

# BOND MARKETS AND LONG-TERM INTEREST RATES IN NON-EURO AREA MEMBER STATES OF THE EUROPEAN UNION AND IN ACCESSION COUNTRIES

**NOVEMBER 2004** 

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"-" data do not exist/data are not applicable

"." data are not yet available

"..." nil or negligible



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# FOREWORD AND ACKNOWLEDGEMENT

The ECB has an obligation to provide statistical information of the highest quality to the public and this third edition of the publication "Bond markets and long-term interest rates in non-euro area Member States of the European Union and in accession countries" serves to contribute to the performance of this task. This publication aims to inform policy-makers and the general public about recent developments in and the current structure of the national bond markets. As a consequence of the enlargement of the European Union on 1 May 2004 when ten new Member States joined, the coverage of this third edition has been extended to include all thirteen non-euro area EU Member States and the two accession countries, Bulgaria and Romania. Therefore, statistics for Denmark, Sweden and the United Kingdom have been included for the first time.

This publication would not have been possible without significant contributions from and very good cooperation among a large number of colleagues within the European System of Central Banks and at the central banks of the accession countries. I would like to express my thanks to all contributors and reviewers, with a special thanks to the staff of the European Commission (Eurostat) for their cooperation throughout this process.

Frankfurt am Main, November 2004

José Manuel González-Páramo Member of the Executive Board





## INTRODUCTION

#### I BACKGROUND

The fifth round of European Union (EU) enlargement was concluded by the ceremonial signing of the Treaty of Accession for the ten new Member States (Czech Republic, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Slovenia and Slovakia), which took place with the participation of their respective Heads of State or Government and Foreign Ministers in Athens on 16 April 2003. The Treaty of Accession set out the conditions of accession for the ten countries that became members of the EU on 1 May 2004. Negotiations aimed at accession in 2007 are continuing with Bulgaria and Romania.

All ten new EU Member States intend eventually to adopt the euro, once they have achieved a high degree of sustainable economic convergence. This will be assessed on the basis of the "convergence criteria" specified in Article 121 (ex Article 109j) of the Treaty establishing the European Community (the "Treaty") and set out in further detail in Protocol 21, which is attached to the Treaty. Following the introduction of the euro in 11 Member States on 1 January 1999 and in Greece on 1 January 2001, the enlargement of the EU on 1 May 2004 brought the number of Member States that are not yet full participants in Stage Three of Economic and Monetary Union (EMU) to 13. Two of these Member States, Denmark and the United Kingdom, have a special status.

The four convergence criteria specified in the Treaty also apply to the countries that joined the EU on 1 May 2004, and there will be a regular assessment of the Member States' obligations with respect to Stage Three of EMU.

The fourth criterion refers to the durability both of the convergence achieved by the Member State and of its participation in the exchange rate mechanism of the European Monetary System being reflected in the level of long-term interest rates. According to Article 4 of Protocol No. 21 of the Treaty, compliance with the fourth convergence criterion means that, observed over a period of one year before the examination, a Member State has had an average nominal long-term interest rate that does not exceed by more than 2 percentage points that of, at most, the three best performing Member States in terms of price stability. Interest rates shall be measured on the basis of long-term government bonds or comparable securities, taking into account differences in national definitions.

Given the need to produce harmonised longterm interest rate series for convergence reporting purposes, the European Central Bank (Directorate General Statistics) and the European Commission (Eurostat) have, together with the national central banks (NCBs) of the countries involved, identified the representative debt securities or, where necessary, proxies. Where no fully harmonised long-term interest rate statistics (LTIR statistics) are available, careful analyses are needed to determine how closely the available indicators approximate long-term nominal interest rates and whether these indicators can be used for formally assessing compliance with the fourth convergence criterion. The relevant statistics have been released and are updated monthly on the websites of the European Central Bank (ECB)<sup>1</sup>, the European Commission and the respective NCB.

#### LONG-TERM INTEREST RATES FOR PURPOSES OF ASSESSING CONVERGENCE

The wording of the Treaty and Protocol had to be interpreted in statistical terms before it could be applied for the generation of comparable statistics. The harmonised statistical framework closely follows the statistical principles applied in the context of the preparation of Stage Three of EMU. Those principles are presented together with their associated recommendations

1 http://www.ecb.int/stats/money/long/html/index.en.html.

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#### Table Statistical framework for defining long-term interest rates

| Ref. | Concept         | Recommendation  |
|------|-----------------|---|
| 1    | Bond issuer     | The bond should be issued by the central government.  |
| 2    | Maturity        | The maturity should be as close as possible to ten years' residual maturity. Any replacement of bonds should minimise maturity drift.   |
| 3    | Coupon effects  | No direct adjustment.   |
| 4    | Taxation        | Gross of tax.   |
| 5    | Choice of bonds | The applied bonds should be sufficiently liquid. This requirement should determine the choice between benchmark or sample approaches, depending on national market conditions; special feature bonds are to be omitted; the NCBs should keep the ECB and the Commission informed about the choice of bonds. |
| 6    | Yield formula   | The "yield to maturity" ISMA formula 6.3 should be applied.   |
| 7    | Aggregation     | Where there is more than one bond in the sample, a simple average of the yields should be used to produce the representative rate.  |

in the Table above and the subsequent paragraph below. It is understood that the longterm interest rates refer to the interest on bonds denominated in national currency.

The purpose of these principles is to ensure the comparability of statistics of non-euro area Member States, taking into account developments and opportunities in the various national capital markets.

#### 2.1 RECOMMENDATIONS

#### 2.1.1 BOND ISSUER

According to the Treaty, the bonds used for the calculation of the yield for the purposes of the convergence criterion should be "long-term government bonds or comparable securities". Long-term government bonds should always be used for the calculation of yields. Alternative solutions may only be considered if these bonds are not available, e.g. bonds issued by other general government, comparable securities or, if necessary, proxies. This approach is based on the economic assumption that government bonds are the most secure type of bonds. It is therefore reasonable to assume that the prices of these bonds are relatively less affected by risk considerations.

#### 2.1.2 MATURITY

The recommendation with regard to "maturity" is to select bonds with a residual maturity of close to ten years. The maturity should be stable over time, with minimum drifting. Therefore it is recommended that the residual maturity of bonds should be between 9.5 and 10.5 years. In general this method necessitates the regular issue of comparable bonds. However, when choosing the maturity, the structural liquidity of the market must also be considered. If the tenyear segment is not sufficiently liquid, it may be appropriate to choose a different segment close to the agreed maturity range, if the market for this issue is considerably more liquid at that point in time.

#### 2.1.3 COUPON EFFECTS

There is a positive relationship between the coupon and the price, and an inverse relationship between the price and the yield. The extent to which changes in bond prices affect the yield is weighted by the coupon value. If the coupon is significantly different across countries, both the yield and its changes will not be comparable. However, in practice, there is no suitable way of directly adjusting for coupon effects.

#### 2.1.4 TREATMENT OF TAXATION

The complexity of calculating net-of-tax yields can vary considerably according to the method

used and the kind of tax to be netted out. Therefore, gross-of-tax yields should be used in the interest of comparability.

#### 2.1.5 CHOICE OF BONDS

Both the averaging and benchmark methods have their own merits. Average yields calculated through samples are considered to be more stable over time from a statistical point of view. This is because the replacement of bonds in the basket is usually staggered, so that the renewal effects are dampened. However, in a small market, using a sample may not be meaningful, as the range of liquidity would be very diverse. Forcing relatively illiquid securities into a basket would not improve the comparability of the yields.

Benchmark issues have the advantage of being highly liquid, but the risk of maturity drift is greater than with the sample approach and this method necessitates the issue of comparable bonds each year. The criteria for selecting averaging or benchmark bonds depend on the liquidity of the market.

#### 2.1.6 YIELD FORMULA

In view of the need to apply the same formula across all Member States, one single formula is selected which is statistically meaningful and robust and which complies with the recommendations made by the International Securities Market Association (ISMA).

The yield-to-maturity ISMA formula 6.3 is as follows:

$$P = \sum_{i=1}^{n} CF_i * V^{L_i}$$

where

- P = gross price (i.e. clean price plus accrued interest),
- n = number of future cash flows,
- $CF_i$  = i-th cash flow (can be variable),
- $L_i = time in years to the i-th cash flow and$
- V = annualised discounting factor = 1/(1+y)where y is the annualised yield.

The advantages of this formula are its flexibility and versatility. It allows for flows of funds that are not exactly equal and for payment periods of different length. Thus it does not excessively impose characteristics on the bond to be selected.

#### 2.1.7 AGGREGATION

The formula allows for the possibility of adopting a portfolio approach if more than one bond is included in the sample. This is an alternative to taking some form of average of the yields of the bonds, i.e. they can be treated as one series of cash flows and discounted together at the same rate. Nevertheless, simple averaging is recommended as the most suitable approach.

#### 3 BOND MARKETS AND LONG-TERM INTEREST RATES IN NON-EURO AREA MEMBER STATES OF THE EUROPEAN UNION AND IN ACCESSION COUNTRIES

The Monetary, Financial Institutions and Markets Statistics Division of the ECB's Directorate General Statistics and the NCBs of both the non-euro area EU Member States and the accession countries have been cooperating in the field of money, banking and financial market statistics for many years. The respective NCBs provided the material presented in this document. The intention of this publication is to provide an overview of the structure of each country's capital market, focusing in particular on the bond market and interest rates.

The first edition of this report, which was entitled "Bond markets and long-term interest rates in EU accession countries", consisted of 12 national chapters (12 accession countries) and was published by the ECB in June 2002. A second, updated edition of that report was published in October 2003.

The positive feedback was such that the ECB, together with the European Commission (Eurostat) and the NCBs of both the non-euro area EU Member States and the accession countries, agreed to publish a new and extended version of this report, containing information as



at the end of 2003. This new edition, which is entitled "Bond markets and long-term interest rates in non-euro area Member States of the European Union and in accession countries". reflects recent developments related to the enlargement of the EU through the accession of ten new Member States on 1 May 2004, increasing the number of non-euro area EU Member States to 13. Therefore, this edition for the first time provides statistics for Denmark, Sweden and the United Kingdom, in addition to those for the ten new non-euro area EU Member States and the two accession countries. Consequently, the publication now includes 15 national chapters, each of which is divided into five sections. Section 1 covers the size of the debt securities market by original maturity, sector of the issuer and currency of denomination. Section 2 provides an overview of activity in the primary and secondary markets, in terms of the methods for primary placements and the values and numbers of market transactions. This section also provides information on the liquidity of the secondary market. Section 3 focuses on certain features of individual long-term debt securities issued by the general government. Section 4 covers interest rates in order to obtain information on potential proxies (if required). Finally, Section 5 briefly addresses issues related to securities market regulation. Data included in this publication have been reported until the end of September 2004.

As a preliminary introduction to the national reports, two overview charts are presented below. The first chart shows the total amount outstanding of debt securities issued by residents of EU Member States and accession countries at the end of December 2003 (in  $\notin$  millions). The second chart presents the same information in relative terms as a percentage of GDP.

#### INTRODUCTION





ECB



Sources: ECB long-term interest rate statistics. Eurostat (for GDP figures).



PART I

# NATIONAL REPORTS



# I NON-EURO AREA EU MEMBER STATES

## **CZECH REPUBLIC**

#### I MARKET SIZE

#### I.I THE SIZE OF THE NATIONAL DEBT SECURITIES MARKET

The total amount outstanding of debt securities issued by Czech residents was €45,146 million at the end of 2003. Almost 50% of that total amount outstanding (i.e. €21,602 million) was accounted for by Česká národní banka bills (CNB-bills) used as collateral in monetary operations (repos) of Česká národní banka, the NCB (CNB). In the market segment encompassing long-term bonds, the government sector is the dominant issuer. Of the total amount of  $\notin 17,188$  million of long-term bonds outstanding, almost 70% ( $\notin 11,510$  million) were issued by the government sector. The vast majority of all the issues outstanding was denominated in Czech koruna (CZK) as all Treasury bonds and bills as well as all CNBbills were denominated only in CZK.





#### 1.2 EXPECTED ISSUE VOLUME AND MATURITY DISTRIBUTION FOR GOVERNMENT BONDS

The central government issues long-term debt securities and regularly publishes the quarterly issuance calendar. The originally announced amount of Treasury bonds to be issued in the domestic market in 2004 has been reduced from CZK 139 billion to CZK 124 billion (around €3.8 billion) taking into account the planned Eurobond issue. According to the new issuance strategy communicated by Ministerstvo financí, the Ministry of Finance (MoF) in December 2003, a medium-term strategic target is to gradually decrease the share of the total debt accounted for by debt due within one year to between 25% and 30%. The new target band for the modified duration was set at between 3.3 and 4.3 years for 2004.

The MoF is also preparing the first issue of a Czech State Eurobond. Under consideration is a ten-year euro-denominated bond in a total nominal amount of around  $\notin 1$  billion. The issue is expected in mid 2004.

#### 2 ACTIVITY IN THE PRIMARY AND SECONDARY MARKETS

#### 2.1 THE PRIMARY MARKET

#### 2.1.1 ACTIVITY IN THE PRIMARY MARKET

Activity in the primary market has fluctuated over the past three years. The total amount of all debt securities issued was €62,027 million in 2003, compared with €72,246 million in 2002 and €47,867 million in 2001. Short-term debt securities constitute more than 90% of the issues. With minor exceptions, the only active issuers of short-term debt securities are the MoF – issuing Treasury bills mainly for its liquidity management – and Česká národní banka – issuing CNB-bills that are used as collateral in its open market operations. Together, these issues amounted to €57 billion in 2003, €14 billion of which were accounted for by Treasury bills.

