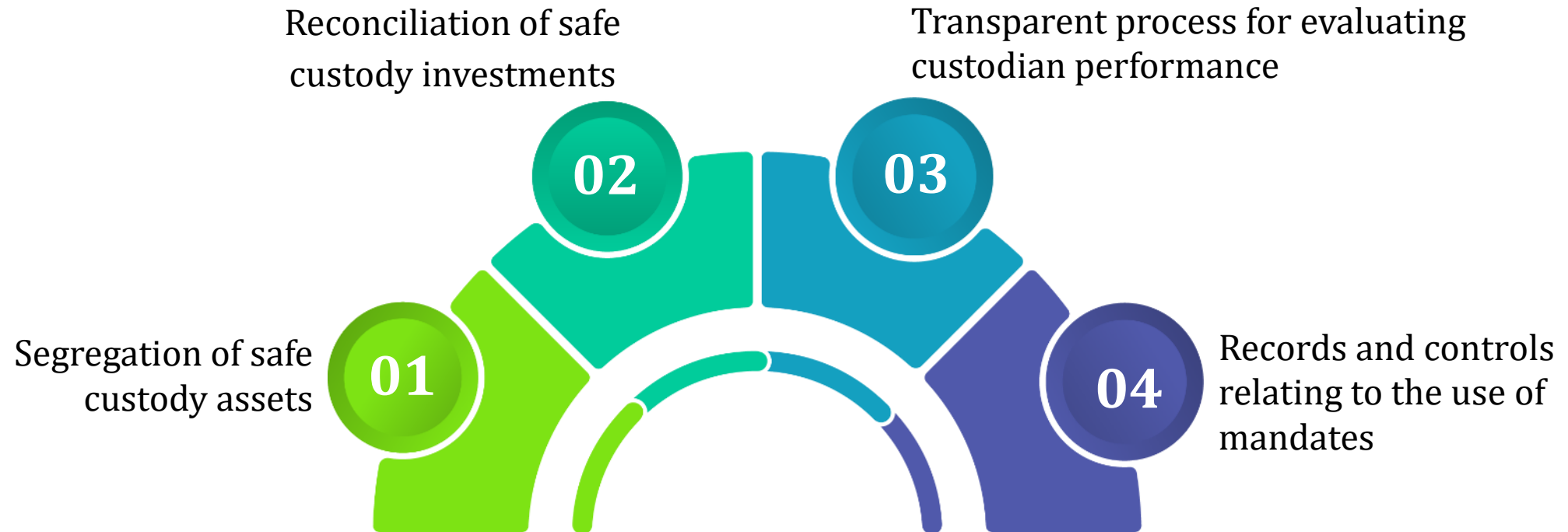


Assets used by the firm
without the client's
agreement



Assets treated as the
firm's assets in the
event of liquidation

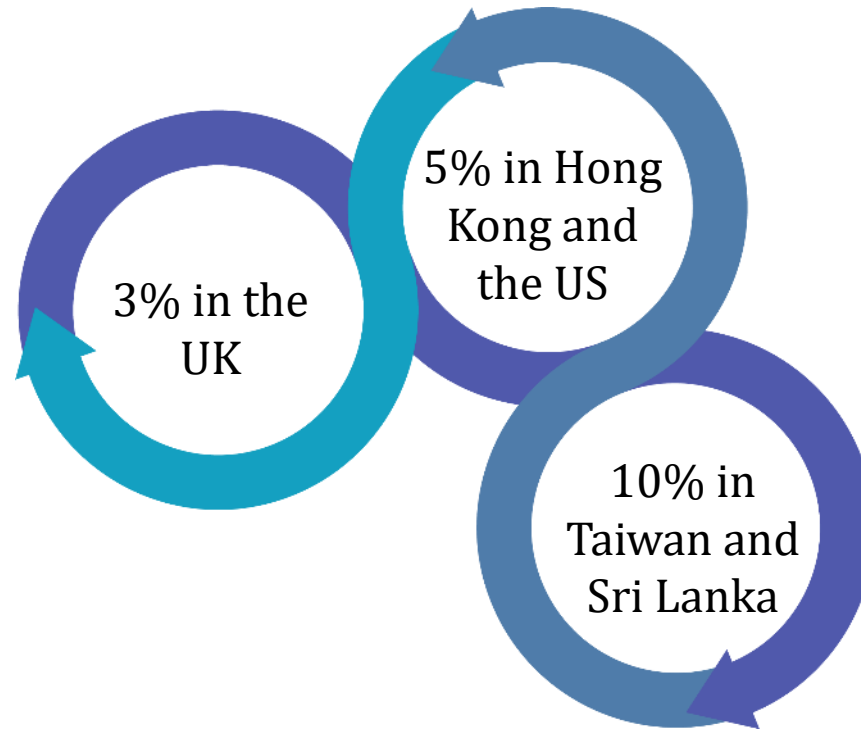
Main controls that a provider of custody services should undertake include:



Substantial Shareholder Reporting

Substantial Shareholder Reporting requires shareholders to notify a company when their ownership crosses specified percentage thresholds of the company's capital.

Thresholds vary by country. Examples include:



The Nominee Concept

Nominee Concept is where investors register overseas assets under a custodian or nominee for convenience.



Custodians handle transactions and safekeeping via nominee companies



Nominee holds legal title, while beneficial ownership stays with the investor



Nominee receives and processes shareholder communications based on investor instructions

The Nominee Concept can be classified into 3 areas:

- 1 Pooled Nominee Holdings (Omnibus Account)
- 2 Designated Nominee Holdings
- 3 Sole Nominee Holdings

Pooled Nominee Holdings Benefits

Aggregated Payments

Entitlements are paid directly to the custodian's nominee account, reducing individual payment processing.

Simplified Reconciliation

The custodian reconciles one holding instead of multiple beneficiary accounts.

Anonymity:

Only the nominee's name appears on the registrar, keeping beneficial owners anonymous.

Efficient Transfers:

Securities transfers between clients don't require reregistration, as the legal title remains with the custodian.

The Nominee Concept

The characteristics of Pool and Designated Nominee Holdings can be summarized as shown below:

| Pooled | Designated |
|---|--|
| Company registrar maintains one registration for any particular company | Each beneficial owner's holding is registered separately |
| Nominee retains records of each client's holdings | Still in the nominee company's name |
| | With an additional identifying code |

What is the primary risk of poor Safeguarding practices by a firm?



- A. Client assets may be used by the firm without their agreement
- B. Client assets may lose considerable value overtime
- C. Firm may be at risk of missing its yearly ROI targets
- D. Firm may show preferential treatment of certain clients over others

Custodian Fee Schedules

Custodian fees depend on business volume, relationship strength, client reputation, and other factors.

May negotiate better terms due to their size and reputational value.

Fee Types include:

Ad Valorem Fee:

A basis point fee on the value of assets held, often with a minimum fee



Transaction Fee:

Charged based on the number of settlement transactions processed



Custodians must inform clients of corporate events and process instructions accurately and promptly. Failure to do so may require compensating clients for any resulting financial losses.

