CENTRAL DEPOSITORY & SETTLEMENT CORPORATION

Invested in Progress

SECURITIES LENDING GUIDEBOOK

This guidebook describes CDSC's screen based Securities Lending and Borrowing Model. It contains useful information for investors to consider in making decisions on lending and borrowing of securities.

Contents

List of Acronyms

ATS	Automated Trading System
CBK	Central Bank of Kenya
CDA	Central Depository Agent
CDS	Central Depository System
CDSC	Central Depository & Settlement Corporation
CMA	Capital Markets Authority
NSE	Nairobi Securities Exchange
SLB	Securities Lending and Borrowing

I. Introduction

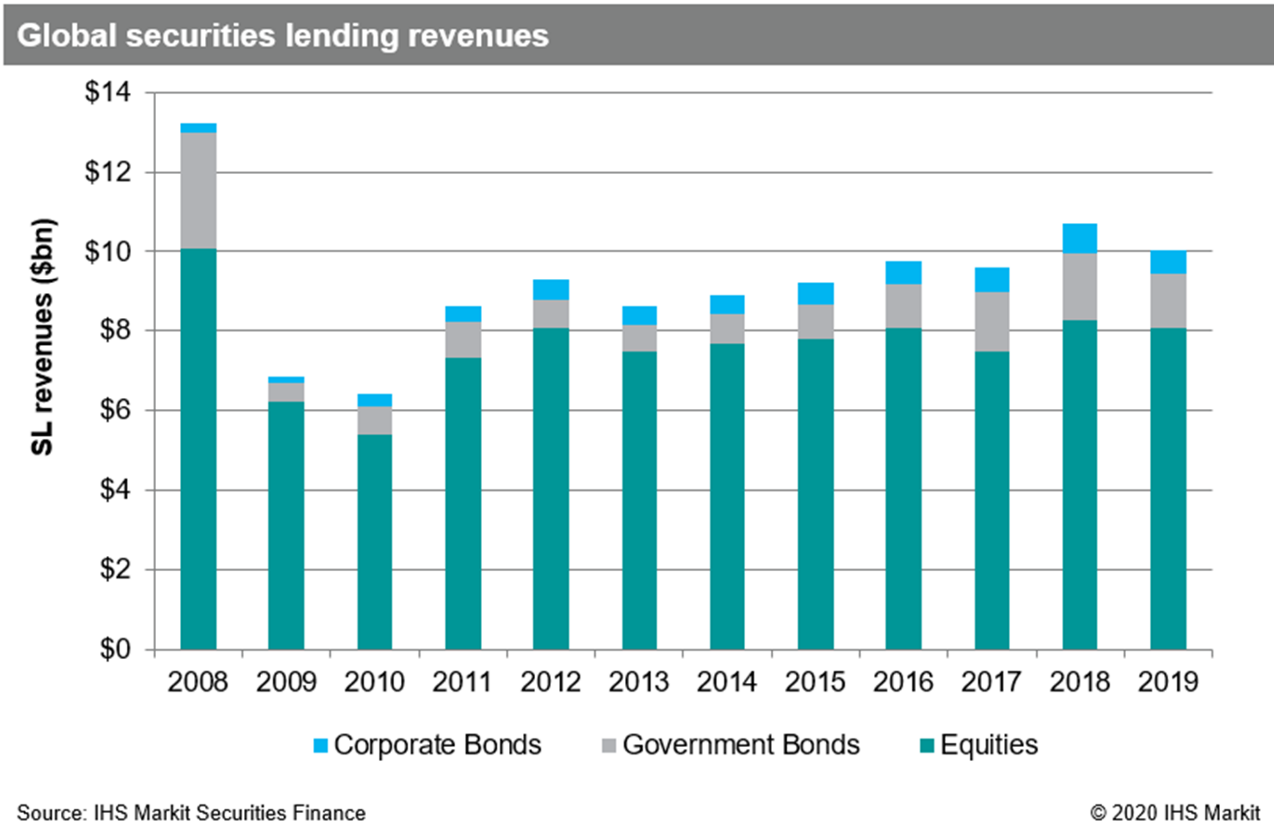
Securities lending and Borrowing (SLB) is the temporary transfer of securities from one party, the lender, to another, the borrower, with a simultaneous agreement to return the securities either on demand or at a future date. The lender can be any individual or an institution who hold a substantial number of shares on a long term basis. The lender would therefore loan out their securities for a specific period and earn a cash return.