The most important issuer of long-term debt securities is the MoF. Almost 80% of all longterm debt securities issued in 2003 were Treasury bonds. The general government has gradually been increasing the amount of bonds issued from  $\pounds 2,334$  million in 2001 to  $\pounds 4,151$ million in 2003. The issues by monetary financial institutions stepped up in 2002, to  $\pounds 788$  million, and remained at  $\pounds 701$  million in 2003. Issues by other sectors fluctuated between  $\pounds 300$  million and  $\pounds 400$  million.

All short-term debt securities have been issued through auctions, as have all Treasury bonds. Data on the methods used to issue securities are not collected, but auctions are estimated to account for 100% in the case of the general government.

#### 2.1.2 AUCTIONS: REGULARITY, FREQUENCY AND PRE-ANNOUNCEMENT

Auctions of Treasury bonds and bills are regularly pre-announced by the MoF for the next calendar quarter. Usually, there are three auctions of Treasury bills and one or two auctions of Treasury bonds per month.

#### 2.1.3 MEASURES (EITHER PUBLIC OR PRIVATE) TO PROMOTE THE FUNCTIONING OF THE PRIMARY MARKET

There are separate groups of primary dealers for auctions of Treasury bills and bonds. The primary dealers have exclusive access to the auctions, in exchange for certain obligations (e.g. subscription, reporting, market making, etc.). A new auction infrastructure has recently been introduced that allows an electronic submission of bids, auction allocation and publication of the results.

The MoF has introduced reverse auctions of Treasury bonds close to maturity (since the

#### **CZECH REPUBLIC**

## Chart 2 Primary market activity for debt securities

#### (gross issuance during the period; nominal amounts)









#### (2b) By sector of the issuer (as a percentage of the total)

non-financial and non-monetary financial corporations monetary financial institutions central government and other general government



(2d) Issuance methods for long-term debt securities in national currency by general government in 2003 (as a percentage of the total)



beginning of 2004), thus promoting the liquidity of other outstanding bonds.

### 2.2 THE SECONDARY MARKET

#### 2.2.1 ACTIVITY IN THE SECONDARY MARKET

Secondary market activity has been decreasing over the past three years. The total daily average

turnover fell from €798 million in 2001 to €463 million in 2003, due to a decline in trading of both short-term and long-term debt securities. The share of trade in debt securities issued by MFIs has slowly gained dominance over that in general government debt securities because of the trend in the short-term market segment where mainly trading in Treasury bills has gradually fallen.

## Chart 3 Secondary market activity for debt securities

(value of transactions; daily averages; nominal amounts)





short-term









(3d) Trading places for long-term debt securities denominated in national currency in 2003 (as a percentage of the total)



Note: Data reported in Charts 3a to 3c are estimates for 2001, 2002 and 2003

In the secondary market for long-term bonds, the daily average value of transactions dropped from  $\notin$ 240 million in 2001 to  $\notin$ 142 million in 2003. Traditionally unmatchable have been general government issues, which account for around 90% of the transactions.

Trading in short-term debt securities is registered by Systém krátkodobých dluhopisů, the Shortterm Bond System (SKD) operated by Česká národní banka. However, all transactions are over-the-counter (OTC) transactions. Long-term debt securities can be registered in (upon approval by Komise pro cenné papíry, the Czech Securities Commission) and traded via the systems of Burza cenných papírů Praha, the Prague Stock Exchange (PSE). Investors can also utilise the services provided by RM-Systém,



#### **CZECH REPUBLIC**

a company authorised by Komise pro cenné papíry as an off-exchange trading organiser. In reality, the vast majority of all transactions in long-term debt securities are "block trades", i.e. OTC trades in which at least one party is a member of the PSE and which is registered (for settlement) in the PSE's trading system.

#### 2.2.2 MEASURES (EITHER PUBLIC OR PRIVATE) TO PROMOTE LIQUIDITY IN THE SECONDARY MARKET

In order to promote liquidity in the secondary market, the MoF decided in 2000 to increase the amounts of Treasury bonds outstanding by reopening existing issues. One of the obligations of primary dealers is to quote liquid government issues in the secondary market, and the market makers contribute their prices to the PSE's government bond fixing on a daily basis.

Repos and reverse repos with short-term debt securities other than those with Česká národní banka are included in Table 2B.1 in the statistical tables in Part 2. These transactions comprised around 74% (in terms of value) of all the transactions with short-term debt securities in 2003 (around 51% of the total value of all transactions).

#### 2.2.3 LIQUIDITY IN THE SECONDARY MARKET

Treasury bonds are generally the bonds traded most in the Czech Republic. The liquidity of all the benchmark securities is quite high (narrow spread, high turnover). Treasury bonds with original maturities of ten and 15 years perform best, with the highest liquidity ratio and a spread similar to that of other Treasury bonds.

#### **3** CALCULATION OF THE YIELD

Yield to maturity is calculated by Česká národní banka from daily official PSE price-list data. The mean of market makers' reference price quotations is inserted as the "clean price" in the ISMA formula 6.3 used for the calculation. No adjustment for coupon effects is performed and the yields are gross of tax.

#### INTEREST RATES

4

#### 4.1 OFFICIAL INTEREST RATES

*Repo rate – two weeks:* the maximum rate at which banks' bids can be satisfied in the CNB's repo tenders. Česká národní banka uses repo tenders as one of its main monetary policy instruments for absorbing surplus liquidity from banks.

*Discount rate:* the rate at which the deposit facility is remunerated. The deposit facility is a non-collateralised standing facility which banks may use for overnight deposits of surplus liquidity with Česká národní banka The discount rate provides a floor for short-term interest rates on the money market.

*Lombard rate:* the rate at which the marginal lending facility is remunerated. The marginal

| Table I | Methodological notes on | the statistical treatment of | secondary market statistics |
|---------|-------------------------|------------------------------|-----------------------------|
|         |                         |                              |                             |

| (cf. Table 2B in the statistical tables in Part 2)   |   |                           |  |
|--|---|---------------------------|--|
| Methodological item  | All debt securities   | Long-term debt securities |  |
| Repos and reverse repos (if available, the percentage<br>of these transactions in terms of the nominal value of<br>the daily averages of transactions) | Included  | Not included              |  |
| Trading in secondary markets abroad  | Not included  | Not included              |  |
| Measures to ensure single counting   | Although the data on transactions were obtained from two different<br>primary sources (data on transactions with short-term debt securities<br>from the SKD, data on long-term bonds from the PSE) the sets of<br>securities covered are different in both cases and no double counting<br>is possible. |                           |  |



#### **Chart 4 Interest rate statistics** (percentages per annum; monthly averages unless otherwise indicated; based on new business) Canital market and bank interest rates Official interest and money market rates repo rate (2 week) 1) 2-year government bond yield ••••• discount rate 1 . . . . . 5-year government bond yield - - - 3-month deposits . . . 10-year government bond yield lending to enterprises lending to households deposits with agreed maturity 2) 10 10 13 13 12 12 9 9 11 11 8 8 10 10 7 9 9 8 8 6 6 7 5 5 6 6 4 4 5 5 3 3 3 2 2 2 2 1 1 1 0 0 0 2000 2001 2002 2003 2001 2002 2003 2000 Source: ECB long-term interest rate statistics.

1) End-of-month rate.

2) Deposits with agreed maturity are based on amounts outstanding. Up to and including December 2001, all time deposits are included in deposits with agreed maturity, i.e. deposits with agreed maturity, deposits redeemable at notice, certificates of deposit, savings deposits, deposits in building saving schemes.

lending facility is a standing facility which banks that have a general repo agreement with Česká národní banka may use to obtain overnight liquidity from Česká národní banka in the form of repos. Owing to a persistent liquidity surplus, banks make minimal use of this facility. The Lombard rate provides a ceiling for short-term interest rates on the money market.

#### 4.2 MONEY MARKET INTEREST RATES

*PRIBOR (Prague Interbank Offered Rate):* the reference value of interest rates on the interbank deposit market, calculated (fixed) from the reference banks' offer quotations for the sale of deposits.

CZEONIA (Czech Overnight Index Average): the weighted average of the interest rates of all unsecured overnight deposits placed by reference banks on the interbank market.

#### 4.3 CAPITAL MARKET INTEREST RATES

Capital market interest rates are the yield-tomaturity of Treasury bonds calculated by Česká národní banka as described in Section 3. For each maturity category, the latest bond issue is selected and is replaced for the calculation at the moment of a new issue with the same maturity.

#### 4.4 BANK INTEREST RATES

Average interest rates of CZK-denominated loans granted by and deposits placed with banks. The data are collected and produced by Česká národní banka from census data on a monthly basis. The breakdown by instrument and sector follows the ECB's definitions and ESA 95 standards. The rates refer to the interest rates agreed individually between banks and their customers, quoted in percentages per annum. Weighting by business volumes is used for averaging. New business rates on deposits

**CZECH REPUBLIC** 

are not collected and new business rates on loans refer to all newly drawn loans (including new tranches of old agreements) rather than to rates on new agreements.

## 5 AUTHORITIES INVOLVED IN BOND ISSUANCE, BOND MANAGEMENT AND SECURITIES MARKET SUPERVISION

- Komise pro cenné papíry (Czech Securities Commission (CSC)), which is the regulatory authority for the capital market.
- Středisko cenných papírů (Prague Securities Centre (PSC)), which is the register of owners of dematerialised and immobilised securities.
- Systém krátkodobých dluhopisů (Shortterm Bond System (SKD)), which is the statutory register of short-term debt securities and the settlement system for the securities recorded therein.
- Ministerstvo financí (Ministry of Finance (MoF)), which represents the Czech Republic as an issuer of Treasury bonds and bills.
- Česká národní banka (Czech National Bank (CNB)), which organises the primary sale, and serves as an agent for the MoF in the issuance, of Treasury bonds and bills, operates the SKD and issues CNB-bills.



## **DENMARK**

#### I MARKET SIZE

#### I.I THE SIZE OF THE NATIONAL DEBT SECURITIES MARKET

At the end of 2003, the overall size of the debt securities market in Denmark, as measured by the total amount outstanding, was  $\notin 377,789$  million, representing 201% of GDP. The vast majority of these securities ( $\notin 270,067$  million or 72%) was issued by the monetary financial institution

(MFI) sector, followed by the general government sector ( $\notin$ 92,216 million or 24%) and the non-financial and non-monetary financial corporations sector ( $\notin$ 15,505 million or 4%).

Long-term debt securities in Denmark represented around 95% of the total amount outstanding in the market and only 5% were short-term debt securities. With regard to the central government and other general government sector, short-term debt securities issued in



#### DENMARK



national currency accounted for 12% of the total issuance by this sector. The remaining 88% of the total represented long-term bonds. A proportion of 61% of total issues outstanding in this sector had an original maturity of over ten years, whereas 15% had an original maturity of five years or more, but less than ten years. The remaining 12% of the total had an original maturity of more than one year, but less than five years.

#### 1.2 EXPECTED ISSUE VOLUME AND MATURITY DISTRIBUTION FOR GOVERNMENT BONDS

The domestic borrowing requirement for 2004 is DKK 86 billion and is financed through the issuance of fixed-rate bullet loans. It is the intention, seen for the year as a whole, to finance approximately 40% of the borrowing requirement in the two-year maturity segment, 20% in the five-year maturity segment, and 40% in the ten-year segment.

The net financing contribution from Treasury bills in 2004 is expected to be around zero, depending on auction demand and market conditions.

The foreign borrowing requirement for 2004 has been covered by the issuance of a  $\notin 2.1$  billion bond in the five-year maturity segment.

#### 2 ACTIVITY IN THE PRIMARY AND SECONDARY MARKETS

#### 2.1 THE PRIMARY MARKET

## 2.1.1 ACTIVITY IN THE PRIMARY MARKET

In 2001 the total value of the gross issues of debt securities amounted to  $\notin 103,570$  million in nominal terms. This amount increased to  $\notin 109,532$  million in 2002 and to  $\notin 148,248$  million in 2003.

In 2001 the total value of debt securities in the economy issued by the central government and other general government sector amounted to €15,264 million in nominal terms. This amount increased to €18,731 million in 2002 and decreased to €12,863 million in 2003.

Issues of debt securities by the MFI sector accounted for the largest proportion of primary issues. Issues by this sector represented 75% of the total in 2001, 76% in 2002 and 86% in 2003. Issues by the central government and other general government sector represented 15% of the total in 2001, 17% in 2002 and 9% in 2003. The contribution of the non-financial and non-monetary financial corporations sector to the primary market for debt securities was relatively small. Issues by this sector represented 10% of the total in 2001, 7% in 2002 and 5% in 2003.

Long-term debt securities in national currency, issued by the central government and other general government sector, have been offered to the public via opening auctions and subsequent tap issuances in two-, five- and ten-year "onthe-run securities".

#### 2.1.2 AUCTIONS: REGULARITY, FREQUENCY AND PRE-ANNOUNCEMENT

Treasury bills (T-Bills) are issued at monthly auctions, normally held on the penultimate banking day of each month. Prior to the auction, Danmarks Nationalbank announces the auction on behalf of the government via the Copenhagen stock exchange.