The size of the loss may be uncertain until the custodian addresses the error (e.g., buying or selling shares).

Market fluctuations can increase potential financial losses for the custodian.

Risks for the Custodian (Voluntary Actions)

For voluntary actions, custodians must submit client instructions to the registrar before deadlines.

Custodians set a cutoff time to receive client instructions to meet event deadlines



If custodians fail to act on instructions received before the cutoff, they may be liable for losses.



Instructions received after the cutoff are processed on a best-efforts basis, with no liability for missed deadlines.

Mandatory Corporate Events – Dividends

Global custodians must provide timely and accurate information about the event and ensure clients' instructions are properly recorded

01

Dividend payments are a company's distribution of profits to shareholders, usually paid in cash but sometimes as shares.

02

03

Errors in recording client preferences, such as paying cash instead of shares, can lead to significant losses for custodians if the market moves unfavorably

→ Custodians are responsible for compensating clients if they fail to inform them of a corporate event, resulting in a loss of entitlement

Interest payments are a cash entitlement paid to holders of debt securities

They are predictable, with the payment amount (coupon rate) and timing (coupon payment date) announced at the issuance of the debt security

An exception is floating rate bonds, where the coupon rate varies with the benchmark interest rate and is not predetermined.

Mandatory Corporate Events – Capitalization Issues

Capitalization (or bonus) issues are the distribution of new shares to existing shareholders at no cost, from the company's capital reserves



It is an alternative to paying dividends from accumulated reserves.



The total market value of the shares (existing and bonus) remains unchanged, leading to a reduction in share price.

Mandatory Corporate Events – Splits

01

Stock splits or subdivision involves converting one share into multiple shares, as decided by the company's directors.

They occur to make shares more affordable and attractive to investors by reducing the share price.

02

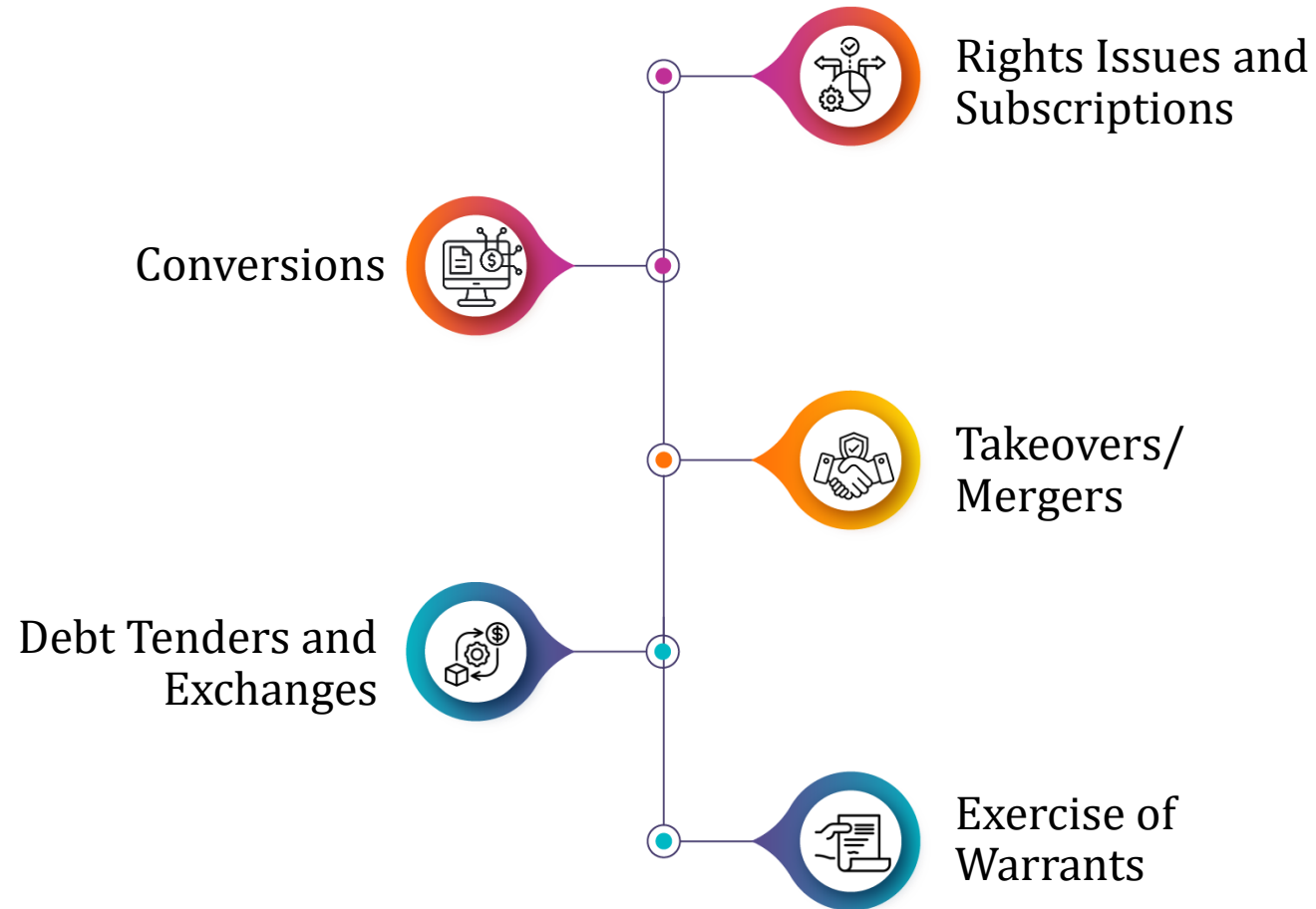
03

Other mandatory events include Consolidation, Capital Repayments, and Redemptions.

→ Let's go through a worked example...

Voluntary Corporate Events

Voluntary corporate events demand that the shareholder communicate whether it wishes to accept or reject the terms of the corporate action. These include:



Rights Issues and Subscriptions

Rights issues give existing shareholders the right to subscribe to an issue of new shares, usually at a discount to the market price.

Main stages include:



Distribution of the rights entitlement by the issuer to the existing shareholders



Shareholders elect or decline to subscribe to the offer of new common shares



Non-subscribed rights will expire at the subscription deadline

Voting

Shareholders have the right to vote on resolutions at company meetings.

Examples include:

Election of directors

Directors' remuneration

Issuance of new equity capital

Stock repurchase plans

Takeover bids

Appointment of a new auditor

Resolutions proposed by shareholders

Approval of dividends

Ex-Benefit and Cum-Benefit

When a company announces a dividend, it specifies the following:

01

Type of dividend

02

Amount per share

03

Record date

04

Payable date

Shareholders must own the stock before the Ex-Dividend Date to receive the dividend

Cum-Benefit

Security has been purchased **before** the ex-date / the **purchaser** is entitled to the dividend.

Ex-Benefit

Security has been purchased **on or after** the ex-date / the **seller** is entitled to the dividend

Cash Management

Cash management refers to strategic policies to optimize an organization's cash resources.

