

# Understanding South African **Financial Markets**

## Chapter 10: The money market



© VAN SCHAIK PUBLISHERS

### Study outcomes

The objective of this chapter is to familiarise you with the basic concepts, the issuing and dealing mechanics, and the most prominent securities traded in the South African money market.

#### *When you have studied this chapter you should*

- be able to identify the principal features of the money market
- know who the main participants in the money market are
- have a basic understanding of the interbank market
- be familiar with the basic mathematical calculations for all types of money market securities



© VAN SCHAIK PUBLISHERS

## Study outcomes

- be able to explain the issuing procedures of Treasury bills
- know how to describe the main features of each of the commonly used money market securities such as Treasury bills, negotiable certificates of deposit, commercial paper, floating rate notes and many more
- understand how repurchase agreements are used by the South African Reserve Bank as well as by the commercial financial sector
- be aware of the legal requirements under which non-banks can issue securities and thereby accept money from the public
- know how and where to find data on money market interest rates and total return benchmarks.

© VAN SCHAIK PUBLISHERS

## Introduction

### *Overview*

- The money market defined and explained
- Technical features associated with the money market
- The interbank market
- Money market mathematics
- The instruments of the money market
- Published money market information

© VAN SCHAIK PUBLISHERS

## The money market defined and explained

*[Figure 1.1 Financial system \(simplified\) \(Textbook page 4\)](#)*

### *Wholesale and retail money market*

### *The purpose of the money market*

### *The participants in the money market*

- Borrowers
- Lenders
- Brokers and dealers

© VAN SCHAİK PUBLISHERS

## The money market defined and explained

### *Characteristics of money market securities*

*[Table 1.2 Financial instruments/securities \(Textbook page 13\)](#)*

- Primary and indirect securities
- Fixed-income (or interest-bearing) securities
- Marketability
- The money market versus the bond market

© VAN SCHAİK PUBLISHERS

## The Strate classification of money market instruments

- The 4 categories

**Table 10.1 The Strate classification of money market instruments (Textbook page 256)**

Security type description	Security type category 1	Security type category 2	Security type category 3	Security type category 4
Bankers' acceptances	BA			
Bills	BL			
Commercial paper bills/ capital project bills	CPB			
Promissory notes	PN	PN		
Treasury bills	TB			
Notes	NOT	NOT	NOT	
Bridging bonds		BB		
Debentures		DEB		
Negotiable certificates of deposit		NCD		
Linked negotiable certificates of deposit			LNCD	
Credit-linked notes			CLN	
Floating rate notes			FRN	
Call bonds				CB
Zero bonds	ZB			

© VAN SCHAIK PUBLISHERS

## The regulatory structure of the money market

### The size of the money market

**Table 10.2 Outstanding amounts in selected rand-denominated money market instruments and government bonds (Textbook page 257)**

	Sep 2011	Sep 2012	Sep 2013
Marketable Treasury bills (TBs)	151 729	160 201	189 686
Bankers' acceptances (BAs)	0	0	0
Land Bank promissory notes (LBPNs)	10 563	19 398	23 066
Land Bank bills (LBBs)	853	758	1 196
SARB debentures (RBDs)	30 262	21 967	7 272
Negotiable certificates of deposit* (NCDs)	399 365	387 765	402 407
Short-term commercial paper** (CP)	35 497	35 285	33 768
<b>Total</b>	<b>628 579</b>	<b>625 717</b>	<b>657 680</b>
National marketable government bonds (by comparison)	964 725	1 141 892	1 329 799

© VAN SCHAIK PUBLISHERS

## Technical features associated with the money market

*Liquid assets and Reserve Bank collateral*

*The implementation of an electronic money market in South Africa*

*Money market securities issued and traded by the SARB*

© VAN SCHAIK PUBLISHERS

## The interbank market

*Standard size of interbank transactions*

- SABOR (South African benchmark overnight rate on deposits)
- Top 20 call rate
- One-day FX rate
- JIBAR (Johannesburg Interbank Average Rate)
- Rand overnight deposit rate (RODR)

© VAN SCHAIK PUBLISHERS

## Money market mathematics

### *Discount instruments*

[F.10.1](#)