Mortgage credit institutions' issues of bonds to finance adjustable-rate loans are placed on the market through yearly auctions held in December.

#### 2.1.3 MEASURES (EITHER PUBLIC OR PRIVATE) TO PROMOTE THE FUNCTIONING OF THE PRIMARY MARKET

A Primary Dealer System for Danish government securities was launched in connection with the establishment of electronic trading in Danish government securities on MTSDK in November 2003. The system obliges a number of banks, the primary dealers, to quote current bid and ask prices within predefined spreads and amounts. The main



#### DENMARK

## Chart 2 Primary market activity for debt securities

#### (gross issuance during the period; nominal amounts)

#### (2a) Total gross issuance (€ millions)



(2c) By original maturity for the general government sector (as a percentage of the total)



privilege is the right to purchase government securities on issuance. Furthermore, the primary dealers are counterparties in the central governments buy-back transactions.

For further information, see Danish Government Borrowing and Debt 2003, chapter 9, on www.nationalbanken.dk.

#### (2b) By sector of the issuer (as a percentage of the total)

non-financial and non-monetary financial corporations
 monetary financial institutions

central government and other general government



(2d) Issuance methods for long-term debt securities in national currency by general government in 2003 (as a percentage of the total)



#### 2.2 THE SECONDARY MARKET

#### 2.2.1 ACTIVITY IN THE SECONDARY MARKET

There are no reliable estimates of secondary market activity on non-regulated markets. Therefore, both the figures in chart 3 and the comments in this section refer only to secondary market activity on the regulated



ECB

market, as published by the Copenhagen Stock Exchange (CSE). The figures published by CSE include trades directly on the CSE and trades on the trading platform MTSDk.

Most of the debt securities traded in the secondary market in Denmark in the last three years were issued by the MFI sector and by the central government and other general governments sector. Trades in debt securities issued by the MFI sector accounted for around 70% of long-term debt securities traded in the economy.

A distinction between short-term and long-term debt securities in the statistics on secondary market activity published by the CSE is not directly available. However, for debt securities issued by the government sector, the figures published by the CSE allow an approximation of trades in short-term and long-term securities. According to this approximation, 92% of all trades in government debt securities in 2003 were trades in the long-term segment and only 8% were trades in the short-term segment.

All debt securities issued by the MFI sector and traded on the CSE are long-term debt securities.

#### 2.2.2 MEASURES (EITHER PUBLIC OR PRIVATE) **TO PROMOTE LIQUIDITY IN THE SECONDARY MARKET**

The market making obligation for primary dealers ensures a certain turnover in

government debt securities. Furthermore, the objective is total amount outstanding of at least DKK 35 billion in the case of two and five-year on-the-run issues and at least DKK 60 billion in that of the 10-year on-the-run issue before they are replaced.

#### 2.2.3 LIQUIDITY IN THE PRIMARY AND SECONDARY MARKETS FOR GOVERNMENT BONDS

The liquidity of the secondary market for government bonds, measured as the share of total secondary market activity in the total amount outstanding, amounted to 308% in 2002 and to 299% in 2003, respectively.

#### 3 **CALCULATION OF THE YIELD**

With regard to the calculation of the long-term interest rates used for the purpose of assessing convergence the same formula is used across all EU Member States.

As mentioned in the introduction of this publication, one single formula was selected which is statistically meaningful and robust and which complies with the recommendations made by the International Securities Market Association (ISMA).

| Table   Methodological notes on the statistical treatment of secondary market statistics   |  |                           |  |
|--|--|---------------------------|--|
| (cf. Table 2B in the statistical tables in Part 2)   |  |                           |  |
| Methodological item  | All debt securities  | Long-term debt securities |  |
| Repos and reverse repos (if available, the percentage of<br>these transactions in terms of the nominal value of the<br>daily averages of transactions) | Not Included   | Not Included              |  |
| Trading in secondary markets abroad  | Not included   | Not Included              |  |
| Measures to ensure single counting   | The CSE has ensured that double counting of reported trades<br>between members of the CSE is excluded when the figures listed in<br>Table 2B.1 are compiled. |                           |  |





#### DENMARK

## Chart 3 Secondary market activity for debt securities

#### (value of transactions; daily averages; nominal amounts)





(3c) By original maturity for the general government sector (as a percentage of the total)







non-financial and non-monetary financial corporations

monetary financial institutions

(3d) Trading places for long-term debt securities denominated in national currency in 2003 (as a percentage of the total)

(3b) By sector of the issuer (as a percentage of the total)

100

90

80

70

60

50

40

30

20

10

0

Data are not collected



The yield-to-maturity ISMA formula 6.3 is as follows:

$$P = \sum_{i=1}^{n} CF_i * V^{L_i}$$

where

- P = gross price (i.e. clean price plus accrued interest),
- n = number of future cash flows,
- $CF_i = i$ -th cash flow (can be variable),
- $L_i = time in years to the i-th cash flow and$
- $\dot{V}$  = annualised discounting factor = 1/(1+y) where y is the annualised yield.

#### 4 INTEREST RATES

#### 4.1 OFFICIAL RATES

The interest rates used by Danmarks Nationalbank for its monetary policy are the discount rate, the current account rate and the lending rate (corresponds to the rate of interest on certificates of deposit). The monetary policy interest rates guide the short-term money-market interest rates. When the discount rate is changed, the banks often change their customer rates.

In practice, Danmarks Nationalbank conducts monetary policy via the facilities it uses to manage and service accounts with the monetary policy counterparties. Danmarks Nationalbank's monetary policy instruments have generally remained unchanged since 1992. The monetary policy counterparties have access to two facilities:

1) overnight current-account deposits.

2) weekly market operations whereby they either borrow against securities as collateral (monetary policy loans) or make placements by purchasing certificates of deposit; these transactions usually have a maturity of 14 days.

The rates of interest on the two types of 14-day transactions are normally identical and known as the lending rate and the rate of interest on certificates of deposit respectively. Current account deposits accrue interest at the current account interest rate, which is lower than the





#### DENMARK

lending rate. Since April 1992 the current account interest rate has been equal to the discount rate. None of the monetary policy instruments directly accrue interest at the discount rate. Rather, the discount rate is a signaling rate that indicates the overall level of monetary policy interest rates.

#### 4.2 MONEY MARKET RATES

The primary money market rates are the Copenhagen Interbank Offered Rate (CIBOR), the tomorrow/next interest rate (T/N rate) and the three-month money market interest rates.

The CIBOR is a reference interest rate for liquidity offered in the interbank market (in Denmark) on a non-collateralised basis. The CIBOR is calculated on the basis of rates offered by a number of individual banks, called the CIBOR offerers. The CIBOR is calculated for eight different maturities: one, two, three, four, five, six, nine and 12 months.

The T/N rate is a non-collateralized day-to-day interest rate for money market lending. The T/N rate is calculated as an average of the interest rates on actual lending. The market for day-to-day loans is divided into several segments, depending on the starting point of the transaction. The T/N market, which is the dominant segment, comprises loans commencing on the first banking day after the transaction date and expiring on the second banking day after the transaction date.

Danish three-month money market interest rates, which are the interest rates offered for money market deposits (bid rates), are collected at 11 a.m. on each banking day. The collateralised rate is based on repo transactions in government securities.

#### 4.3 RETAIL BANK INTEREST RATES

The interest rate statistics provide information on the interest rates of banks and mortgage credit institutes on loans granted to and deposits received from households and nonfinancial companies, etc. The statistics include interest rates on existing loans and deposits (outstanding amounts) as well as on the new lending and deposits agreements concluded in a given month (new business).

The principles governing the content and structure of the statistics are laid down in the Regulation No. 63/2002 of the European Central Bank of 20 December 2001 concerning statistics on interest rates applied by monetary financial institutions to deposits and loans visà-vis households and non-financial companies (ECB/2001/18).

The published interest rates solely concern lending and deposits vis-à-vis Danish residents. Danish residents are persons domiciled in Denmark, as well as business enterprises and institutions that are domiciled in Denmark.

Information on interest rates is collected from the 23 largest banks and all mortgage credit institutes in Denmark that are full-reporting institutions for statistics on the balance sheets and flows of the MFI sector. The reporting population comprises Danish banks and mortgage credit institutes, as well as danish branches of foreign banks and mortgage credit institutes.

#### AUTHORITIES INVOLVED IN BOND ISSUANCE, BOND MANAGEMENT AND SECURITIES MARKET SUPERVISION

5

The main bodies involved in the supervision of the Danish securities market are the Fondsrådet (Danish Securities Council), Finanstilsynet (Danish Financial Supervisory Authority) and the Københavns Fondsbørs (Copenhagen Stock Exchange).

Apart from bonds issued abroad by residents, almost all bonds are listed on the CSE and registered in Værdipapircentralen (VP Securities Services).



## ESTONIA

#### I MARKET SIZE

#### I.I THE SIZE OF THE NATIONAL DEBT SECURITIES MARKET

The market size, as measured by the total amount of debt securities outstanding, was  $\notin 268$  million at the end of December 2003, which represented 3.3% of GDP. Of this total, 23% of the debt securities were issued by non-financial and non-monetary financial corporations, while 34% were issued by monetary financial institutions and 43% by the general government.

Government securities have not been the driving force behind the development of nonbank financial markets in Estonia, owing to prudent fiscal policies. Therefore, the securities market in Estonia is primarily equity-based, and the debt market has developed according to private sector instruments and needs, consisting mainly of a primary market with private placements and a modest secondary market.

Due to the central government's Eurobond issue of  $\notin 100$  million in 2002, most of the debt securities issued by the general government are denominated in euro (88%). The remaining 12%



**ESTONIA** 



of the general government securities were issued in national currency (Estonian kroon – EEK).

At the end of 2003, 94% of all debt securities issued by the general government (i.e. both in national currency and in euro) had an original maturity of five years or more but less than ten years; 3% had an original maturity of ten years or more; 2% had an original maturity of up to and including one year; and 1% had an original maturity of over one year but less than five years.

According to the maturity structure of debt securities issued in national currency by the general government, 19% had an original maturity of up to and including one year, and 6% had an original maturity of over one year but less than five years. General government debt securities in national currency with an original maturity of five years or more but less than ten years accounted for the largest share of government debt securities (48%). Government debt securities with an original maturity of ten years or more constituted 27% of the total.

#### 2 ACTIVITY IN THE PRIMARY AND SECONDARY MARKETS

#### 2.1 THE PRIMARY MARKET

#### 2.1.1 ACTIVITY IN THE PRIMARY MARKET

There was an increase in primary market activity in 2002. Total gross issuance increased from  $\notin$ 74 million in 2001 to  $\notin$ 309 million in 2002 (of which  $\notin$ 100 million was accounted for by a new issue of central government Eurobonds listed on the Luxembourg Stock Exchange). In 2003 total gross issuance of debt securities was  $\notin$ 127 million.

Non-financial and non-monetary financial corporations accounted for 48% of debt securities issuance on the primary market in 2001, for 18% in 2002 and for 23% in 2003. Monetary financial institutions accounted for 42% of issuance in 2001, 49% in 2002 and 75% in 2003.

Issuance by the general government increased from 10% of total primary market issuance in 2001 to 33% in 2002, mainly due to a new issue of central government Eurobonds with a maturity of five years. In 2003, the general government accounted for only 2% of total primary market debt securities issuance.

#### 2.1.2 AUCTIONS: REGULARITY, FREQUENCY AND PRE-ANNOUNCEMENT

Auctions are pre-announced, but not regular.

#### 2.1.3 MEASURES (EITHER PUBLIC OR PRIVATE) TO PROMOTE THE FUNCTIONING OF THE PRIMARY MARKET

In Estonia, the Government supports the functioning of financial markets mainly through the implementation of an adequate legal and regulatory framework and the conduct of financial supervision. The functioning of the national debt securities market has been promoted by the enactment of the Securities Market Act on 1 January 2002.

#### 2.2 THE SECONDARY MARKET

#### 2.2.1 ACTIVITY IN THE SECONDARY MARKET

The secondary market for debt securities is relatively undeveloped in Estonia. Activity in the secondary market remained modest between 2001 and 2003, with an average daily turnover of  $\notin 0.2$  million in 2001,  $\notin 0.4$  million in 2002 and  $\notin 0.3$  million in 2003.

With regard to the sector breakdown, the highest proportion of debt securities traded on the secondary market in 2001 was issued by non-financial and non-monetary financial corporations (82%). This figure decreased to 37% in 2002 and increased again to 53% in 2003. Debt securities issued by monetary financial institutions accounted for 9% of total secondary market transactions in 2001, for 58% in 2002 and for 39% in 2003. The share of debt securities issued by the central and other general government in total secondary market transactions was 9% in 2001, 5% in 2002 and 9% in 2003.

#### **ESTONIA**

## Chart 2 Primary market activity for debt securities

#### (gross issuance during the period; nominal amounts)

(2a) Total gross issuance (€ millions)









#### (2b) By sector of the issuer (as a percentage of the total)



(2d) Issuance methods for long-term debt securities in national currency by general government in 2003 (as a percentage of the total)



#### 2.2.2 MEASURES (EITHER PUBLIC OR PRIVATE) TO PROMOTE LIQUIDITY IN THE SECONDARY MARKET

In Estonia, the Government supports the functioning of financial markets mainly through the implementation of an adequate legal and regulatory framework and through the conduct


# Chart 3 Secondary market activity for debt securities

(value of transactions; daily averages; nominal amounts) (3a) Total turnover (€ millions)



(3c) By original maturity for the general government sector (as a percentage of the total)



#### (3b) By sector of the issuer (as a percentage of the total)



central government and other general government 100



#### (3d) Trading places for long-term debt securities denominated in national currency in 2003 (as a percentage of the total)



Source: ECB long-term interest rate statistics.

of financial supervision. The functioning of the national debt securities market has been promoted by the enactment of the Securities Market Act on 1 January 2002.