Key responsibilities for a custodian in this space include:

Knowing when and where cash is needed to meet obligations



Detailed understanding of cash flows



Predicting short and medium-term cash flows efficiently

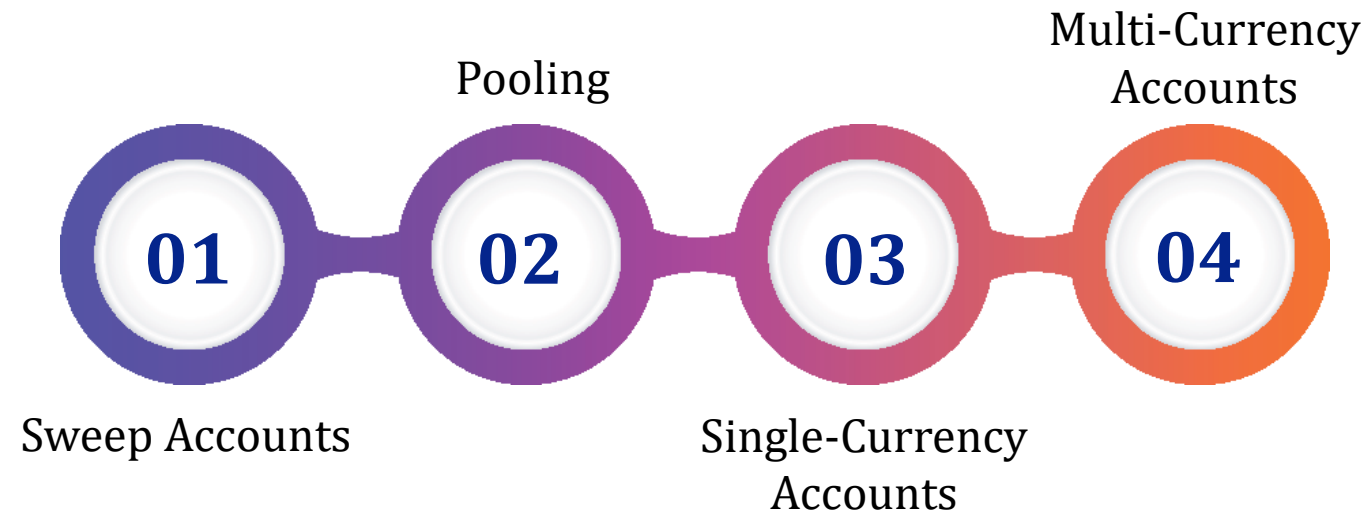


Safeguarding client cash with designated bank accounts in case of custodian insolvency



Cash Management

Custodians may administer the following accounts/techniques:



Why is SLB Employed?

Securities lending and borrowing (SLB) is a process where institutional investors lend out securities to generate additional income.

Lenders earn income from lending their securities, boosting portfolio returns

Borrowers may need securities to cover failed settlements, fulfill short-selling needs, or maintain liquidity for market makers

Risks Involved and Precautionary Measures

SLB presents the risk of the securities on loan, or the collateral, not being returned on the agreed date. Those securities will then need to be acquired in the market, potentially at high cost.

Risk mitigation measures include:



Detailed credit evaluations on the borrower



Collateralising loan exposures



Employ master legal agreements



Set limits on the lender's credit exposure

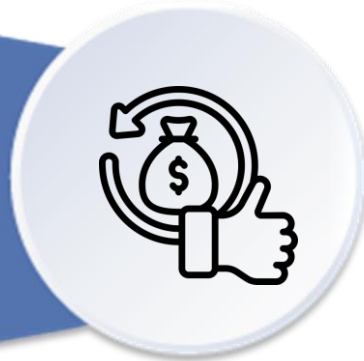


Mark exposures/ collateral to market daily & make margin calls

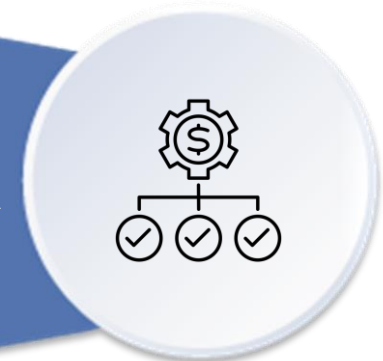
Repurchase Agreements

Repurchase Agreement (Repo) is a secured lending method involving selling securities for cash with an agreement to repurchase them later.

For the borrower, it offers a cheaper alternative to unsecured funding



For the lender, it provides an avenue through which it can generate income on its cash balance



Cash lender receives securities as collateral throughout the loan period.

Repurchase Agreements

The types of securities acceptable as collateral will depend on the risk appetite of the cash lender.

Some cash lenders may opt for lower quality collateral due to:



Better returns



Top-grade collateral is in short supply and expensive to borrow

Environmental, Social, and Governance (ESG) is a set of standards for companies that helps socially conscious investors screen investments before trading.

| Environmental | Social | Governance |
|--|---|---|
| <ul style="list-style-type: none">• Energy usage• Waste and pollution management• Treatment of animals• Conservation of natural resources | <p><i>Relationships with:</i></p> <ul style="list-style-type: none">○ Employees○ Suppliers○ Customers○ Community | <ul style="list-style-type: none">• Executive remuneration• Shareholder's rights• Internal controls• Audit |

What is the difference between the Ex-Benefit and Cum-Benefit periods for dividend payments?



- A. The seller receives entitlement in the Cum-Benefit period
- B. The entitlement is paid to the buyer in the Ex-Benefit period
- C. The entitlement is paid to the buyer in both periods
- D. None of the choices