For institutional investors, securities lending is a good instrument, with a low risk profile, for generating extra returns on securities that will remain in a portfolio for a longer period. It is considered to have a low risk profile because the transactions are carried out between market parties in a fully collateralized manner. By lending these securities, pension funds and other lenders receive extra income, while still maintaining the right to recall the securities at any time.

Securities lending has traditionally acted as a lubricant for the financial markets. In addition, securities lending helps market parties with their risk management and creates greater liquidity in the market where securities lending and borrowing is available.

In 2019, the global revenues from SLB transactions stood at $10.1B[1]. The value of the securities on loan as at September 2019 was $2.4 Trillion with the USA accounting for approximately 55% of this value. Government bonds (45%) and equities (43%) account for the majority of the securities on loan globally.

[1] https://ihsmarkit.com/research-analysis/securities-lending-2019-snapshot.html



II. Current situation

In Kenya, Institutional investors like Pension Funds hold a significant part of their portfolio in Equities. Due to the long-term nature of pension liabilities, this type of investors are not speculators and as such hold the securities for long periods. During these periods, when the securities are held, they may earn dividends and other corporate returns but the value of the securities rises and falls in relation to market prices. As long as the securities lie in the investors' accounts they cannot earn any additional income.

This is due to the fact that previously Securities Lending and Borrowing had not been implemented in Kenya. The technical platform and the regulations to govern this process were not in place making it difficult for any transactions to be carried out.

III. The solution

Securities Lending and Borrowing (SLB) has recently been introduced in Kenya. There are broadly two models of SLB: the Bilateral model and the Screen - Based model. The Bilateral model is where the lender independently looks for another party to whom they can lend their securities. In this model, the lender and the borrower sign a contract (bilateral agreement) and then exchange the collateral and the securities. The two parties are required to do due diligence on each other to ensure the counter party will be able to meet their obligations as stipulated in the contract because in the Bilateral model there is no central entity to guarantee settlement of the transactions.

The Screen based model of SLB is where lending and borrowing requests/orders are captured on a platform in an automated system by the SLB agents on behalf of their clients or on their own behalf. The system then matches the transactions according to the specified criteria. This process is similar to trading in Equities where the broker captures the bids and offers, which are then automatically matched on the ATS. In this case, the lender does not have to look for borrowers to lend their securities to. The framework for the Screen Based model is described in detail below.

CDSC has been approved by the Capital Markets Authority to facilitate Securities Lending and Borrowing using the Screen Based Model. CDSC is the central party that will guarantee settlement of all transactions. This will be achieved through the process that has been set out in the Central Depository (Securities Lending and Borrowing) Procedures as highlighted in this document, and will be overseen by the various risk mitigation measures that have been put in place as outlined in the risk management section of this document.

IV. Value Proposition

Lender's Perspective

In a lending transaction, the lender will be able to quote the price at which they want to lend their securities. This is called the **lending fee** and is calculated as a percentage of the value of the securities lent out.

$$\mathbf{L= \{(S \times P)\ (R \times d/365)\} - C}$$

Where:

L = Lending Fee/Return to Lender (Net)

S = Number of shares lent

P = Current price of the shares lent (trading price at the beginning of the contract)

R= Lending rate (in %) p.a

d = Number of lending days/lending duration/contract period

C=SLB commissions & levies (16%)