#### 2.2.3 LIQUIDITY OF THE SECONDARY MARKET

Owing partly to restrictions imposed by the currency board,<sup>1</sup> but even more to successful 1 Under the currency board arrangement, the Estonian kroon is pegged to the euro (EUR 1 = EEK 15.64664 - please refer also to footnote 2). Eesti Pank does not set any policy interest rate. The currency board arrangement is a special kind of fixed exchange rate system where the upper limit of base money (banknotes and coins in circulation and credit institutions' deposits with the central bank) emission depends on the amount of the central bank's foreign reserves. This ensures an automatic cover for the Estonian kroon, as a decrease in the central bank's foreign reserves will not jeopardise the preservation of the exchange rate.



#### **ESTONIA**

#### Table | Methodological notes on the statistical treatment of secondary market statistics (cf. Table 2B in the statistical tables in Part 2) All debt securities Methodological item Long-term debt securities Repos and reverse repos (if available, the percentage Not included Not included of these transactions in terms of the nominal value of the daily averages of transactions) Trading in secondary markets abroad Not included Not included Measures to ensure single counting There is a regulation called "Order of labelling transaction notifications" which states that if two or more transactions are related, one or more of them has to be labelled with the letter "D" for "double". These "D" transactions are later excluded from transaction statistics.

economic reforms, Estonian fiscal deficits and government borrowing over the last ten years have remained modest by European standards. Estonia's recent Pre-accession Economic Program (PEP) also foresees that the government budget will remain in balance over the medium term, as exceptional deficits are allowed to emerge only as a result of pension reform costs. For 2003, the government surplus reached 2.6% of GDP.

However, debt securities issued by the central government at the end of 1992 are still outstanding. The total amount of this one-off issue was EEK 300 million (€19 million), of which EEK 120 million (approximately €7.6 million) was still outstanding at the end of 2003. The purpose of this issue was to finance the resolution of the banking crisis. These securities were bought by local banks and have never been actively traded on the secondary market. As another exceptional measure, the Government of Estonia issued a five-year Eurobond in 2002, in a total amount of €100 million, which was used for the redemption of earlier loans (from the World Bank and other international investment banks in the early 1990s) and aimed to reduce interest costs and currency risk (see Chart 3.1).

Estonia's general economic policy (including the principle of maintaining a balanced budget) has supported the conservative government borrowing policy. Estonian fiscal deficits and government borrowing have remained modest over the past ten years.

As the Government does not issue Treasury bills or bonds on account of the balanced budget principle, the investment needs of the country are met predominantly by the private sector (there is no financial crowding-out of the private sector). Given the integration of the real and financial sectors, financing via foreign markets, in addition to using domestic resources, has become a vital component of financing in the economy.

For the private sector (especially the financial sector), the preferred securities markets for long-term borrowing have been the deep euro markets, while the domestic bond market has been used more to cover the short-term financing needs of the real sector. Given this background on the underlying general economic policy principles and market developments, the government securities market is likely to stay thin in Estonia.

#### GOVERNMENT AND PRIVATE SECTOR DEBT MARKETS

The lack of a long-term government securities market in Estonia means that there is no "classic" yield curve for benchmark government bonds in Estonia.

The total volume of outstanding EEKdenominated general government bonds with a



| (percentages)         |      |      |      |      |      |      |     |
|-----------------------|------|------|------|------|------|------|-----|
|                       | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 200 |
| Up to one year        | 89   | 83   | 92   | 96   | 97   | 87   | :   |
| One to two years      | 2    | 8    | 3    | 3    | 1    | 4    |     |
| More than three years | 9    | 9    | 5    | 1    | 2    | 9    |     |

## Table 2 Maturity structure of debt securities issued

Source: Eesti Väärtpaberite Keskregister.

maturity of over one year amounts to €11.3 million. 67% of this outstanding debt (with a value of €7 million) is related to the one-time issue of central government bonds at the end of 1992 to finance the resolution of a banking crisis, as mentioned before. In addition, as another exceptional measure, the Government of Estonia issued one five-year Eurobond in a total amount of €100 million in 2002, which was used for the redemption of earlier loans.

As regards the domestic private debt market, developments have generally been encouraging, but the intermediated flows in the domestic market are obviously far smaller than the crossborder flow of funds in a small and open economy like Estonia. The domestic debt securities market is mainly a primary market and the turnover in the secondary market has been modest.

In recent years, mainly short-term debt securities have been issued on the Estonian market. In many cases, the reason for the short maturities lies in issuers' roll-over financing schemes.

#### 3 **CALCULATION OF THE YIELD**

In principle, the yields to maturity should be calculated according to formula 6.3 recommended by the International Securities Market Association (ISMA). However, since government securities have never been actively traded, no yields are calculated.





2002

2001

2003

#### **ESTONIA**

#### **INTEREST RATES** 4

#### **OFFICIAL RATES** 4 1

Under the currency board system, the Estonian kroon is pegged to the euro (€1 = EEK 15.64664<sup>2</sup>). Eesti Pank, the NCB does not set any policy interest rate. All interest rates are determined by the market.

#### 4.2 **MONEY MARKET RATES**

The most representative rate is the Tallinn interbank offered rate (TALIBOR). This is the average interest rate calculated on the basis of the interbank offered rates of reference banks during the reference periods (one, two, three, six, nine and twelve months).

#### 4.3 **BANK INTEREST RATES**

**Chart 4 Interest rate statistics** 

Eesti Pank collects data on interest rates (except overnight rates) with regard to new activity. Until March 2003, no data on interest rates based on amounts outstanding were collected. Since March 2003, data on amounts outstanding have also been collected.

Eesti Pank produces statistics on deposit and lending interest rates according to various customer groups, maturity bands and currencies.

In the case of deposit interest rates, only deposits in Estonian kroons are included. In the case of lending interest rates, however, loans in Estonian kroons, US dollars and euro are included, as the amount of the loan is often tied to one of these currencies, especially as regards long-term loans. In most cases, the interest rate is also tied to the money market rate for the relevant currency.

There are two types of deposits in Estonia: time deposits and savings deposits. According to the ECB classification, both types are equivalent to "deposits with agreed maturity".

The most representative maturities for interest rates are the following:

the money market rate (TALIBOR); \_

2 Since May 2004, the EEK/€ rate has been 15.6466.

#### (percentages per annum; monthly averages unless otherwise indicated; based on new business) Money market rates Bank interest rates 1-month deposits lending to non-financial corporations (t < = 1)3-month deposits . . . . . lending to households (t = > 10). . . . . 6-month deposits deposits with agreed maturity (1 < t < 5). . . 12-month deposits 10 10 20 20 9 18 18 9 8 16 16 8 7 14 14 12 12 6 6 5 5 10 10 4 8 4 8 3 6 6 3 2 4 4 2 2 1 2 0 0 0 0 2000 2001 2002 2003 2000 2001 2002 2003 Source: ECB long-term interest rate statistics.

Note: Both loans to non-financial corporations and households are denominated mainly in  $\epsilon$ , but also in USD and EEK. The remarkable change in the interest rates on bank loans to non-financial corporations in March 2001 was due to an exceptional contract between one of the banks and its client



- the rate on bank loans to non-financial corporations t < = 1; and</li>
- the rate on bank loans to households t = > 10

# 5 AUTHORITIES INVOLVED IN BOND ISSUANCE, BOND MANAGEMENT AND SECURITIES MARKET SUPERVISION

According to the Securities Market Act, participants in the market are stock exchanges and securities brokers.

- All public issues must be registered with Finantsinspektsioon (Financial Supervision Authority). The latter authority supervises the securities market.
- Eesti Väärtpaberite Keskregister (Estonian Central Register of Securities) runs the main securities register of the State and manages the deposition of dematerialised securities, the registration of security ownership, loans and pledges, and the processing and clearing of securities transactions.

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#### I MARKET SIZE

#### I.I THE SIZE OF THE NATIONAL DEBT SECURITIES MARKET

At the end of 2003, the overall size of the debt securities market in Cyprus, as measured by the total amount outstanding, was  $\notin$ 7,006 million ( $\notin$ 5,325 million at the end of 2002), representing 62% of GDP (50% at the end of 2002). The vast majority of these securities ( $\notin$ 5,537 million or

79%) were issued by the central government and other general government sector, followed by the monetary financial institutions sector ( $\in 1,420$  million or 20%) and the non-financial and non-monetary financial corporations sector ( $\in 49$  million or 1%).

Debt securities outstanding in national currency (Cyprus pound – CYP) accounted for the largest proportion of the total debt securities issued by the central government and other



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general government sector (75%), while the remaining 25% were issued in euro.

With regard to debt securities issued in national currency by the central government and other general government sector, 49% of the total issues outstanding in this sector had an original maturity of five or more but less than ten years, whereas 25% had an original maturity of more than one but less than five years. Issues at the two ends of the maturity spectrum, i.e. shortterm issues (with an original maturity of less than or equal to one year) and longer-term issues (with an original maturity of over ten years) accounted for 16% and 10% respectively of the total.

#### 1.2 **EXPECTED ISSUE VOLUME AND MATURITY DISTRIBUTION FOR GOVERNMENT BONDS**

The maturity distribution of government debt securities is as follows:

#### **1.2.1 DEBT SECURITIES ISSUED IN NATIONAL** CURRENCY

- 13-week Treasury bills;
- 52-week Treasury bills;
- two-year registered development stocks;
- three-year registered development stocks;
- five-year registered development stocks;
- ten-year registered development stocks;
- 15-year registered development stocks;
- five-year savings certificates; and
- seven-year savings bonds.

### **1.2.2 DEBT SECURITIES ISSUED IN FOREIGN CURRENCY**

- euro commercial paper with maturity of up to 12 months; and
- over 12 months.

A short description of government debt securities issued in both national and foreign currency is given below.

#### **I.2.3 TREASURY BILLS**

13-week and 52-week Treasury bills are issued in multiples of CYP 1,000 (€1,705) and are offered to the public by auction. Auctions are held as required by the financing and liquidity needs of the government. Auctions of 13-week Treasury bills are not held regularly, while auctions of 52-week Treasury bills are held on average once or twice each month. 52-week Treasury bills are listed on the Cyprus Stock Exchange (CSE) and are traded at prices determined on the floor of the CSE.

#### 1.2.4 REGISTERED DEVELOPMENT STOCKS

- a) Two-year registered development stock, bearing a coupon rate of 3.75% per annum as at end-2003, payable every six months. These securities are offered to the public via a bid-price auction. Buyers of these securities may be both natural and legal persons.
- b) Three-year registered development stock, bearing a coupon rate of 4.00% per annum as at end-2003, payable every six months. During the subscription period (approximately one week prior to the issue date), the security is offered at par. Threeyear registered development stocks may be purchased, by natural persons only, through banks, post offices, stockbrokers and the Central Bank of Cyprus (CBC). Encashment prior to maturity is possible at prices quoted by the CBC.
- c) Five-year registered development stock, bearing a coupon rate of 4.25% per annum as at end-2003, payable every six months. It is issued in tranches and offered to both natural and legal persons via a bid-price auction.
- public Eurobond issues with maturity of d) Ten-year registered development stock, bearing a coupon rate of 4.50% per annum as at end-2003, payable every six months. It is issued in tranches and offered to both natural and legal persons via a bid-price auction.
  - e) 15-year registered development stock, bearing a coupon rate of 4.60% per annum as at end-2003, payable every six months. It



is issued in tranches and offered to both natural and legal persons via a bid-price auction.

Two-year, five-year, ten-year and 15-year registered development stocks are listed on the CSE and are traded at prices determined on the floor of the CSE. Interest from investments in all development stocks held by natural persons is exempt from income tax without any limitation.

#### 1.2.5 SAVINGS BONDS

As from October 2002, the issuance of CYP 5 savings bonds was suspended by the Ministry of Finance. Outstanding CYP 5 savings bonds continue to participate in regular savings bond draws, and prizes from these draws are exempt from income tax without any limitation. The last series of CYP 10 savings bonds matured in December, 2003. Matured CYP 5 and CYP 10 savings bonds are redeemed at CYP 5.50 and CYP 11 respectively.

#### **I.2.6 SAVINGS CERTIFICATES**

Savings certificates are issued in multiples of CYP 1, with a maturity of five years. Interest from investments in savings certificates is compounded annually and, on maturity, amounts to an average interest rate of 4.15% per annum as at end 2003. Encashment prior to maturity may be effected at prices that reflect the overall length of the investment period. Interest earned is exempt from income tax without limitation as to the amount. Savings certificates are sold exclusively to individuals.

#### I.2.7 EURO COMMERCIAL PAPER

These notes can be issued by the Republic of Cyprus through the CBC, in euro, US dollars and Swiss francs, normally for maturities of up to 12 months, and are offered to non-resident institutional investors. Notes in any other currency may also be issued subject to all necessary approvals and consents having been obtained. These notes are issued under the Euro Commercial Paper (ECP) Programme of the Republic of Cyprus.