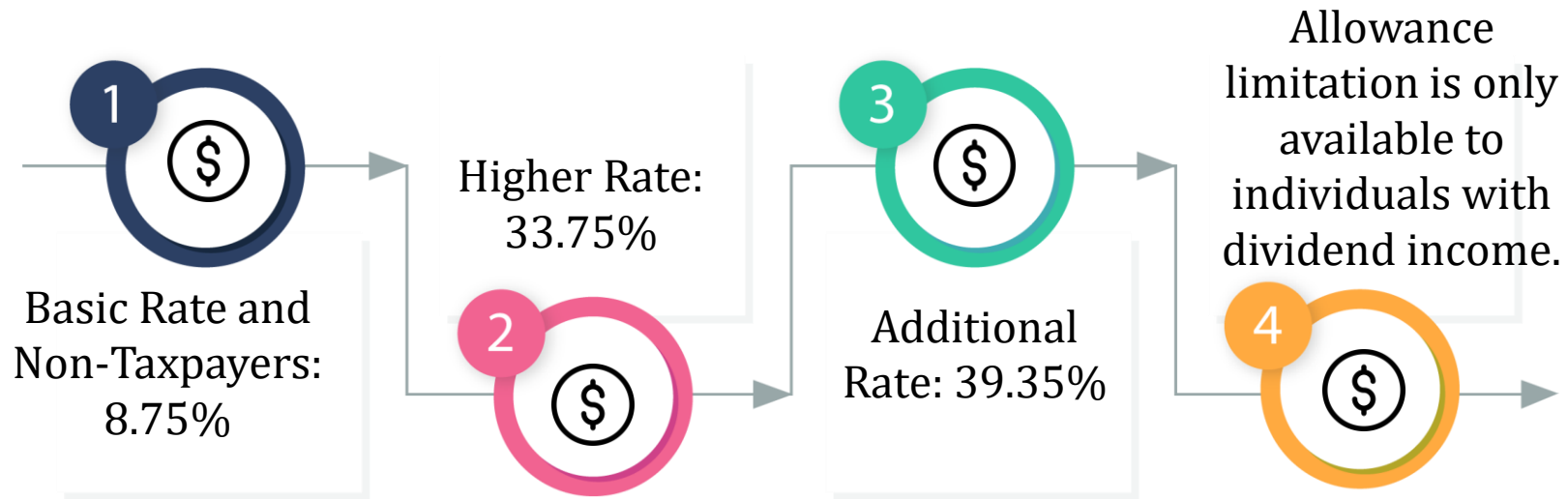
Chapter 5 - Aspects of Taxation

3 Questions

Taxation of Dividends

UK-based companies pay dividends from profits already taxed at the company level.

Tax Rates on Dividends Over £1,000:

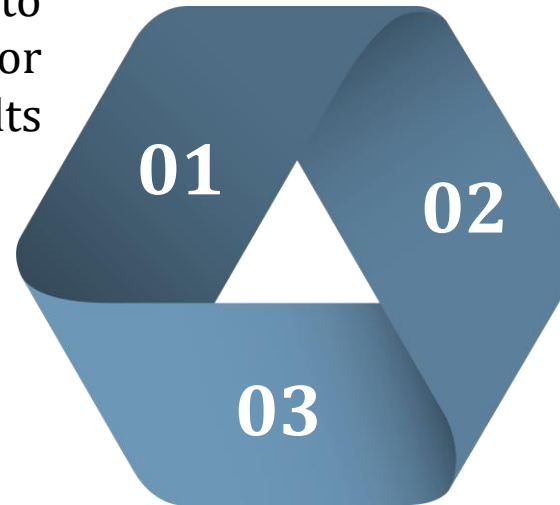


Conventional and Index-linked Gilts

UK individual investors are liable for income tax on interest receivable on gilts. Interest is normally paid gross, but investors may opt for net payment.

Further requirements include:

Individuals are not liable to capital gains tax (CGT) or income tax on the sale of gilts



No stamp duty or stamp duty reserve tax (SDRT) is payable on purchases or sales of gilts

UK individual investors may be liable for tax on accrued interest on the purchase and transfer of gilts

Corporate Bonds

- UK individual investors are **liable for income tax on interest received on corporate bond**
- Most corporate bonds are **payable gross**
- Certain corporate bonds are **not liable to pay CGT**
E.g. Sterling denominated without rights of conversion or rights to subscribe
- **No stamp duty or SDRT is payable** on purchases or sales of UK corporate bonds

Gilt Strips

- All gains/losses are taxed as income on an **annual basis**
- End of Tax Year - gilt strips are treated as if they have **sold** and then immediately **repurchased** them at their **market value at that time**
- Any gain/loss during the year should be added to the gain/loss on any strips maturing in the tax year
- The overall gain/loss is taxed as income.

Overseas Investors (FOSTRA)

- Gilts on FOSTRA terms, and the interest on these bonds, are **exempt from tax** when held by persons who are **not ordinarily resident** in the UK

Capital Gain Tax (CGT) is payable on profits from most assets, including equities.

Exemptions are on profits from the sale of gilts and qualifying corporate bonds for UK private investors

Here is an example:

An investor purchases 1,000 shares in ABC Corporation at £1.30 per share, selling all 1,000 shares 1 year later for £4.00 each.

$$\text{Capital Gain} = (1,000 \times 4.00) - (1,000 \times 1.30) = 4000 - 1300 = \mathbf{\pounds 2700}$$

CGT Rates for Tax Year 2023-24:

10% and 20% for general gains (excluding residential property and carried interest)

18% and 28% for gains on residential property and carried interest

20% for trustees or for personal representatives of someone who has died (not including residential property)

28% for trustees or for personal representatives of someone who has died for disposals of residential property

10% for gains qualifying for Business Asset Disposal Relief

Individuals have a £6,000 exemption, which is deducted from net gains before calculating CGT liability.

Tax Treatment of Discount Securities

Discount Securities are those purchased below their par value.



Original Issue Discount (OID) exists when a bond issued at a price lower than its redemption price.



If an OID bond is purchased below its issue price due to a decline in market value, it may be subject to market discount rules.



Market discount must be declared, on an accreted basis, as ordinary taxable income in the year a bond is sold or redeemed.

Withholding Tax (WHT)

Withholding Tax (WHT) is the tax on income payments to nonresidents in the country where the income originates.

WHT is typically deducted by the issuer or paying agent and paid directly to local tax authorities.

01

02

Investors usually reclaim WHT through their custodian, who handles the process with local tax authorities.

03

In some jurisdictions like the US, tax relief can be applied directly at the source, eliminating the need for custodians to reclaim WHT.

Double Taxation Treaties (DTTs)

There are over 1,300 double taxation treaties (DTTs) worldwide with the UK holding the largest DTT network.

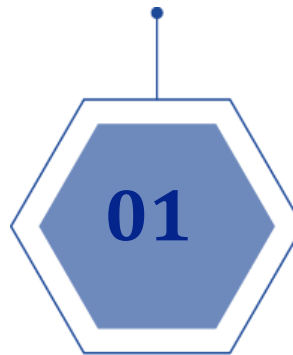
The objectives of DTTs include:



Double Taxation Treaties (DTTs)

The following factors have been identified as obstacles to streamlined tax processing:

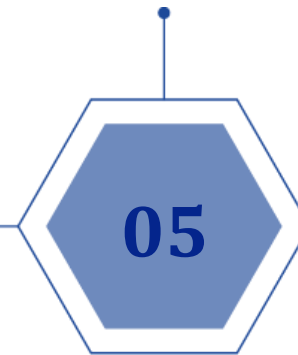
Different jurisdictions maintain unique tax frameworks, hindering streamlined processing



Inconsistent tax procedures limit custodians' ability to standardize and automate processes, increasing costs and risks



Fees and resource costs can make smaller tax reclaims uneconomical



Different instruments may have varying withholding tax rates within the same country, requiring case-by-case processing

Some jurisdictions impose heavy reporting demands on custodians

Double Taxation Treaties (DTTs)



Qualified Intermediary (QI) Program

QIs report non-US clients holding US securities, report income for US residents, and withhold taxes on US securities



Foreign Account Tax Compliance Act (FATCA)

Requires US taxpayers holding foreign financial assets that exceed given thresholds to report those assets to the IRS



Common Reporting Standard (CRS)

Standardizes financial account reporting globally and aligns with FATCA, but with a broader global focus.