[F.10.2](#)

[F.10.3](#)

[F.10.4](#)

[F.10.5](#)

[F.10.6](#)

[F.10.7](#)

[F.10.8](#)

[F.10.9](#)

© VAN SCHAIK PUBLISHERS

## Money market mathematics

### *Interest add-on (or yield-traded) securities*

[F.10.10](#)

- Secondary market calculations

[F.10.11](#)

[F.10.12](#)

- Calculating the (simple interest) annualised yield for the holding period

[F.10.13](#)

[F.10.14](#)

© VAN SCHAIK PUBLISHERS

## The instruments of the money market

### *Treasury bills*

- Treasury bills defined
- History
- Characteristics
  - [F.10.6](#)
  - [F.10.5](#)
  - [F.10.8](#)
- Issuing procedures (primary market)
  - [Box 10.1](#)
- The secondary market
- Redemption



© VAN SCHAIK PUBLISHERS

## The instruments of the money market

### *South African Reserve Bank debentures*

- SARB debentures defined
- History
- Characteristics
- Issuing procedures (primary market)
  - [Box 10.2](#)
- The secondary market
- Redemption of RBDs



© VAN SCHAIK PUBLISHERS



### ***Bankers' acceptances***

- Bankers' acceptances defined
- Bills of exchange defined
- Characteristics of bankers' acceptances
- Dealing mathematics
- The death of the BA



### ***Negotiable certificates of deposit***

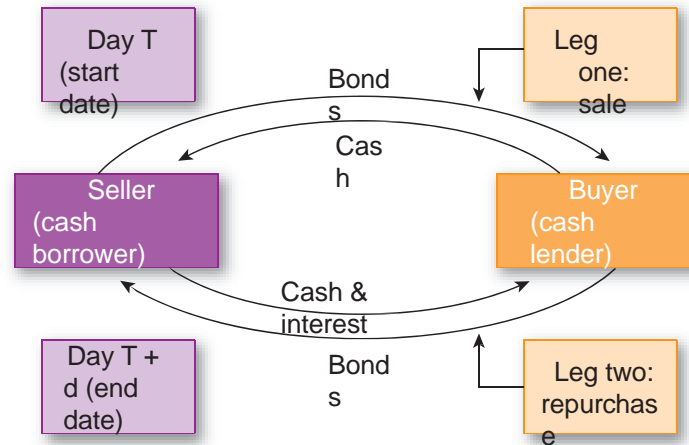
- NCDs defined
- History
- Characteristics
- Variable-rate or indexed NCDs
- Stamp duty
- Limits on a bank's ability to issue NCDs
- Dealing mathematics



## Repurchase agreements

- Repos defined and explained

Figure 10.1 Flows in a repo (Textbook page 284)



© VAN SCHAİK PUBLISHERS

## Repurchase agreements

- Types of repo
- Bonds as underlying instruments
- Regulation and standardisation of repos
- Ownership of collateral
- Collateralised loans
- Securities lending
- Fixed or open maturities
- Manufactured payments
- Margining
- Reverse repos (resale agreements)

© VAN SCHAİK PUBLISHERS

## The instruments of the money market

*Repurchase agreements*

- Repos versus carries
- Types of repo used in South Africa
  - Weekly refinancing repos
  - Calculations [\(F.10.15\)](#), [\(F.10.16\)](#), [\(F.10.19\)](#)
- Longer-term reverse repos
- Repos between the banks and other counterparties (sell/buybacks or carries)
  - Calculations
- Benefits and uses of repos
  - Cash-driven deals
  - Bond-driven deals

© VAN SCHAIK PUBLISHERS

## The instruments of the money market

*Land Bank bills*

- Land Bank bills defined

*Commercial paper*

- Commercial paper defined
- Regulation of commercial paper issues
- Capital project bills
- Asset-backed commercial paper

© VAN SCHAIK PUBLISHERS

### Promissory notes

- Promissory notes defined
- PNs issued by commercial banks
- PNs issued by the Land Bank

### Call bonds

[Table 10.2 Outstanding amounts in selected rand-denominated money market instruments and government bonds \(Textbook page 257\)](#)