#### **1.2.8 PUBLIC EUROBOND ISSUES**

Public Eurobond notes can be issued by the Republic of Cyprus, through the CBC, in US dollars, euro, pounds sterling, Swiss francs and Japanese yen, or in any other currency that may be agreed between the issuer and the dealer(s), normally for maturities of over 12 months, and are offered to non-resident institutional investors. In all cases such issues are subject to the applicable laws and regulations. These notes are issued under the Euro Medium-Term Note (EMTN) Programme of the Republic of Cyprus.

#### ACTIVITY IN THE PRIMARY AND SECONDARY MARKETS

#### 2.1 THE PRIMARY MARKET

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#### 2.1.1 ACTIVITY IN THE PRIMARY MARKET

In 2001 the total value of the gross issues of debt securities amounted to  $\notin$ 3,509 million in nominal terms. In 2002 it decreased to  $\notin$ 2,852 million, while in 2003 it increased to  $\notin$ 3,162 million.

Issues of debt securities by the central government and other general government sector account for the largest proportion of primary issues. Issues by this sector represented 84% of the total in 2001, 99% in 2002 and 76% in 2003. Issues by the monetary financial institutions sector represented 16% of the total in 2001 and a negligible share in 2002. In 2003 the issues of this sector represented 23% of the total. The contribution of the nonfinancial and non-monetary financial corporations sector to the primary market for debt securities was negligible in 2001 and 2002. In 2003 the issues of this sector represented only 1% of the total.

Within the central government and other general government sector, primary market activity was highest with respect to Eurobonds in 2002 (43%), followed by short-term debt securities, i.e. 13-week and 52-week Treasury bills (25%). In 2003 five-year registered development CYPRUS



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#### Chart 2 Primary market activity for debt securities

(gross issuance during the period; nominal amounts)





(2b) By sector of the issuer (as a percentage of the total)

non-financial and non-monetary financial corporations monetary financial institutions central government and other general government







(2d) Issuance methods for long-term debt securities in national currency by general government in 2003 (as a percentage of the total)



stocks had the highest primary market activity (36%), followed by 13-week and 52-week Treasury bills (31%).

Long-term debt securities in national currency, issued by the central government and other

general government sector, have been offered mainly to the public via auctions. More specifically, in 2003, 90% of total long-term government bond issues were offered to the public by auction.

#### 2.1.2 AUCTIONS: REGULARITY, FREQUENCY AND PRE-ANNOUNCEMENT

Government securities are regularly auctioned. The amount issued depends on the Government's financing and liquidity needs.

- 13-week Treasury bill auctions are not held on a regular basis, while auctions of 52week Treasury bills are held, on average, once or twice a month;
- two-year and five-year registered development stock auctions are held, on average, once a month; and
- ten-year and 15-year registered development stocks are auctioned less frequently and according to market needs.

Approximately seven days before each auction, the CBC announces the auction date together with all the details of the debt security to be auctioned. Announcements are published in the Official Gazette of the Republic, the local media and on Bloomberg media. Investors can submit their bids during the specified period, which commences two to three days prior to the actual auction date.

### 2.1.3 MEASURES (EITHER PUBLIC OR PRIVATE) TO PROMOTE THE FUNCTIONING OF THE PRIMARY MARKET

A number of measures have been taken in order to promote the functioning of the primary market for government debt securities in national currency. The CBC acts as the agent for the issuance of government debt instruments. This includes providing advice and/or making recommendations to the Minister of Finance on the type of securities to be issued and the terms of issue and redemption. These measures include:

a) a regular and frequent programme of issuance to enable institutional and other investors to plan accordingly; and b) designating various entities in the public and private sectors to act as agents of the CBC in order to increase the number of sales outlets. A commission is paid by the issuer to these agents to compensate them for their services to investors on the condition that they do not impose any additional charges on the investors. Such agents are the Post Office, commercial banks and stock exchange brokers.

Until the end of June 2002, the Government of Cyprus had direct access to CBC financing. This practice was distorting the smooth functioning of the market for government bonds and was also affecting government demand for credit. As a result, the market for government securities failed to develop adequately. However, with the amendment of the Central Bank of Cyprus Law to provide for the independence of the CBC, and the amendments of the pertinent provisions of the Constitution required to comply with the Treaty on European Union and the Statute of the European System of Central Banks, the CBC has been prohibited since 1 July 2002 from granting overdrafts or other credit facilities to the Government, and from purchasing debt instruments directly from it. This is expected to pave the way for a better functioning of the primary market based on market forces, and will help with the further development of the government bond market.

#### 2.2 THE SECONDARY MARKET

#### 2.2.1 ACTIVITY IN THE SECONDARY MARKET

The secondary market for debt securities in Cyprus is still at an embryonic stage, and trading activity in this market is very low. In particular, the daily average value of transactions in the bond market amounted to  $\notin 0.035$  million in 2001,  $\notin 0.020$  million in 2002 and  $\notin 0.018$  million in 2003. The corresponding number of transactions in the bond market was 355 in 2001, 392 in 2002 and 385 in 2003.

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Secondary market activity in government bonds dropped to 37% of the total nominal value of transactions in 2002, compared with 70% in 2001. The situation was reversed in 2003 and secondary market activity in government bonds increased to 59% of the total nominal value of transactions. On the other hand, secondary market activity in debt securities issued by the monetary financial institutions sector reached 31% in 2002, up from 16% of the total in 2001. In 2003, the secondary market activity in these securities dropped to 24% of the total nominal value of transactions. Finally, trading in debt securities issued by the non-financial and nonmonetary financial corporations sector surged to 33% of the total in 2002, from 15% in 2001. In 2003, the secondary market activity in these bonds dropped to 17% of the total nominal value of transactions.

It is worth mentioning that secondary market activity in government bonds during the period from 2001 to 2003 was limited to trading in long-term government bonds, while no trading was reported for 52-week Treasury bills.

The CSE is the only regulated secondary market operating in Cyprus. According to certain provisions of the Cyprus Stock Exchange Law, the operation of other secondary markets in the Republic of Cyprus is prohibited. Consequently, only the CSE reports on trading in long-term debt securities in national currency.

#### 2.2.2 MEASURES (EITHER PUBLIC OR PRIVATE) **TO PROMOTE LIQUIDITY IN THE SECONDARY MARKET**

In order to promote liquidity in the secondary market for government bonds in national currency, the CBC, as the agent for the issuance of all government paper, has taken the following measures:

- a) For the three-year registered development stock that is being offered on tap to private individuals and that is not listed on the CSE, the CBC establishes prices at which it is prepared to buy or sell stock.
- b) For the first few years after 52-week Treasury bills as well as five-year and tenyear registered development stocks were first listed on the CSE, the CBC stood ready to buy and sell the Treasury bills and stocks at prices that ensured an orderly market for these instruments. This policy with regard to trading in Treasury bills was recently discontinued. However, the CBC is continuing its policy of intervening in the market for development stocks and has retained the right, when necessary, to intervene in the market for any of the government debt securities.
- c) The CBC and the Ministry of Finance are currently exploring the possibility of introducing a primary dealer group to

| (cf. Table 2B in the statistical tables in Part 2)   |  |                           |  |
|--|--|---------------------------|--|
| Methodological item  | All debt securities  | Long-term debt securities |  |
| Repos and reverse repos (if available, the percentage of<br>these transactions in terms of the nominal value of the<br>daily averages of transactions) | Not applicable   | Not applicable            |  |
| Trading in secondary markets abroad  | Not included   | Not included              |  |
| Measures to ensure single counting   | All data on secondary market activity were obtained from the san<br>official source, namely the CSE. The CSE ensures single counting<br>transactions via its computerised system (Cyprus Automatic Tradin<br>System). Trades – matched buy and sell orders that have been inp<br>into the Trading System – are assigned a unique trade number. In th<br>reports, the System only takes into account the unique (single) trade<br>number. |                           |  |

# Table | Methodological notes on the statistical treatment of secondary market statistics



## Chart 3 Secondary market activity for debt securities

#### (value of transactions; daily averages; nominal amounts)

(3a) Total turnover (€ millions)



(3c) By original maturity for the general government sector (as a percentage of the total)





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conduct bond auctions aiming at the creation of an efficient and liquid secondary bond market.

#### 2.2.3 LIQUIDITY IN THE PRIMARY AND SECONDARY MARKETS FOR GOVERNMENT BONDS

In order to assess the liquidity of the secondary market for government debt securities, the number of transactions, the value of the

#### (3b) By sector of the issuer (as a percentage of the total)

non-financial and non-monetary financial corporations monetary financial institutions

central government and other general government



(3d) Trading places for long-term debt securities denominated in national currency in 2003 (as a percentage of the total)



securities traded, the liquidity ratio<sup>1</sup> and the bid-offer spread<sup>2</sup> were calculated. However, it is evident from the results discussed below that neither the liquidity ratio nor the frequency/number of transactions in the

- Liquidity ratio = value of securities traded during the year/ market capitalisation of securities as at the end of the year.
- 2 The bid-offer spread is calculated as the difference between the average offered price and the average bid price for the reference month.

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secondary market may be considered appropriate indicators for measuring the liquidity of the government debt securities market, since trading in these bonds is very thin and transactions are few and far between. Moreover, there are no reliable data on bidoffer spreads apart from the spread used by the CBC for market intervention.

#### a) Short-term: $t \le 1$

52-week Treasury bills are listed on the CSE. However, there was no trading activity in these securities in the period from 2001 to 2003.

#### b) Long-term: 1 to t < 5

Two-year registered development stocks were first listed on the CSE in January 2002. However, no transactions were recorded for these securities in that year. The bid-offer spread for the period averaged 0.0145. In 2003, six transactions were recorded, for a total value of CYP 0.18 million ( $\notin$ 0.31 million)<sup>3</sup>. The liquidity ratio for the year was 0.0053 and the average bid-offer spread was 0.0398.

#### c) Long-term: 5 to t < 10

Five-year registered development stocks have been listed on the CSE since 1997. In 2001, 62 transactions were recorded, with a total value of CYP 1.79 million (€3.11 million). The liquidity ratio for 2001 was 0.0028 and the average bid-offer spread was 0.023. In 2002, 34 transactions were recorded for a total value of CYP 0.86 million (€1.5 million). The liquidity ratio for the period was 0.0034 and the average bid-offer spread was 0.0232. In 2003, 43 transactions were recorded, with a total value of CYP 0.76 million (€1.30 million). The liquidity ratio for 2003 was 0.0016 and the average bid-offer spread was 0.0325.

#### d) Long-term: $t \ge 10$

Ten-year registered development stocks have been listed on the CSE since 1997. In 2001, 15 transactions were recorded, with a total value of CYP 1.77 million ( $\in$ 3.07 million), a liquidity ratio of 0.0117 and an average bidoffer spread of 0.0701 for the year. In 2002, four transactions were recorded for a total value of CYP 0.24 million ( $\notin$ 0.42 million). The liquidity ratio for the period was 0.0059, while the average bid-offer spread was 0.0782. In 2003 five transactions were recorded for a total value of CYP 0.23 million ( $\notin$ 0.39 million). The liquidity ratio for the period was 0.0019 and the bid-offer spread was 0.0782.

15-year registered development stocks were first listed on the CSE in November 2001. However, no transactions were concluded for these securities in 2002. In 2002, the bid-offer spread averaged 0.1192. In 2003 seven transactions were recorded for a total value of CYP 0.13 million ( $\notin$ 0.22 million). The liquidity ratio for the period was 0.0276, while the average bid-offer spread was 0.1436.

Based on this analysis, it is quite obvious that trading in government bonds in the secondary market is very thin. Therefore, liquidity in the primary market, as calculated below, should be considered as well:

#### a) Short-term: $t \le 1$

13-week Treasury bills: in 2001, 27 auctions for a total amount of CYP 710 million (€1,234.69 million) were announced and the tenders submitted amounted to CYP 504.7 million (€877.67 million). The amount eventually auctioned was CYP 262.2 million (€455.96 million). In 2002, nine auctions for a total amount of CYP 195 million (€340.22 million) were announced, while tenders were submitted for CYP 289 million (€504.22 million). The amount auctioned to the public was CYP 69 million (€120.38 million). In 2003, two auctions for a total amount of CYP 45 million (€76.74 million) were announced. The tenders amounted to CYP 83 million (€141.55 million), with CYP 18 million (€30.7 million) eventually being offered to the public.

52-week Treasury bills: in 2001, 27 auctions were announced for a total amount of CYP 640

3 Based on the end-of-year exchange rates (€/CYP): 1.739 in 2001; 1.7447 in 2002; 1.7054 in 2003.



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million (€1,112.96 million) and tenders were submitted for CYP 950.7 million (€1,653.26 million). The amount of CYP 420.1 million (€730.55 million) was eventually auctioned. In 2002, 13 auctions were announced for a total amount of CYP 585 million (€1,020.64 million) and the amount of CYP 887.3 million (€1,548.07 million) was tendered. The amount of CYP 329.39 million (€574.69 million) was auctioned during this period. In 2003, 13 auctions were announced for a total amount of CYP 475 million (€810.07 million). Tenders were submitted for CYP 783.4 million (€1,336.01 million), and CYP 392.4 million (€669.2 million) were auctioned.