For example if the lender wants to lend **1 million Safaricom shares** and the shares are trading at **Kes 28** at the NSE for a period of **90 days**, the lender can charge a lending fee of **2% p.a** which would then translate to **Kes 115,989 over the 90 days period** as shown below:

Therefore:

(S X P) **(**1,000,000 X 28) = **28,000,000**
(R X d/365) Lending rate for 90 days (2% X 90/365) = **0.49315%**
{(S X P) (R X d/365)} 28,000,000 X 0.49315% = **138,082**
C = 16% X 138,082 = **22,093**
L = 138,082 – 22,093 = **115,989**

The lender can however define a higher or lower lending fee depending on what the lender wants to achieve from the transaction and the market demand in terms of demand for borrowing.

The table below shows scenarios derived from actual data with an assumption that the lender charges 5% lending fee p.a. The net earnings depict what the lender would have earned by lending their shares for the specified number of days.

SECURITY	Borrowing Date	No. of Days Borrowed	No of Units	Value of Shares (Kes)	Lending fee (Kes)	Commission& Levies (Kes)	Net Earnings (Kes)
ABSA	19/02/2019	91	587,160	6,722,982	83,807	13,409.13	**70,398**
	20/01/2020	30	587,160	7,867,944	32,334	5,173.44	**27,161**
EQUITY	19/02/2019	365	1,506,240	63,563,328	3,178,166	508,506.62	**2,669,660**
	20/01/2020	30	1,506,240	77,947,920	320,334	51,253.43	**269,080**
KCB	19/02/2019	181	1,070,240	45,645,736	1,131,764	181,082.26	**950,682**
	19/02/2019	91	1,070,240	45,645,736	569,008	91,041.36	**477,967**
NCBA	19/02/2019	365	155,300	6,219,765	310,988	49,758.12	**261,230**
	19/02/2019	91	155,300	6,219,765	77,534	12,405.45	**65,129**
STANCHART	19/02/2019	365	5,100	1,020,000	51,000	8,160.00	**42,840**
	19/02/2019	181	5,100	1,020,000	25,290	4,046.47	**21,244**
COOP BANK	19/02/2019	365	524,440	7,971,488	398,574	63,771.90	**334,802**
	19/02/2019	91	524,440	7,971,488	99,371	15,899.30	**83,471**
SCANGROUP	19/02/2019	365	746,720	9,595,352	479,768	76,762.82	**403,005**
	19/02/2019	181	746,720	9,595,352	237,912	38,065.94	**199,846**

Borrower's perspective

Borrowing cost formula

- The cost of SLB transaction will be borne by the borrower
- SLB cost to the borrower therefore will be as follows;

- ❑ **Lending Fee (Gross) + 0.55% of Borrowed Value + Equity Mkt Trading Levies**

Where;

Lending Fee (Gross) will be = **{(S x P) (R x d/365)}**

Equity Market Trading Levies **= 1.8%**

Borrower Transaction Economics (Exemplified)

In the earlier example if the borrower borrows **1 million Safaricom shares** with shares trading at **Kes 28** and immediately sells in the secondary market at same price. Contract period of **90 days** and the lending fee of **2% p.a**, then the borrower transaction economics will look as follows:

- ❑ **Borrowing cost will be** {(1,000,000 X 28) X (2% X 90/365)} + {(0.55% x 90/365) X 28,000,000}
- ❑ 138,082 + 37,973 = **176,055**

This therefore means total borrower's cost will be (176,055+ Trading Transaction Levies)

If the share price falls by **Kes 2** to **Kes 26** within the contract period the following economics will apply to the borrower;

- ❑ Cost of buying back the shares to return to the lender 1,000,000 X 26 = **26,000,000**
- ❑ Transaction Gross Profit will therefore be 28,000,000 - 26,000,000 = **2,000,000**
- ❑ Net Profit = **2,000,000 – [176,055** + {**Transaction levies at NSE (28,000,000 X 1.8% + 26,000,000 X 1.8%)** }**]**