### Short-term FRNs

- Medium-term notes
- FRNs defined
- Characteristics of FRNs
- The mathematics of FRN coupon payments ([F.9.7](#)), ([F.10.20](#))
- The methodology of FRN pricing

© VAN SCHAIK PUBLISHERS

## Published money market information

### Benchmark rates

[Figure 10.2 Daily published money market rates \(Textbook page 307\)](#)

Money market				Fixed deposit rates (%)					
	NCD buy	NCD sell	JIBAR	Name	1m	3m	6m	12m	24m
3 M	5,80	5,65	5,58	Absa Bank	4,59	4,61	5,05	5,35	5,50
6 M	6,45	6,30	5,86	African Bank		5,67	6,46	7,16	7,53
12 M	7,18	7,03	6,29	Bidvest Bank	5,10	5,20	5,75	6,80	
Prime overdraft rate			9,00	Capitec Bank			6,00	6,10	6,85
Repo rate			5,50	FNB	4,00	5,10	5,20	5,80	6,25
SABOR			5,36	GBS Mutual Bank		4,90	4,90	6,65	7,00
				Mercantile Bank	5,00	5,20	6,00	6,50	7,00
				Grindrod Bank	5,45	5,55	6,25	6,80	

These rates apply to amounts from R50 000 to R100 000.  
 Source: Personal Trust (021) 689 8975. While all care is taken to ensure accuracy, Personal Trust cannot accept responsibility for errors at source.

Source: Business Day, Tuesday 25 March 2014

© VAN SCHAIK PUBLISHERS

## Published money market information

*Benchmark rates*

**Figure 10.3 Money market rates published by the Reserve Bank  
(Textbook page 307)**

Indicator	Value	Last Period	Movement
Repo rate	5,50	2014-03-20	→
Sabor	5,539	2014-03-19	↑
Overnight FX rate	5,506	2014-03-19	↓
Treasury bills – 91 day (tender rates)	5,70	2014-03-19	→
Treasury bills – 182 day (tender rates)	6,07	2014-03-19	→
Treasury bills – 273 day (tender rates)	6,21	2014-03-19	→
Treasury bills – 364 day (tender rates)	6,34	2014-03-19	→
NCDs – 3 months (closing rates)	5,72	2014-03-19	→
NCDs – 6 months (closing rates)	6,41	2014-03-19	↓
NCDs – 12 months (closing rates)	7,01	2014-03-19	↑
Jibar – 3 months	5,73	2014-03-19	→
Prime lending rate (predominant rate)	9,00	2014-03-20	→

Source: <http://www.resbank.co.za> (available on the SARB website: Links to other indicators, Current market rates)

© VAN SCHAIK PUBLISHERS

## Published money market information

*Benchmark rates*

**Table 10.3: JIBAR (and SABOR) rates published by the JSE on 7 March 2014  
(end of day) (Textbook page 308)**

JIBAR rates report								
From date: 03/03/2014 To date: 07/03/2014								
Date of Rate	JIBAR 1 month	JIBAR 3 month	JIBAR 6 month	JIBAR 9 month	JIBAR 12 month	JIBAR 3-month discount rate	Rand Overnight rate	SARB call rate (SABOR)
04/03/2014	5,575	5,700	6,475	6,775	7,225	5,620	5,280	5,322
05/03/2014	5,583	5,700	6,475	6,767	7,175	5,620	5,280	5,337
06/03/2014	5,600	5,708	6,475	6,750	7,125	5,628	5,280	5,330
07/03/2014	5,600	5,725	6,450	6,692	7,067	5,644	5,280	5,344

© VAN SCHAIK PUBLISHERS

## **Benchmark performance indices**

*Table 10.4 STeFI benchmark values published by the JSE on 7 March 2014 (base date = 1 October 2000) (Textbook page 309)*

Date	Call Deposit index	Three-month Index	Six-month Index	Twelve-month Index	STeFI
04/03/2014	280,441	292,229	299,204	311,867	296,829
05/03/2014	280,479	292,270	299,249	311,916	296,873
06/03/2014	280,518	292,312	299,294	311,964	296,917
07/03/2014	280,556	292,353	299,340	312,013	296,961