Transaction Taxes

Transaction Tax is imposed on trading specific assets like shares or property and is calculated as a percentage of the transaction's value or as a flat fee.

Examples in the UK:



Which tax is levied on income payments to nonresidents in the country where the income originates?

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- A. Value Added Tax (VAT)
- B. Capital Gains Tax
- C. Withholding Tax
- D. Excise Tax



Chapter 6 – Risk

5 Questions

What is Risk?

Risk is the quantifiable likelihood of loss or underperformance of invested assets.

While risk presents opportunities for profits, especially through market risk management, it also poses major loss potential:

01

Lehman Brothers' collapse in 2008

02

Collapse of subcustodians or central securities depositories (CSDs)

03

Missing significant corporate actions

04

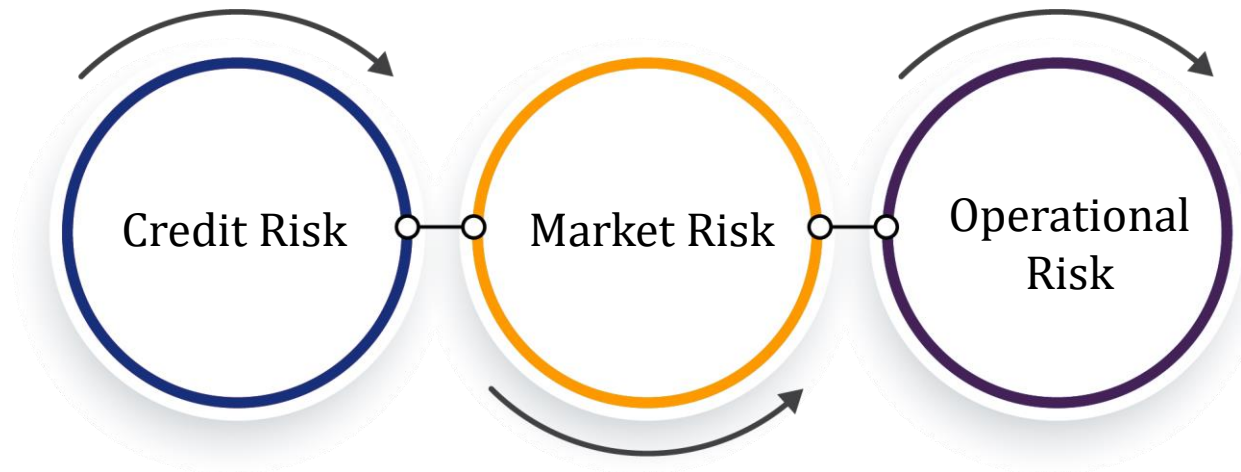
Events like terrorist attacks

05

Large losses due to rogue trading, such as Barings Bank in 1995

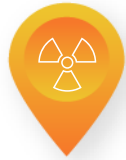
Bank for International Settlements (BIS): What is Risk?

The Bank for International Settlements (BIS) identifies three main categories of risk in the financial services sector:



What is Risk?

Systemic Risk

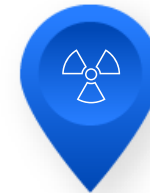


Risk of collapse affecting the entire financial system or market

Liquidity Risk



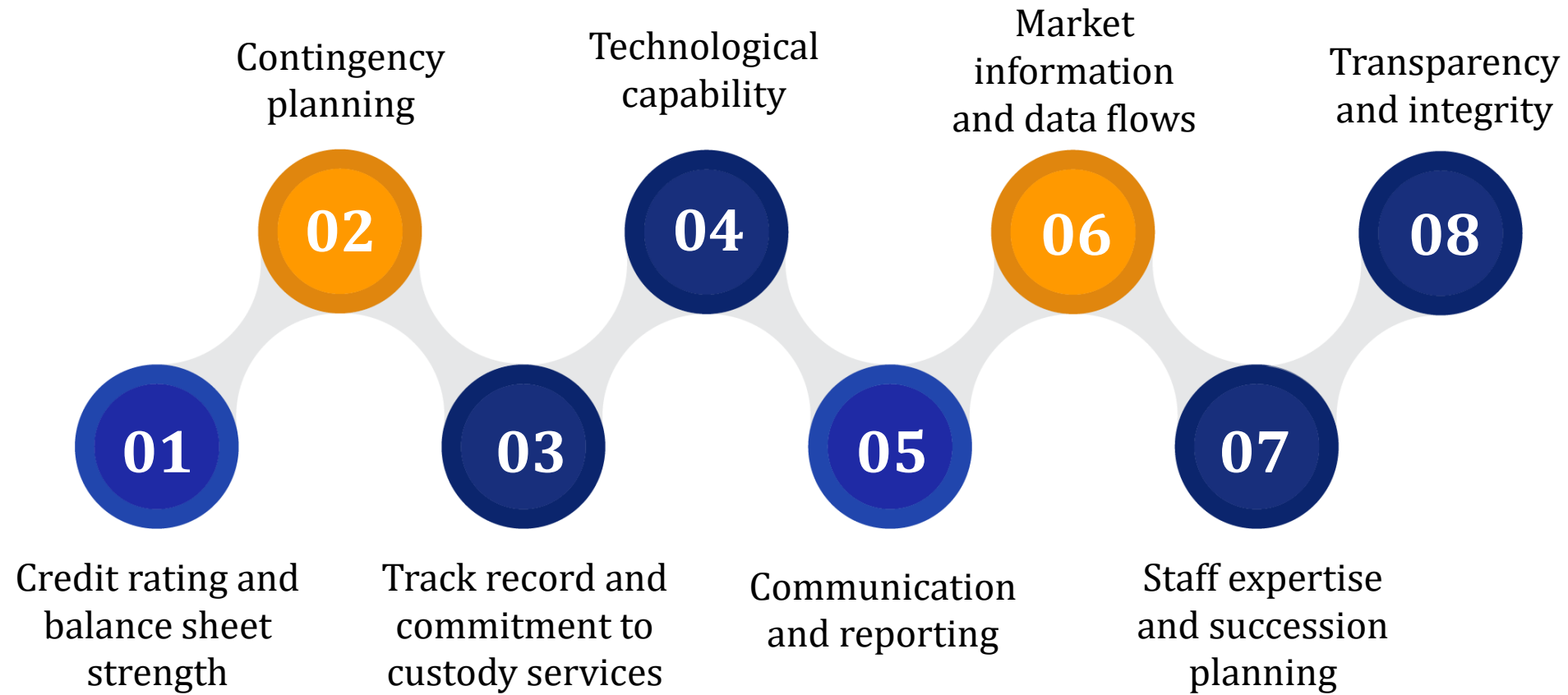
Risk related to the ease of quickly trading a security or financial asset



Involves selling an asset to realize cash without significantly affecting the market price