- Therefore Net Profit will be **1,823,945 – {504,000 + 468,000}**

- **Net Profit = <u>Kes 851,945</u>** Excluding interest earned from cash collateral

V. Benefits of the Screen based model of SLB

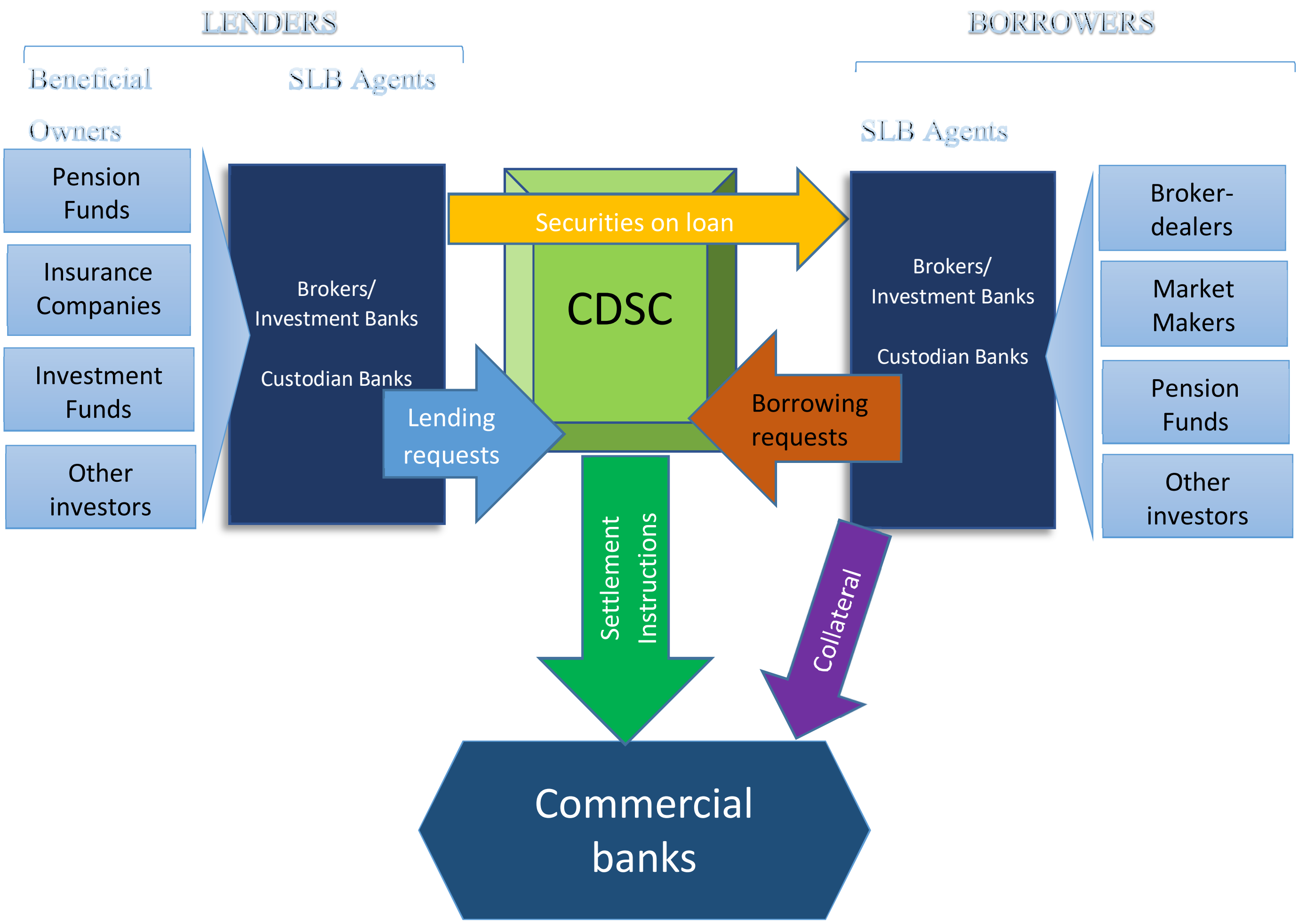
Benefits to the Lender

1. The lender will receive income from the securities they lend out, without having to liquidate their portfolio.
2. The lender does not have to look for borrowers in order to lend securities since the agents are able to see all the borrowing and lending requests on the platform.
3. The lender does not have to manage the collateral since CDSC will perform this function.
4. The securities are transferred automatically by the system when a transaction is matched as well as when the securities are due for return without requiring the signing of physical documents.
5. The lent securities will still remain in the books of the lender and a statement of the lender's account will reflect the shares that have been lent out.

Benefits to the Borrower

1. Additional income to the borrower.
2. Supports trading and investment strategies e.g. short selling.
3. Screen based model ensures that borrowers can view securities on offer to enable them to quickly take advantage of opportunities that arise.
4. No counterparty risk as transactions are guaranteed by CDSC.
5. Immediate automated transfer of securities ensures that borrowers receive securities in a timely manner.

VI. Securities Lending and Borrowing Framework



A. Securities Lending and Borrowing Agents

i. Eligibility of Agents

According to the Capital markets (Securities Lending, Borrowing and Short Selling) Regulations 2017, Securities lending and borrowing activities may only be carried out by regulated persons and any other category of persons specifically identified for that purpose by the Capital Markets Authority.

CDSC has formulated the Central Depository (Securities Lending and Borrowing) Rules under which the process for the appointment of SLB Agents has been spelt out. Interested entities (Central Depository Agents) are required to apply for appointment as SLB Agents, and meet the set out criteria and requirements.