#### b) Long-term: 1 to t < 5

Two-year registered development stocks: in 2001, eight auctions were announced for the total amount of CYP 225 million (€391.28 million), and the amount of CYP 419 million (€728.64 million) was tendered. The amount of CYP 142 million (€246.93 million) was eventually offered to the public. In 2002, 11 auctions were announced for the amount of CYP 395 million (€689.15 million). The amount of CYP 592.9 million (€1,034.43 million) was tendered and CYP 207.55 million (€362.11 million) was eventually offered to the public. 17 auctions for a total amount of CYP 610 million (€1,040.29 million) were announced in 2003. Tenders were submitted for CYP 573.1 million (€977.37 million), and CYP 179.7 million (€306.46 million) were auctioned.

#### c) Long-term: 5 to t < 10

Five-year registered development stocks: in 2001, 11 auctions were announced for the total amount of CYP 230 million (€399.97 million), with tenders being submitted for CYP 550.1 million (€956.62 million). The amount of CYP 158.4 million (€275.45 million) was eventually auctioned. In 2002, 12 auctions were announced for the total amount of CYP 425 million (€741.5 million). Tenders were

submitted for CYP 536.2 million (€935.5 million) and the amount of CYP 199.53 million (€348.12 million) was auctioned during this period. In 2003, 17 auctions were announced for the total amount of CYP 835 million (€1,424.01 million). Tenders were submitted for CYP 826.8 million (€1,410.03 million), and CYP 501.1 million (€854.58 million were eventually auctioned.

#### d) Long-term: $t \ge 10$

Ten-year registered development stocks: in 2001, ten auctions were announced for the total amount of CYP 105 million (€182.59 million). Tenders were submitted for CYP 167.4 million (€291.11 million) and the amount of CYP 37 million (€64.34 million) was eventually auctioned. In 2002, only two auctions were announced for CYP 30 million (€52.34 million). Tenders were submitted for CYP 31.16 million (€54.36 million), and the amount of CYP 3.68 million (€6.42 million) was eventually auctioned. In 2003, four auctions were announced for the total amount of CYP 55 million (€93.80 million). Tenders were submitted for CYP 13.91 million (€23.72 million) and the amount of CYP 6.21 million (€10.59 million) was subsequently auctioned.

15-year registered development stocks: the first bid-price auction for this stock was announced in October 2001 for the amount of CYP 15 million (€26.08 million). Tenders were submitted for the amount of CYP 24.5 million (€42.6 million) and an amount of CYP 4.1 million (€7.13 million) was offered to the public. In 2002, two auctions were announced for the total amount of CYP 25 million (€43.62 million), with CYP 19.5 million (€34.02 million) being tendered. The amount of CYP 7.76 million (€13.54 million) was auctioned. In 2003, four auctions were announced for the total amount of CYP 55 million (€93.8 million). Tenders were submitted for CYP 15.2 million (€25.92 million) and the amount of CYP 11.5 million (€19.61 million) was eventually auctioned.



#### **3** CALCULATION OF THE YIELD

The yield to maturity figures for all debt securities except the three-year registered development stock are calculated using formula 6.3 of the International Securities Market Association (ISMA). In the case of securities involved in more than one transaction, the yield to maturity represents a simple average (the sum of all yield to maturity figures for the securities in question, divided by the number of transactions). The yield to maturity of the threeyear registered development stocks, which may only be purchased by natural persons, is set in advance by the CBC.

#### 4 INTEREST RATES

## 4.1 OFFICIAL RATES

The marginal lending rate or short-term central bank facility rate is intended to provide the upper bound for money market interest rates. A change in the interest rate of this facility is used to signal a change in the monetary policy stance.

The overnight deposit rate is the interest rate on the overnight deposit facility offered to banks by the CBC for depositing their short-term surplus funds at the end of the day. It is intended to provide the floor for short-term money market rates.

The *repo rate (reverse repo rate)* refers to the minimum bid (maximum bid) rate for liquidity-providing (liquidity-absorbing) open market operations, i.e. repos (reverse repos or depos), of the CBC.

Since 1 January 2001, when interest rate liberalisation came into force, rates have been cut five times. At the end of 2003, the rates were as follows: a marginal lending rate of 4.5%, an overnight deposit rate of 2.5% and a repo rate of 3.5%.

#### 4.2 MONEY MARKET RATES

With regard to the money market rates, banks submit offered rates for the following maturity bands: overnight, one week, one month, three months, six months and one year. In 2003, 44% of the amounts involved were placed for a period of six to twelve months.

#### 4.3 BANK INTEREST RATES

The Interest Law of 1977 was in effect until the end of 2000, prescribing a legal ceiling of 9% per annum on interest rates. Within this ceiling, the upper limits of bank deposit and lending interest rates were determined, from time to time, by the CBC.

The Interest Rate Liberalisation Law came into force on I January 2001, providing for the abolition of the interest rate ceiling. Following interest rate liberalisation, banks adopted a base lending rate as the reference rate, to which a margin is added according to the risk and creditworthiness of the client. As a transitional measure, the base rate of banks was set equal to the marginal lending rate, so that changes in the official interest rates by the CBC could be passed on effectively to market rates.

The most representative interest rates in Cyprus are:

#### Official rates:

Marginal lending rate and overnight deposit facility rate.

#### Money market rates:

Six to twelve-month deposit rate, which is the most active maturity band (with a market share of approximately 44% of total deposits in the interbank market in 2003).

#### Bank interest rates:

Lending rate for non-financial corporations, up to one year – it refers to the simple average of the representative nominal interest rates charged on overdrafts within limits, as defined by the three largest banks.



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Lending rate for non-financial corporations, over one year – it refers to the simple average of the representative nominal interest rates charged on secured loans to non-financial corporations, as defined by the three largest banks.

Lending rate for households, consumer credits – it refers to the average of the representative nominal interest rates charged to individuals on overdrafts within limits, on personal secured loans and on credit card loans, as defined by the three largest banks.

Lending rate for households, for house purchase – it refers to the average of the representative nominal interest rates charged on housing loans secured by assignment of a life insurance policy and other housing loans, as defined by the three largest banks.

Overnight deposit rate (with a market share of 14% in total national currency deposits at end

December 2003) – it refers to the average of the representative interest rates applied to overnight deposits, as defined by the three largest banks.

*Rate for deposits with an agreed maturity* (with a market share of 39% in total national currency deposits at end December 2003) – it refers to the average of the representative nominal interest rates applied to fixed one-year deposits for amounts up to CYP 5,000 and over CYP 5,000, as defined by the three largest banks.

*Rates for deposits redeemable at notice* (with a market share of 37% in total national currency deposits as at end December 2003) – it refers to the average of the representative nominal interest rates applied to deposits with seven-day and three-month notice for amounts up to CYP 5,000 and over CYP 5,000, as defined by the three largest banks.

# Chart 4 Interest rate statistics

(percentages per annum; monthly averages unless otherwise indicated; based on new business)





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# 5 AUTHORITIES INVOLVED IN BOND ISSUANCE, BOND MANAGEMENT AND SECURITIES MARKET SUPERVISION

- The CBC acts as the financial agent of the government for the issuance and management of government bonds. The central bank also has the right to intervene in the secondary market for government debt securities in national currency in order to maintain orderly market conditions.
- The Securities and Exchange Commission is responsible for securities market supervision in the case of companies listed, or seeking listing, on the CSE.
- The CSE is also responsible, to a limited extent, for securities market supervision, but only with regard to members of the CSE and certain listing requirements. For companies not seeking listing on the CSE, the competent authority is the Registrar of Companies. However, the Securities and Exchange Commission also has the power to supervise the issuance of prospectuses and the collection of subscriptions of companies making a public offering, claiming that they will be, or intend to be, listed on the CSE.

The issuance of debt securities in foreign currency, under both the Euro Commercial Paper Programme and the Euro Medium-Term Note Programme, is executed through prime international banks and securities houses.



# LATVIA

#### I MARKET SIZE

#### I.I THE SIZE OF THE NATIONAL DEBT SECURITIES MARKET

The amount of debt securities outstanding at the end of December 2003 was €1,098 million or 11% of GDP. The market for Latvian debt securities is rather new; it was in late 1993 that the first auction of one-month Treasury bills was held. The Government gradually introduced securities with longer maturities: five-year bonds were issued in 2000 and tenyear bonds in 2003.

The central government was the major issuer of debt securities in 2003, accounting for 90% of all debt securities outstanding at the end of December 2003. The remainder was issued by monetary financial institutions (7%), and non-financial and non-monetary financial corporations (3%).



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In 2003, 57% of all government debt securities were denominated in national currency (Latvian lats – LVL) and 43% in euro (Eurobonds). At the end of 2003, the breakdown by original maturity of debt securities issued by the central government in national currency was as follows: 15% were securities with an original maturity of up to and including one year, 4% were securities with an original maturity of over one year but less than five years, 55% were securities with an original maturity of five years or more but less than ten years, and 26% were securities with an original maturity of ten years or more.

In general, the Latvian market is characterised by the following features: (i) the central government is the largest issuer of debt securities; (ii) the central government tends to issue more long-term bonds than short-term ones; (iii) Eurobond issues have become an important source of government funding; and (iv) the fact that the financial system is centred on banking makes corporate bond issues less important as a source of financing, and the main source of funding is bank loans.

#### 1.2 EXPECTED ISSUE VOLUME AND MATURITY DISTRIBUTION FOR GOVERNMENT AND CORPORATE BONDS

In the domestic market, Treasury bills and government bonds are issued in accordance with an annual schedule, and issue volumes depend on projected government money flows and the issuance of government bonds in foreign markets. According to the schedule for 2004, the Treasury will issue government securities in the amount of  $\notin$ 237 million on the domestic market and  $\notin$ 400 million on foreign markets (Eurobonds). The new issue of Eurobonds, which took place in March 2004, funded the redemption of the first Eurobond issue, which matured in May 2004.

In 2004, domestic issue volumes are expected to be as follows:  $\notin 126$  million for Treasury bills and  $\notin 111$  million for ten-year government bonds.

#### ACTIVITY IN THE PRIMARY AND SECONDARY MARKETS

#### 2.1 THE PRIMARY MARKET

2

#### 2.1.1 ACTIVITY IN THE PRIMARY MARKET

In 2003, primary market activity increased, as the Government preferred borrowing in the local market to borrowing in the foreign markets. Total gross issuance in the primary market increased by 110% compared with 2002, reaching  $\notin$  317 million. Usually, there is overbidding of two to three times in the primary market for bonds.

The development of primary market activity broken down by the issuer's sector showed that the central government's share in the total value of primary market transactions increased from 72% in 2002 to 83% in 2003. At the same time, the opposite trend could be observed for the MFI sector, whose share in total issuance decreased from 29% in 2002 to 5% in 2003.

In 2003, the value of transactions in long-term debt securities issued by the central government exceeded that of transactions in short-term central government debt securities. This trend has been prevailing on the market since 1999.

Owing to limited market capacity, government bonds are issued in several tranches. In 2004, the central government will issue bonds denominated in the national currency in the amount of  $\notin$ 22 million per tranche. To mitigate the impact on money market rates, the amounts offered in each auction will be lower than in previous years.

The number of central government bond issues outstanding at the end of 2003 was seven (five domestic issues and two Eurobond issues). Domestic government debt securities were issued at auctions held by Latvijas Banka (the Bank of Latvia) and the Latvian Central Depository.

Most primary market issues of MFI bonds were organised as primary placement auctions run by the Riga Stock Exchange.

## Chart 2 Primary market activity for debt securities

## (gross issuance during the period; nominal amounts)

(2a) Total gross issuance (€ millions)







#### (2b) By sector of the issuer (as a percentage of the total)

20

0

2001



20

0

2003

(2d) Issuance methods for long-term debt securities in national currency by general government in 2003 (as a percentage of the total)

2002



#### 2.1.2 AUCTIONS: REGULARITY, FREQUENCY AND PRE-ANNOUNCEMENT

The government securities auctions are not held at regular intervals and depend on government financing needs. The annual schedule for government securities issues, which contains the auction date, the original maturity of the securities and the amount offered, is published at the beginning of the year. Other relevant details are announced five days before the auction.

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# LATVIA



## Chart 3 Secondary market activity for debt securities

(value of transactions; daily averages; nominal amounts)









non-financial and non-monetary financial corporations monetary financial institutions







#### 2.1.3 MEASURES (EITHER PUBLIC OR PRIVATE) TO PROMOTE THE FUNCTIONING OF THE PRIMARY MARKET

Domestic banks and foreign financial institutions can take part in multiple-rate primary market auctions of government debt securities held by the Latvijas Banka. In addition, since 2002, fixed-rate primary market auctions have been organised by the Latvian Central Depository, where the procedure has been simplified to encourage non-banks (e.g. brokerage companies, investment funds, etc.) to participate in auctions.



#### 2.2 THE SECONDARY MARKET

## 2.2.1 ACTIVITY IN THE SECONDARY MARKET

The daily average turnover of debt securities on the secondary market at the Riga Stock Exchange decreased to  $\notin 1.3$  million in 2003, from  $\notin 1.4$  million in 2002. In 2003, the prices of securities increased as yields were falling mainly due to the convergence process. The difference between the yields on Latvian government bonds and those on EU government bonds of similar maturity diminished as the risk premium required by investors became smaller.