Risk Reviews of Market Infrastructure

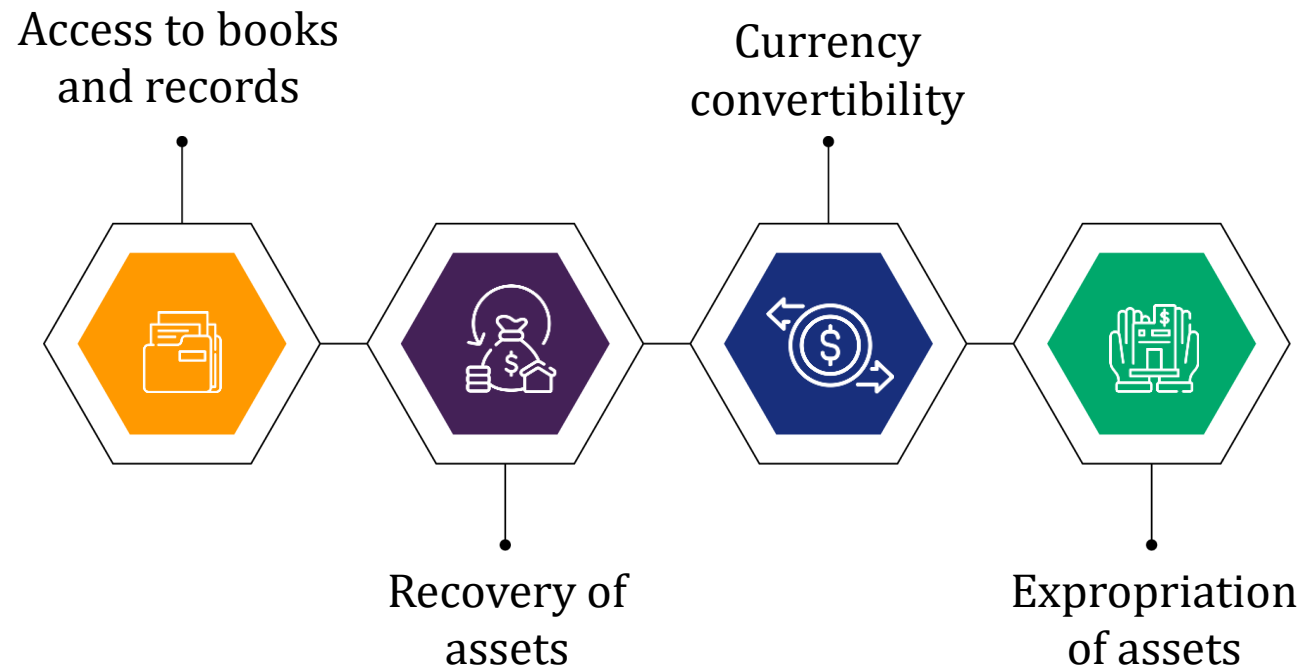
Risk reviews on Sub-Custodian networks consider these areas:



Risk Reviews of Market Infrastructure

SEC Rule 17f5 states that US investment companies can hold securities with any custodian that meets the SEC's eligible foreign custodian criteria.

Therefore, the following considerations should be made:



Risk Reviews of Market Infrastructure

SEC Rule 17f7 states that any depository that is employed by a US investment company to hold its assets must be an eligible foreign depository.

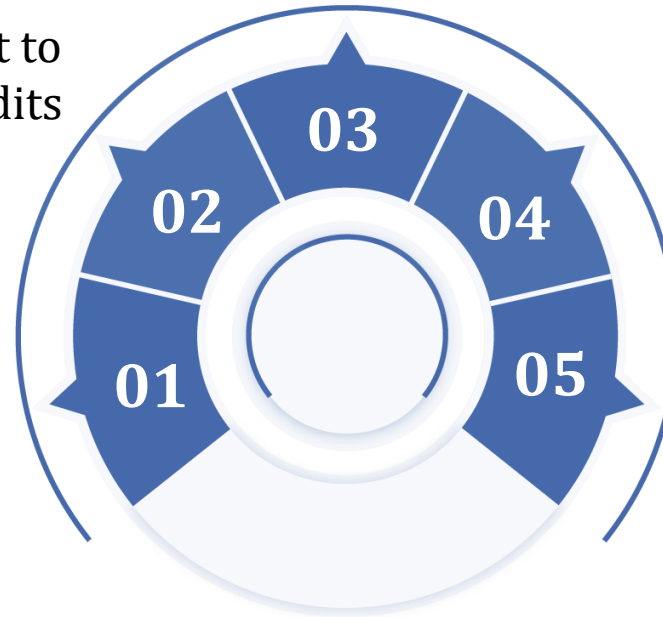
Therefore, the following criteria should be met:

Must provide regular reports to all depository participants

Must be subject to periodic audits

Must apply equal safekeeping treatment to each depository participant

Must be national or transnational centre for handling securities that is regulated by foreign financial regulatory authority