CDSC has agreements in place with the SLB Agents to govern the interactions on SLB transactions.

ii. SLB Agents to act as intermediaries to lenders and borrowers

SLB Agents are required to carry out transactions on behalf of their clients. They may also effect transaction for their own books.

The Agents will be required to have agreements in place with their clients before they carry out any lending or borrowing transactions on their behalf. In terms of process, SLB Agents will be able to mark their clients as eligible for lending and borrowing in the CDS, thus enabling the client's account to undertake SLB transactions.

B. CDS accounts to be used for SLB transactions

The normal CDS accounts will be used for SLB transactions. This is to enable the following:

- Ensure that the temporary transfer of ownership of securities will only occur when an SLB transaction is concluded and securities move from the lender to the borrower;
- Enable CDAs and their clients track the movement of the securities;
- Enable calculation of the SLB obligations in the system; and
- Enable the transfer of securities back to the lenders account upon expiry of the SLB contract.

C. Eligible Securities for SLB

According to Rule 4 of the Capital Markets (Securities Lending, Borrowing and Short Selling) Regulations 2017, the Capital Markets Authority shall prescribe the criteria for the identification of securities that are eligible for SLB transactions. CMA has for the time being, prescribed the securities on the NSE 20 Share Index as reviewed by the Securities Exchange from time to time as the eligible securities for SLB. These securities have been marked as allowed for SLB in the CDS system, thus allowing them to participate in securities lending and borrowing.

If a security was previously marked as allowed and is then changed to not allowed, all transactions that had taken place on that security will remain validly in place until they are concluded. However, it will not be possible to capture any new SLB transactions for that particular security.