As regards the breakdown by sector, the share of debt securities issued by monetary financial institutions in the total value of transactions increased from 18% in 2002 to 23% in 2003. The share of government securities in the total value of transactions fell from 82% in 2002 to 77% in 2003.

Long-term government debt securities are mostly traded in the over-the-counter (OTC) market and reported to the Riga Stock Exchange. The Riga Stock Exchange started to trade government debt securities in the third quarter of 1999.

#### 2.2.2 MEASURES (EITHER PUBLIC OR PRIVATE) TO PROMOTE LIQUIDITY IN THE SECONDARY MARKET

The Riga Stock Exchange monitors all major international developments in trading system technologies. The major stages in the development of the Riga Stock Exchange's trading system have been the following:

- In November 1997, less than two-and-a-half years after the Riga Stock Exchange's first trading session, continuous trading at variable prices was introduced.
- In July 1998, a T+0 settlement day, which allows immediate block-trade settlement, was introduced in cooperation with the Latvian Central Depository.

- In August 1999, the ACCEPT trading system, developed primarily for debt securities, was introduced. The system also supports trading in shares. ACCEPT is an advanced block-trading platform (including limits, lots, offers to particular members, etc.).
- In May 2000, the E-broker project was launched. This gives clients of banks and brokerage companies access to the Riga Stock Exchange's trading system via the internet. Clients may carry out securities trading by themselves (within the limits set by the relevant bank or brokerage company). The security of the system is ensured by advanced data encryption software.
- In January 2002, new listing rules were introduced for debt security issuers with the aim of encouraging public companies to borrow in the capital market. The new rules also specify the disclosure obligations for debt issuers.
- In 2002, the Latvian Central Depository received the status of a participant in Euroclear, which enables Latvian investors to operate with securities held within the Euroclear system.

In 2002, the Finnish HEX Group, which owns the Helsinki Stock Exchange and the Finnish Central Securities Depository, acquired both the Riga Stock Exchange and the Latvian Central Depository.

The HEX Group merged with OM AB (the operator of the Stockholm Stock Exchange) in September 2003 in order to create both an integrated Nordic and Baltic market for the listing, trading, clearing and settlement of securities and an integrated depository for securities.

Starting from September 2004, the trading of financial instruments (including bonds) listed on the Riga Stock Exchange will be migrated to the SAXESS trading platform, currently used



#### Table | Methodological notes on the statistical treatment of secondary market statistics

| (cf. Table 2B in the statistical tables in Part 2)   |  |                           |  |  |
|--|--|---------------------------|--|--|
| Methodological item  | All debt securities  | Long-term debt securities |  |  |
| Repos and reverse repos (if available, the percentage of<br>these transactions in terms of the nominal value of the<br>daily averages of transactions) | Included   | Included                  |  |  |
| Trading in secondary markets abroad  | Not included   | Not included              |  |  |
| Measures to ensure single counting   | At the Riga Stock Exchange, buyers' and sellers' orders are matched directly without mediation by the Riga Stock Exchange. <sup>1)</sup> |                           |  |  |

1) In the trading system, the Riga Stock Exchange is not treated as a counterparty to trades, meaning that trading on the Riga Stock Exchange is not managed in the same way as in many other exchanges where the seller sells securities to the stock exchange and the stock exchange subsequently sells these securities to the buyer. The software of the Latvian Central Depository (where the OTC market is located) is integrated in the Riga Stock Exchange's trading system. Therefore, OTC market transactions are counted in the same manner as transactions conducted on the Riga Stock Exchange, i.e. the Latvian Central Depository is not treated as the counterparty to a transaction in the trading system, and both parties to a transaction are matched automatically without the interposition of the Latvian Central Depository.

by the NOREX Alliance of exchanges (Stockholm, Copenhagen, Oslo and Reykjavik). Thus, debt securities will become conveniently available to a much broader investor base.

#### 2.2.3 LIQUIDITY OF THE SECONDARY MARKET (THE MOST LIQUID GOVERNMENT BONDS)

Currently, ten-year government bonds are the most liquid debt securities denominated in the national currency in spite of Latvian banks' preference for a buy-and-hold strategy for longterm bonds. In 2003, ten-year government bonds accounted for 39% of all fixed-income securities traded on the Riga Stock Exchange. This can be attributed mainly to the large amount outstanding and, hence, high availability of ten-year bonds. At the end of 2003, the amount outstanding of ten-year government bonds was 1.4 times higher than the average amount outstanding of five-year government bonds and 1.9 times higher than that of private bonds with a maturity of over five years.

The most appropriate indicators for measuring the liquidity of bonds are the liquidity ratio and the bid-offer spread (a measure of market efficiency). Ten-year government bonds generally have higher liquidity ratios and lower spreads than five-year government bonds.

| Year | ISIN         | Maturity<br>date | Turnover<br>(in €<br>millions) | Listing<br>period<br>(in<br>months) | Average<br>amount<br>outstanding<br>in listing<br>period (in<br>€ millions) | Liquidity<br>ratio<br>(on an<br>annual<br>basis) | Average<br>bid rate<br>(%) | Average<br>offer rate<br>(%) | Average<br>bid-offer<br>spread<br>(in basis<br>points) |
|------|--------------|------------------|--------------------------------|-------------------------------------|---|--|----------------------------|------------------------------|--|
| 2002 | LV0000570018 | 24/03/2005       | 47.9                           | 12                                  | 100.0   | 0.48   | 5.51                       | 5.00                         | 51   |
| 2002 | LV0000570026 | 26/01/2006       | 139.2                          | 12                                  | 132.8   | 1.05   | 5.55                       | 5.02                         | 53   |
| 2002 | LV0000570034 | 08/05/2007       | 36.2                           | 8                                   | 55.4  | 0.98   | 5.32                       | 4.87                         | 45   |
| 2003 | LV0000570018 | 24/03/2005       | 11.1                           | 12                                  | 90.5  | 0.12   | 4.04                       | 3.66                         | 38   |
| 2003 | LV0000570026 | 26/01/2006       | 22.9                           | 12                                  | 120.2   | 0.19   | 4.22                       | 3.84                         | 38   |
| 2003 | LV0000570034 | 08/05/2007       | 21.6                           | 12                                  | 95.5  | 0.23   | 4.33                       | 4.03                         | 30   |
| 2003 | LV0000580017 | 14/02/2013       | 82.7                           | 11                                  | 114.2   | 0.79   | 5.04                       | 4.83                         | 21   |

Table 2 Statistics on the secondary market for five- and ten-year central government bonds

Source: Calculations are based on data from the Riga Stock Exchange.



#### LATVIA

#### 2.2.4 BENCHMARK BONDS VERSUS SAMPLE

The Latvian securities market is small, meaning that the use of the sample approach for the calculation of the long-term interest rates used for convergence assessment purposes is undermined, as it would increase maturity drift. The best solution is to use one security that has the longest redemption maturity, which would result in the smallest maturity drift and higher liquidity (usually the most liquid are newly issued bonds).

As the Latvian securities market is at an early stage of development, there are no conventions about the benchmark bonds. Latvijas Banka uses issues with the smallest maturity drifts as benchmark bonds.

#### **3** CALCULATION OF THE YIELD

The yields to maturity are calculated in accordance with formula 6.3 recommended by the International Securities Market Association (ISMA). For example, the yield to maturity for the ten-year national currency debt security issued on 14 February 2003 by the central government with a fixed coupon of 5.125% (ISIN LV0000580017) is 4.92% per annum. In 2003, the average of the close-of-market values (price gross of tax plus accrued interest) of this bond was 101.48.

#### 4 INTEREST RATES

#### 4.1 OFFICIAL RATES

Latvijas Banka refinancing rate is the reference rate for the banking system. However, the reference rate serves rather as a general guide for the money market and is not used in monetary operations. At the beginning of 2004, Latvijas Banka increased the refinancing rate by 50 basis points to slow down lending growth, limit the foreign trade deficit and keep inflation at a lower level. The repo rate set by Latvijas Banka is the minimum bid rate for repurchase agreements between banks and Latvijas Banka. The repo rate is set between the Lombard rate and the deposit rate.

The marginal lending facility (for Lombard loans) and the deposit facility are the standing facilities Latvijas Banka offers to its counterparties. The maturity of Lombard loans varies from overnight to 30 days. The interest rate depends on the length of use of the facility over the past 30 days. At the end of December 2003 the rates were 5.0% for the first ten days, 6.0% from the 11th to the 20th day and 7.0% as from the 21st day. The Lombard rates normally provide a ceiling for the money market rates. Under its deposit facility, Latvijas Banka accepts 7- and 14-day deposits at rates which stood at 2.00% and 2.25% respectively at the end of December 2003. The interest rate on the deposit facility normally provides a floor for the money market rate.

#### 4.2 MONEY MARKET RATES

The money market rate is the weighted average interest rate on newly granted loans in the interbank market. The overnight money market rate is the most representative rate as it applies to between 80% and 90% of all interbank loans. Stable and low money market interest rates prevailed throughout 2003. The overnight money market interest rate tended to be volatile at the end of the reserve maintenance periods.

The indices for money market rates are the Riga interbank bid rate (RIGIBID) and the Riga interbank offered rate (RIGIBOR). The RIGIBID is the index of Latvian interbank deposit rates and the RIGIBOR is the index of Latvian interbank lending rates. In 2003, one more bank (the joint stock company Baltijas Tranzītu banka) was added to the list of the banks whose money market quotes are used in RIGIBID and RIGIBOR calculations (other banks on the list are the joint stock companies





Hansabanka, Latvijas Krājbanka, Latvijas Unibanka, Parekss-banka, Vereinsbank Rīga and the Latvia Branch of Nordea Bank Finland Plc.).

#### 4.3 BANK INTEREST RATES

Until December 2003, the lending and deposit rates for domestic non-financial corporations and households were weighted average rates on new business. The insignificant stock of deposits redeemable at notice was included under "Deposits with agreed maturity", depending on the period of notice. For example, deposits with a period of notice of three months were given as time deposits with a maturity of up to three months. Newly granted loans with a maturity of one to five years were the most representative, as such loans accounted for 82% of long-term loans to non-financial corporations and for 60% of long-term loans to households in 2003. Interest rates on long-term loans granted by monetary financial institutions have been following a downward trend (in

particular, those on loans to households). Interest rates on long-term deposits held with monetary financial institutions have been rather stable, showing a slight downward trend.

In January 2004, Latvijas Banka introduced new reporting requirements in respect of interest rates applied by credit institutions and credit unions registered in the Republic of Latvia to domestic deposits and loans vis-à-vis households and non-financial corporations. The new reporting requirements are in line with those contained in Regulation ECB/2001/18 concerning statistics on interest rates applied by monetary financial institutions to deposits and loans vis-à-vis households and non-financial corporations. The reporting forms cover interest rate statistics on new business and outstanding amounts, and the reported breakdowns contain all the instrument and maturity categories laid down in Regulation ECB/2001/18.

# 5 AUTHORITIES INVOLVED IN BOND ISSUANCE, BOND MANAGEMENT AND SECURITIES MARKET SUPERVISION

The main authorities involved are:

- Finanšu un kapitāla tirgus komisija (Financial and Capital Market Commission), which grants institutions permission to issue public bonds and supervises the securities market;
- Latvijas Centrālais depozitārijs (Latvian Central Depository), which maintains the register of all public bonds and all bond transactions and which organises fixed-rate auctions of government securities denominated in the national currency;
- Rīgas Fondu birža (Riga Stock Exchange), on which publicly issued government bonds, corporate bonds and mortgage bonds are listed and traded subject to its disclosure and trading regulations; and
- Latvijas Banka (Bank of Latvia), which as the Government's fiscal agent – holds multiple-rate auctions of government securities denominated in the national currency.

LATVIA

# LITHUANIA

### I MARKET SIZE

#### I.I THE SIZE OF THE NATIONAL DEBT SECURITIES MARKET

At the end of 2003 the total amount outstanding of debt securities was €2,661 million, representing 17% of GDP.

The general government accounted for the largest share, i.e.  $\notin 2,540$  million or 95%, of total debt securities outstanding at the end of 2003.

Long-term and short-term general government debt securities accounted for 94% and 6% of all general government debt securities, respectively.

Almost two-thirds of general government debt securities were denominated in euro and issued in foreign markets, while about one-third were denominated in national currency (Lithuanian litas – LTL). All short-term general government debt securities were denominated in national currency, while long-term general government debt securities denominated in national



#### LITHUANIA



currency accounted for 32% of the total amount outstanding of general government debt securities at the end of 2003. All government debt securities with an original maturity of over one year but less than five years were issued in national currency and amounted to 35% of total general government debt securities denominated in national currency. Government debt securities with original maturities of five years or more but less than ten years and ten years or more issued by the general government and denominated in national currency accounted for 37% and 11%, respectively, of all general government debt securities denominated in national currency at the end of 2003.

Debt securities issued by monetary financial institutions, as well as by non-financial and non-monetary financial corporations, were insignificant, with both these categories accounting for about 2% of total debt securities outstanding at the end of 2003.

#### 1.2 EXPECTED ISSUE VOLUME AND MATURITY DISTRIBUTION FOR GOVERNMENT BONDS

The issuance of government securities is directly dependent on a few related factors, e.g. the total borrowing limit and debt refinancing (the redemption of government securities), as well as on strategic aspects, i.e. the restructuring of the currency composition of the debt (adjusting the amounts of foreign and domestic currency-denominated debt).