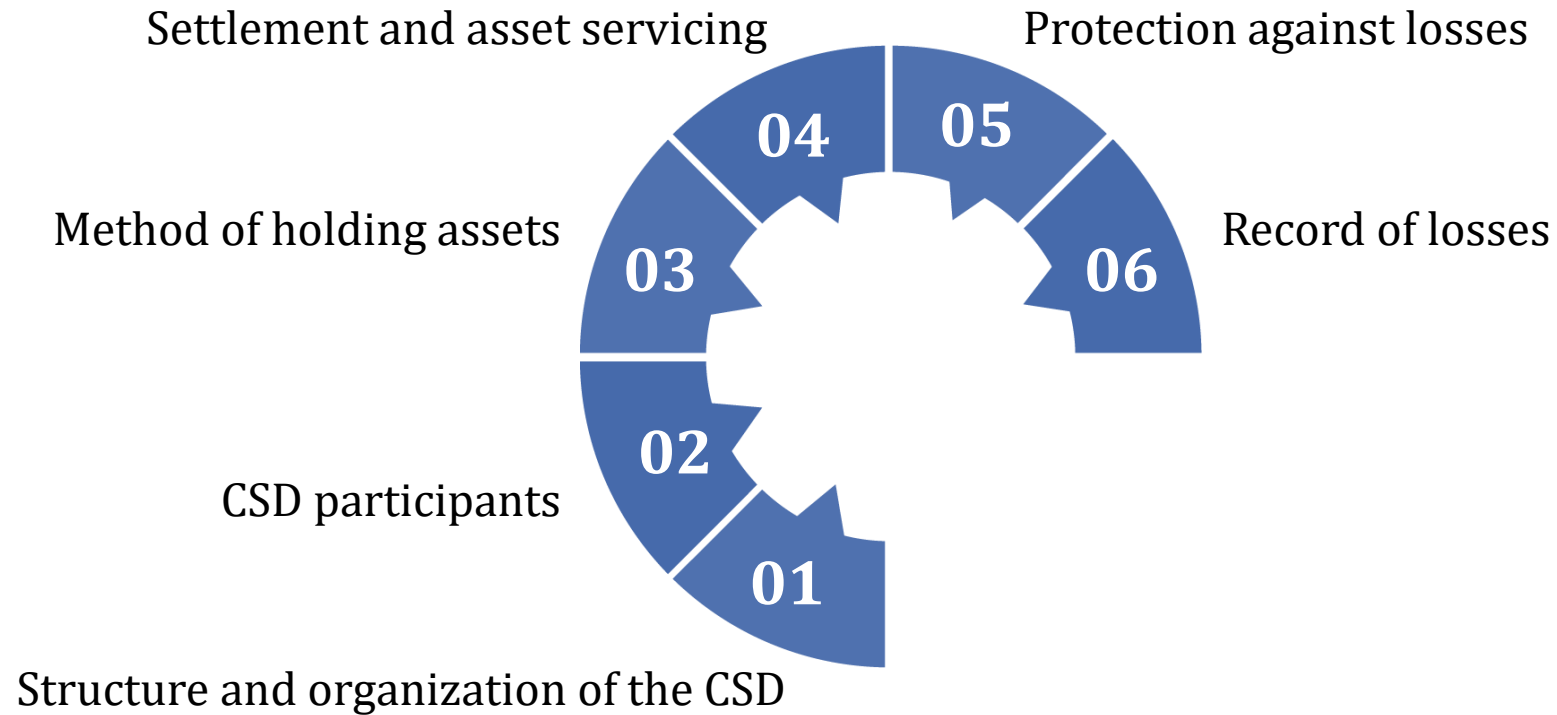


Must maintain a register for the assets held on behalf of each depository participant

Risk Reviews of Market Infrastructure

The AGC requires member custodians to submit 1 consolidated risk report.

These are the components covered in the report:



Settlement Risk

The CISI GSO learning manual has identified 12 sources of trade and settlement risk along with the proposed countermeasure.

| # | Cause | Countermeasure |
|---|--|--|
| 1 | Late receipt of trade data or trade instructions | Maintain agreed operating procedures. Employ electronic communication link. |
| 2 | Inability to verify instructions from investment manager | Ensure timely pre-matching of settlement instructions. Employ standardized/automated electronic data flow. Use trade matching systems. |
| 3 | Inaccurate/outdated pricing feeds for listed and unlisted securities | Periodically check prices against a range of information sources and market vendors supplying pricing data. |
| 4 | Acting on an unauthorized instruction | Ensure instructions carry valid signatures, or other authorised security procedures. Accurate and up-to-date documentation must be maintained by the custodian on who is authorised to give client instructions. |
| 5 | Transaction with a failing counterparty | Use of CCP that assumes counterparty risk through novation. Send periodic analysis of settlement failures to the client. |
| 6 | DvP settlement infrastructure unavailable | Secure DvP on books of a creditworthy settlement bank. Employ ASDA. With CSDA, positions should be collateralised so that they can be reversed if necessary. |

Settlement Risk

| # | Cause | Countermeasure |
|----|--|--|
| 7 | Late delivery of securities and/or cash | Prompt follow-up of shortfall with counterparty. Initiate compensation claim against defaulting counterparty. Initiate a buy-in of securities. |
| 8 | Failure of trading parties to adhere to market standards/codes of practice | Industry associations and market practice groups to promote the use of industry standards and global best practice. Potential use of price discounts for settlement messages communicated by ISO standard. |
| 9 | Lack of reliable and timely dividend/corporate action information | Use multiple information sources to collect information on forthcoming corporate events. Sub-custodians should be responsible for providing timely information of client entitlements. |
| 10 | Delayed income collection | Dividend, interest and redeemable principal should only be credited on due date if timely payment is expected from issuer. Provision should be made in the custody contract to allow credit to be reversed if funds are not actually received from the issuer. |
| 11 | Inaccurate or late reporting to client | Need to implement improvements in reporting system. Need regular reconciliation of predicted with actual positions. |
| 12 | Clients' instructions not implemented or implemented incorrectly | Four-eyes principle involving checking instructions by another person. Forward value payment or delivery instructions to be held in a diary system, which is to be reviewed daily. |

Risks Associated with Contractual Relationships

Global Custodians should take the following measures to mitigate the risks of entering into contractual relationships:



Custodians must ensure complete and unambiguous custody agreements with institutional investor clients



Maintain accurate and current documentation to comply with KYC requirements



Custody contracts must be directly signed with investment managers

Risks Associated with Contractual Relationships

When an investment manager is managing assets as an agent on behalf of a beneficial owner, the custody relationship will be between the custodian and the beneficial owner.

Legal contracts between these parties should include:



Clear instructions must specify which directions custodians should accept directly from appointed investment managers.



Set explicit credit limits for FX transactions and overdrafts



Maintain regularly reviews to ensure compliance with investment standards and timely receipt of instructions

Financial services companies must demonstrate robust and efficient internal control procedures

The Institute of Chartered Accountants in England and Wales (ICAEW) provides guidelines to help directors verify the strength of internal controls within their organizations

→ Let's take a look at the AAF 01/20 guidelines...

AAF 01/20 provides the following:

Generic guidance to a service auditor reporting on specific services performed by the service organization

High-level guidance to senior management who prepare the report on the service organisation and clarifies their responsibilities. This includes:



Description of the services provided



The governance arrangements and supporting infrastructure

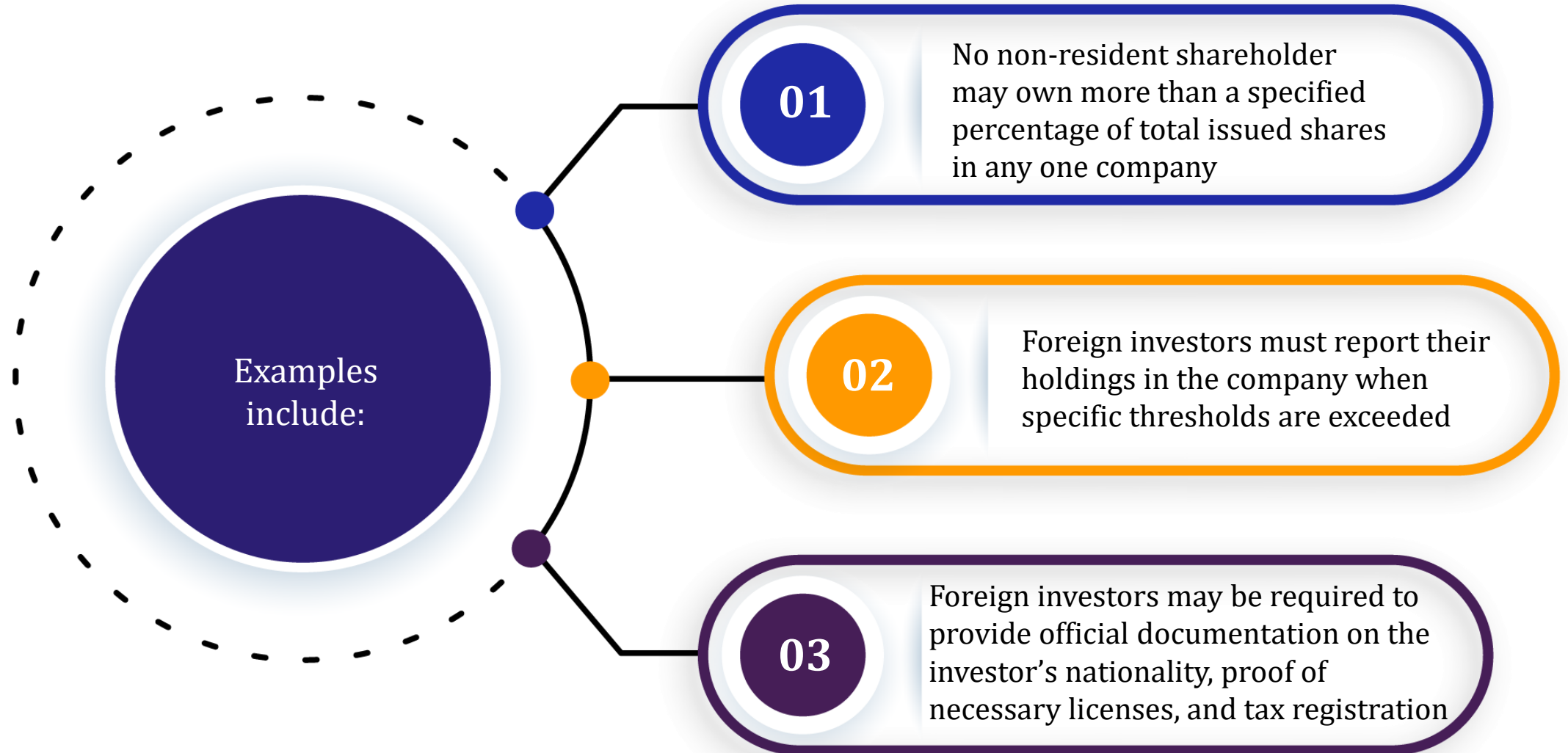


Control objectives and activities with an enhanced management statement

Helps user organisations understand the scope and type of assurance provided in the service auditor's report.

Shareholder Limits and Restrictions on Foreign Investment

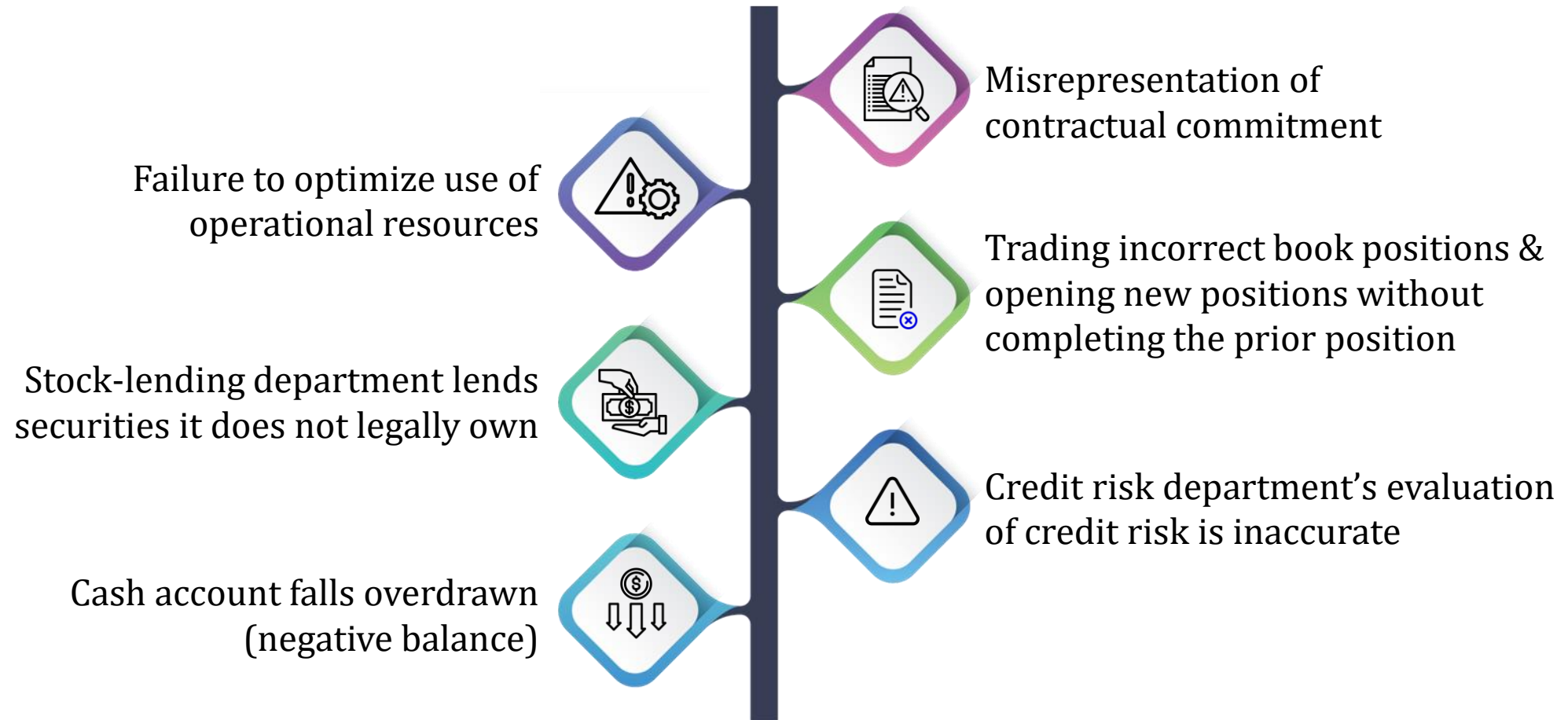
Share ownership on foreign investment may be restricted in some companies or sectors.



*Detailed list available in the CISI GSO textbook

Mitigating Risk Through Reconciliation

Cash and securities reconciliation involves matching internal balances, transactions, and holdings with those held by external providers. Lack of effective reconciliation presents the following risks:



Similarly, a firm will perform a comparable cash reconciliation process for custodian nostro accounts.

Assets and Entitlements

Regular reconciliation of asset holdings also aims to detect:



Unauthorized removal of securities from firm accounts at the custodian



Unexpected receipt of securities



Errors in updating ownership records after transaction settlements.

Financial services face continuous and increasing regulatory reforms. Here is an example discussed previously:

In 2007, MiFID was the first step to creating a more harmonised financial services environment within Europe.

In 2018, this was revised with MiFID II – this affected all stages of the life-cycle of transactions and many consumer/firm-related post-trade requirements.

→ Regulatory changes and reform will continue in the foreseeable future...

Which rule in the US states that investment companies can hold securities with any foreign custodian that meets the SEC's criteria?

- A. AAF 01/20
- B. Rule 17f5
- C. Rule 206(4)-2
- D. Rule 17f7

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Finally.....Thank you & Good Luck