D. SLB Transactions

i. Capturing SLB requests

a. SLB Agents will be required to capture lending requests in the CDS (only SLB Agents can capture lending requests on the CDS, an investor cannot do so directly). The CDS will **confirm availability of securities** to be lent and then submit the request to a virtual lending pool. The securities submitted for lending will be blocked in the lenders account and will not be available for any other transactions.

b. The SLB Agents will capture borrowing requests in the CDS (just like lending requests, only SLB Agents can capture borrowing requests on the CDS, an investor cannot do so directly). The system will **confirm availability of collateral** before admitting the borrowing request. When the request is approved, the collateral provided by the borrower will be blocked.

c. All SLB agents will be able to view all pending lending and borrowing requests.

d. All requests will have an expiry date upon which they will be cancelled automatically and the Agent will be required to capture the requests again. The expiry date will be indicated by the SLB Agent user while capturing the request in the CDS system.

ii. Matching SLB Requests

The system will automatically match the borrowing and lending requests according to set criteria. The criteria includes the following:

a. Security

b. Quantity
c. Lending fee
d. Term/Duration.

Once an SLB transaction is matched, the CDS system will automatically transfer the securities from the lender's account to the borrower's account and commit the collateral that had earlier been blocked. All concerned parties will receive the relevant notifications once the transfer of securities and commitment of collateral has happened.

iii. Amending or Cancelling SLB Requests

SLB Agents will be able to amend or cancel requests that have either not been matched or are partially matched. Any changes to a partially matched request will only apply to the unmatched quantity.

When an unmatched borrowing request is cancelled the collateral that had been blocked will be released. When the quantity is amended the collateral will either be blocked or released when the quantity is either increased or reduced respectively.

When an unmatched lending request is cancelled the Securities that had been reserved will be released. When the quantity is amended the securities will be reserved or released accordingly.

E. Return of securities before the due date

Either the borrower or the lender will be able to request for an early return of the securities, that is return before the due date of the transaction. The SLB Agent will request for the early return in the system by changing the return date to an earlier date. The lender is required to give the borrower a **notice period of 14 days** when requesting for early return. The borrower may return the securities at any time.

F. Settlement of SLB transactions

SLB transactions will settle on the due date or the next business day if the due date is either a weekend or a holiday. The system will send notifications in advance to the parties concerned informing them of the approaching due date.

The borrower will be required to have the securities in his CDS account on the morning of the due date. The system will calculate the shares that are due for return in case there was a bonus or split during the life of that SLB transaction. The securities will be transferred from the borrower's account back to the lender's account.

The system will simultaneously calculate all the obligations due to the lender which will include:

- The lending fee
- Any dividends paid during the period

CDSC will generate settlement reports and avail them to the SLB Agents. The Agents will be required to avail funds in their settlement accounts by the morning of the settlement date. These are funds for the settlement of the lending fee and any other obligations such as dividends that are due to the lender.

CDSC will send instructions to the settlement banks to transfer funds between Agents accordingly. Funds movement between settlement banks will take place at the Central Bank of Kenya (CBK).

G. Corporate Actions and Voting

The basic premise underlying securities lending is to make the lender "whole" for any corporate action event (such as a dividend or bonus issue) by putting the borrower under a contractual obligation to make equivalent payments to the lender, for instance by "manufacturing" dividends.

CDSC will ensure that the lenders receive all dividends, split or bonus shares that they are entitled to as a result of a corporate action event that takes place during the life of the SLB contract.

A shareholder's right to vote as part owner of a company cannot be manufactured. When securities are lent, legal ownership and the right to vote in shareholder meetings passes to the borrower, who will often sell the securities.

The lender however has the right to recall securities and can therefore use this right to restore their holdings and voting rights. Lenders can also use this right to restore their holding and participate in a rights issue.

H. SLB Collateral

The collateral allowed for SLB transactions is:

(a) Cash in Kenya shillings;
(b) Bank Guarantee;
(c) Government Securities; or
(d) Other category of security as may be specified by the Capital Markets Authority.

CDSC will have arrangements in place with CBK to have any government Securities that are provided as collateral blocked in favor of CDSC.

CDSC has collateral accounts with commercial banks where all the collateral submitted for SLB transactions will be held. CDSC will reinvest cash collateral and charge a management fee in accordance with the SLB Guarantee Fund Investment Policy.

All interest earned by the cash collateral will belong to the owner of the collateral. Borrowers will provide collateral through their SLB Agents as and when they need to borrow securities. The collateral provided must be at least 100% of the value of securities borrowed. An additional 10% margin must also be provided.

The borrowed securities and any collateral that is provided in terms of securities will be marked to market daily to ensure that the collateral provided is sufficient to cover the borrowed securities at all times. Where the collateral provided falls below the value of borrowed securities additional collateral will be blocked. Where a borrower has exhausted all the collateral provided they will be requested to provide additional margins through the SLB Agents to cover the exposure.

I. SLB Reports

The system will provide reports per SLB Agent showing all the SLB transactions they are involved in. These reports will also assist the SLB Agents in reporting to the Authority and any other relevant stakeholders.

The client’s statement will have a section to show securities which have either been borrowed or lent. This will enable the client to keep track of their securities.

The system will also generate settlement reports for SLB transactions.

VII. Rules and Procedures

From the above framework CDSC has drafted the following documents which can be accessed from the CDSC Website through the following link;

https://www.cdsckenya.com/legal-framework/rules-and-procedures:

1. Central Depository (Securities Lending and Borrowing) Rules
2. Central Depository (Securities Lending and Borrowing) Procedures

VIII. Risk Management

CDSC has identified the following key risks posed to the lenders and has put in place various mitigations to address them.

1) Counterparty Risk

This is the risk that the borrower will fail to deliver securities at the end of borrowing term or on call by the lender, or fail to pay the margin calls, or pay the lending fees and any manufactured returns on the lent security or that the lender fails to return borrowers' collateral if in their custody.

To mitigate this risk:

- Daily mark-to-market of the lent securities shall be done automatically by the CDS system with daily margin calls where the value of the lent securities is less than the collateral provided;
- The borrower shall provide Collateral of 110% of the value of the securities lent. The margin of 10% shall be maintained throughout the period of lending;
- CDSC shall ensure that the borrower has posted adequate collateral before the lent securities can be transferred from the lenders account. This shall be achieved through DVP-3 settlement of the matched SLB orders with simultaneous blocking of collateral and transfer of borrowed securities from the lender to Borrower;
- The lender's securities shall be reserved upon approval of a lending request by CDSC to ensure delivery to the borrower on matching of lending and borrowing orders.
- CDSC to act the Central Party to the lender and borrower to ensure that the obligation to each counterparty is fulfilled.
- A borrower may, request return of excess collateral held by CDSC.
- Where the borrower fails to deliver securities at the end of the SLB contract term or on call by the lender, CDSC shall source for the securities in the open market or through Buy-in and pay using collateral provided by the borrower. In the unlikely instance where the borrower or CDSC

is not able to get securities to the lender, cash equivalent compensation shall be done to the lender to ensure that the lender is made whole;

- CDSC has also set up a Settlement Guarantee Fund to augment the collateral provided by the borrower in case of borrower's default on the lending fees and manufactured returns;
- In case the lender assesses the credit exposure to be high, the lender may terminate the lending agreement before term by giving a notice to the borrower;
- To discourage default on the borrower, imposition of fines and penalties is provided for in the Rules and the agreements;
- Dealing with regulated entities as SLB Agents as provided for in the SLB regulations.
- Cash collateral provided by the borrowers to be held in credit-worthy Tier I commercial banks.

2) Liquidity Risk

The risk that a counterparty cannot meet its obligation when it is due, because of the demand for large quantities of securities or funds that the borrower/lender is unable to meet.

- The Authority has prescribed that only liquid securities (constituents of the NSE20 index) may be lent/borrowed.
- The quality of the collateral required in a securities lending or borrowing transaction restricted to cash in Kenya shillings and Government securities: These are liquid assets.
- SLB regulation restricts reuse of collateral to:
  - in the case of cash, it may be deposited in an interest bearing account;
  - in the case of Government securities, it may be used in overnight repo transactions; or
  - in any other case, it may be used as the Authority may prescribe;
- For SLB contracts which recall option on the lent security, a notice of up to 14 days by the lender is provided for in the procedures to give the borrower adequate time to source for the securities;
- SLB Rules/procedures allows for cash settlement (compensation to the lender) in case of inability of the borrower or CDSC to get securities at the end of the SLB contract or on recall.

3) Operational Risk

Risk that deficiencies in information systems, manual processes or internal controls could result in an unexpected loss to the lenders.

- SLB Rules and Procedures providing the operational framework for SLB are in place and approved by CMA;
- CDSC was admitted into the CMA's Regulatory Sandbox to pilot the screen based SLB.
- The new system ability to support the SLB framework have been tested and noted to be adequate;
- Training and capacity development for staff and participants was conducted and is still ongoing;
- Adequate Information security and business continuity arrangements are in place.
- Indemnification mechanisms by the agents and CDSC are provided for in the SLB Rules and SLB agreements;
- Periodic communication with the SLB parties, their agents and the regulator on SLB transactions including daily reporting on executed SLB transactions.
- CDSC complaints and whistle blowing policies and procedures to report any malpractices on investors' accounts.

4) Market/Price Risk

That the lender will be exposed due to adverse movement of the price of the lent security or non-cash collateral provided.

- The borrower shall be required to provide collateral and margin of 110% of the value of the lent securities. The margin is essential in protecting the lender from the price movements during SLB contract termination on default by the borrower;
- Only collateral with minimal market risk impact shall be accepted. These include cash, bank guarantees and Treasury Bills and Bonds.
- The securities lent and the non-cash collateral provided shall be marked-to-market daily and daily margin call made when the value of collateral is less than the value of the lent securities;
- Regulation also places restrictions on investment of the collateral provided by the borrower to fixed deposits, call account and overnight repos only. This ensures that the collateral is not invested in high risk assets which are affected by daily price fluctuations. This collateral shall be held in tier I commercial banks only;
- The counterparties (lender and borrower) may terminate the lending contract before term if the market is adversely moving against the lender.

5) Legal Risk

This is the risk related to enforceability of the SLB contracts or Unfavorable changes in regulations governing securities lending and borrowing

- Regulations, Rules and Operational Procedures to support the securities lending and borrowing are already in place;
- Market-wide testing of screen-based SLB framework to be done in the CMA's Regulatory Sandbox;
- The Master Agreements are in place (between lender and borrower, Lender/Borrower and the SLB Agent and CDSC and SLB Agents);
- Right of the lender to be compensated for additional cost incurred to reacquire security in the event of a default by the borrower is provided for in the regulations.
- Continuous compliance assessment to be done by CDSC in collaboration with CMA.

6) Residual Risk to the lender

The lender is required to note the following:

- The lender may loss control of the company or take longer to reacquire this control if shares held for strategic purposes cannot be returned by the borrower and compensation is done on cash basis;
- Due to the notice of up to 14 days that the lender is required to give to the borrower in case of termination of a contract before term, the lender may not promptly exploit opportunities available during the notice period;

7) Residual Risk to the Borrower

The borrower is required to note the following:

- Market may go against borrower ;
- There may be increased cost due to manufactured dividend where the borrower has an outstanding SLB contract as at the value date;
- Premature wind-up of contract on recall by lender or default on margin calls means that the borrower may reacquires securities an unfavorable prices than had been anticipated when the contract was held to term;
- Illiquidity of the market when return is due;

IX. Conclusion

CDSC is committed to providing exceptional Securities Lending and Borrowing services in Kenya to all Investors. We aim to enable maximization of returns and control risk by automating the processing of all transactions through the SLB platform.

Since transparency is key in any market, the screen based model offers a program that is transparent, risk controlled and does not impede the investors trading and valuation processes.

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