Currently, the Government issues securities with maturities of six months and of one, three, five and ten years in the domestic market.

#### 2 ACTIVITY IN THE PRIMARY AND SECONDARY MARKETS

## 2.1 THE PRIMARY MARKET

#### 2.1.1 ACTIVITY IN THE PRIMARY MARKET

During the period from 2001 to 2003 gross issuance of debt securities by residents on the

primary market increased by 33%, to  $\notin$ 939 million in 2003. According to the sector breakdown, the share of the general government decreased by 4% in 2003, compared with the previous year. Nevertheless, because only a relatively small amount of tradable debt was issued by other sectors, developments in primary market activity between 2001 and 2003 were as usual determined by the borrowing needs of the general government.

All general government debt securities denominated in national currency were issued by way of auction and accounted for 55% of the general government debt securities issued in 2003. In addition, 46% of the general government debt securities issued in 2003 were denominated in euro and were issued through syndication.

In 2003 monetary financial institutions accounted for 6% of total primary market issuance, while non-financial and non-monetary financial corporations made up only 0.3%. All of these issues were private.

#### 2.1.2 AUCTIONS: REGULARITY, FREQUENCY AND PRE-ANNOUNCEMENT

Auctions of government securities are held weekly (usually on Mondays) according to a quarterly schedule of government securities issues. Auction details are pre-announced at least one week in advance.

#### 2.1.3 MEASURES (EITHER PUBLIC OR PRIVATE) TO PROMOTE THE FUNCTIONING OF THE PRIMARY MARKET

On 1 October 1999 a primary dealer system was introduced in the Lithuanian government securities market. Auctions are open only to those Lithuanian and foreign commercial banks and brokerage companies that have entered into an Auction Participant's Agreement with Lietuvos bankas, the NCB and which meet the requirements imposed by Lietuvos bankas on auction participants. Namely, auction participants must bid at each auction, acquire at least 1% of the total government securities sold at auctions during a quarter and quote two-



#### LITHUANIA

# Chart 2 Primary market activity for debt securities

#### (gross issuance during the period; nominal amounts)

(2a) Total gross issuance (€ millions)











(2d) Issuance methods for long-term debt securities in national currency by general government in 2003 (as a percentage of the total)



way prices (on a yield basis) of "on-the-run"<sup>1</sup> benchmark issues of government securities.

#### 2.2 THE SECONDARY MARKET

#### 2.2.1 ACTIVITY IN THE SECONDARY MARKET

The secondary market for debt securities was not very active during the period from 2001 to 2003. After the increase in the average daily turnover of debt securities in 2002 by 42% compared with the previous year, secondary market activity remained almost unchanged in 2003 and amounted to about E2 million.

1 "On-the-run" issues are the last government securities issues of "typical" maturities with significant amounts outstanding. All currently issued government securities typically have maturities of six months (about 182 days), one year (about 364 days), and three, five and ten years from the first issue date.





#### Chart 3 Secondary market activity for debt securities

(value of transactions; daily averages; nominal amounts)





Source: ECB long-term interest rate statistics.

The secondary market turnover consisted mainly of debt securities issued by the general government. No issues of debt securities from other sectors were traded on the stock exchange in 2003.

In 2003 most of the transactions in general government debt securities (97%) were registered as negotiated deals, with only 3% being traded on the central market of the stock exchange.

#### (3b) By sector of the issuer (as a percentage of the total)





### (3d) Trading places for long-term debt securities denominated in national currency in 2003 (as a percentage of the total)



#### 2.2.2 MEASURES (EITHER PUBLIC OR PRIVATE) **TO PROMOTE LIOUIDITY IN THE SECONDARY MARKET**

Under the agreement between the Ministry of Finance and the National Stock Exchange of Lithuania (NSEL), the NSEL does not charge any commission on transactions with government securities. This incentive combined with a proven trading and settlement and



#### LITHUANIA

#### Table | Methodological notes on the statistical treatment of secondary market statistics (cf. Table 2B in the statistical tables in Part 2) Methodological item All debt securities Long-term debt securities Repos and reverse repos (if available, the percentage of Included Included these transactions in terms of the nominal value of the daily averages of transactions)1 Trading in secondary markets abroad Not included Not included Measures to ensure single counting In order to ensure single counting of transactions in the secondary market, only the actual turnover (i.e. one side of the agreement) of shares and debt securities is counted by the NSEL. In this way, double counting of the number of transactions and turnover is avoided.

1) Transactions concluded on the regulated market do not bear a specific reference to repos or reverse repos and therefore an estimated percentage cannot be provided. Repos and reverse repos concluded over the counter are however identified as such and accounted for approximately 72% of all OTC transactions in 2003.

3

clearing systems attracts more trading to the regulated secondary market.

Moreover, primary dealers are obliged to quote two-way yields for "on-the-run" issues. Another measure used to promote liquidity in the secondary market has been to reduce the number of different issues of outstanding government bonds and instead to increase the amount of individual issues by reopening previously issued government securities.

#### 2.2.3 LIQUIDITY OF THE SECONDARY MARKET

The liquidity of the secondary market for general government debt securities denominated in national currency and issued in the domestic market is reflected by the overall secondary market liquidity ratio (total turnover divided by the total amount outstanding), which was about 48% in 2003, and by the spreads between bid and ask prices, which were around 30 basis points.

About 30% of the total turnover of government debt securities in the secondary market in 2003 was conducted in long-term securities with an original maturity of over one year but less than five years. The turnover of long-term government securities with an original maturity of five years or more but less than ten years accounted for 32% of the total, while the turnover of long-term securities with a maturity of ten years or more amounted to 18% of the total.

#### CALCULATION OF THE YIELD

The yield to maturity for all domestic long-term government securities issued at auctions and denominated in national currency is calculated using the ISMA formula 6.3, the only difference being that every coupon payment is rounded to two decimal places for each individual security.

#### 4 INTEREST RATES

#### 4.1 OFFICIAL RATES

Lietuvos bankas calculates interest rates for overnight and liquidity loans on every business day. The interest rate for overnight loans equals the maximum value of the overnight VILIBOR (Vilnius Interbank Offered Rate) during the last 15 calendar days, plus 2 percentage points. The interest rate for liquidity loans equals the average value of the overnight VILIBOR over the last 30 calendar days, plus 4 percentage points. In 2003 the commercial banks did not experience any liquidity problems that they could not resolve in the market. Therefore, Lietuvos bankas did not grant any overnight or liquidity loans.



# **Chart 4 Interest rate statistics**

(percentages per annum; monthly averages unless otherwise indicated; based on new business)



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3) As of August 2003 yields refer to government bonds with a residual maturity of close to nine years

#### 4.2 **MONEY MARKET RATES**

Money market rates refer to interbank offered rates (VILIBOR). VILIBOR are based on the quotes of at least five banks, designated by Lietuvos bankas, which are the most active in the Lithuanian money market. The overnight money market rates are the most representative rates.

#### **CAPITAL MARKET INTEREST RATES** 4.3

These interest rates are the yields on government securities denominated in national currency and issued in the primary market. These rates are published for original maturities of three, five and ten years.

#### **BANK INTEREST RATES** 4.4

Bank interest rates on loans and deposits with an agreed maturity refer to the weighted average of interest rates on new loans and new deposits. The interest rates on outstanding amounts are only

collected for overnight deposits and deposits redeemable at notice. Long-term loans are the most representative for households and nonfinancial corporations. For bank deposit rates, short-term loans are the most representative.

#### **AUTHORITIES INVOLVED IN BOND ISSUANCE, BOND MANAGEMENT AND SECURITIES MARKET SUPERVISION**

The main authorities involved are:

- Lietuvos Respublikos Seimas (Parliament), which adopts the law that sets the total net borrowing limit for Lietuvos Respublikos Vyriausybe (Government of the Republic of Lithuania);
- Lietuvos Respublikos finansų ministerija (Ministry of Finance of the Republic of Lithuania), which issues and redeems government debt securities on the domestic and foreign markets on behalf of the Government;

- Lietuvos bankas (Bank of Lithuania), which acts as a State Treasury agent and, on the basis of an agreement with the Ministry of Finance, organises the issuance and redemption of government debt securities and the payment of interest thereon, and monitors compliance with requirements by participants in government debt security auctions;
- Lietuvos centrinis vertybinių popierių depozitoriumas (Central Securities Depository of Lithuania), which carries out the general accounting for securities and their circulation, and renders related services;
- Nacionalinė vertybinių popierių birža (National Stock Exchange of Lithuania), which organises securities trading, listing and quotation, and ensures safe and efficient transactions and their settlement (it was renamed OMX-Vilniaus vertybinių popierių birža/OMX-Vilnius Stock Exchange on 1 September 2004); and
- Lietuvos Respublikos vertybinių popierių komisija (Securities Commission of the Republic of Lithuania), which is the supervisory authority of the securities market. It monitors the observance of the principles of fair trading and competition in public trading of securities and takes the measures necessary to guarantee the effective functioning of the securities market and the protection of investors' interests.







FCB

# HUNGARY

#### I MARKET SIZE

#### I.I THE SIZE OF THE NATIONAL DEBT SECURITIES MARKET

The total amount of debt securities outstanding at the end of 2003 was €45,490 million, which represents 62% of GDP. More than 79% of the total amount outstanding was issued by general government, less than 19% was issued by monetary financial institutions and less than 2% by non-financial and non-monetary financial corporations.

In 2003, 84% of the debt securities issued by general government were denominated in national currency (Hungarian forint – HUF) and almost 14% were issued in euro. The remainder was issued in other currencies.

With regard to the maturity breakdown for all general government debt securities, 27% had an



HUNGARY


original maturity of over one year but less than five years, 33% had one of five years or more but less than ten years and 22% had one of ten years or more. The original maturity breakdown of national currency-denominated debt securities issued by the general government (i.e. 70% of the total amount outstanding of general government securities) was as follows: 26% were short-term and 74% were long-term securities. At the end of 2003, 27% of the debt securities issued in national currency by the general government had an original maturity of over one year but less than five years, 23% had an original maturity of five years or more but less than ten years and 24% had an original maturity of ten years or more.

#### 1.2 EXPECTED ISSUE VOLUME AND MATURITY DISTRIBUTION OF GOVERNMENT BONDS

The Government regularly issues bonds at preannounced auctions. It is intended to prolong the maturity of publicly offered bonds. New issues are necessary for the redemption of previous bonds and loans and because of the general government deficit (5.9% of GDP).

#### 2 ACTIVITY IN THE PRIMARY AND SECONDARY MARKETS

#### 2.1 THE PRIMARY MARKET

#### 2.1.1 ACTIVITY IN THE PRIMARY MARKET

Primary market activity fell by 5% in 2002 and rose by 20% in 2003, when gross issuance totalled €25,774 million.

The strong increase in 2003 was attributable to the privately placed government bonds and government bonds issued in euro, which both accounted for 15% of total issuance in that year.

The breakdown between short-term and longterm maturities remained stable over the period from 2000 to 2003. In 2003, approximately 46% of the general government's gross issuance was accounted for by long-term securities and 54% by short-term securities. Auctions were used for 68% of the total amount of long-term securities denominated in national currency and issued by the general government.

#### 2.1.2 AUCTIONS: REGULARITY, FREQUENCY AND PRE-ANNOUNCEMENT

There are regular pre-announced auctions in Hungary. Auctions of three-month Treasury bills are held every week. Treasury bond auctions are mainly held monthly, while six and twelve-month Treasury bill auctions are held every two weeks for each benchmark maturity. The issuing calendar of the Government Debt Management Agency is available on the Agency's website.<sup>1</sup>

#### 2.1.3 MEASURES (EITHER PUBLIC OR PRIVATE) TO PROMOTE THE FUNCTIONING OF THE PRIMARY MARKET

There is a system of primary dealers. A primary dealer may be any security dealer or credit institution registered in Hungary that provides securities investment services under the Securities Act. The company or its controlling shareholder is required to have operated for at least two years on the money and capital markets of one of the OECD countries. In addition, the company must undertake to fulfil the obligations laid down in the primary dealer contract and to meet all other requirements stipulated by the Government Debt Management Agency, including the maintenance of a good reputation.

#### 2.2 THE SECONDARY MARKET

#### 2.2.1 ACTIVITY IN THE SECONDARY MARKET

Between 2000 and 2003, total turnover ranged from  $\notin 159$  million to  $\notin 348$  million. It rose from  $\notin 180$  million in 2001 to  $\notin 270$  million in 2002 and reached a peak of  $\notin 348$  million in 2003.

Debt securities issued by the general government represent, on average, more than 90% of the value of secondary market transactions. The proportion of long-term securities issued by the general government

1 www.allampapir.hu.



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### Chart 2 Primary market activity for debt securities

#### (gross issuance during the period; nominal amounts)

#### (2a) Total gross issuance (€ millions)







#### (2b) By sector of the issuer (as a percentage of the total)



(2d) Issuance methods for long-term debt securities in national currency by general government in 2003 (as a percentage of the total)



increased continuously, accounting for 81% of the transaction value by the end of 2003.

Almost all transactions took place on the overthe-counter (OTC) market. While average daily turnover in the OTC market grew sharply between 2000 and 2003, average daily turnover on the stock exchange fell to zero in 2003. Data reported in Tables 2B.1 and 2B.2 in the statistical tables in Part 2 only include delivery repos. The proportion of such transactions is negligible, i.e. less than 1% of the total.

In Hungary, a distinction is made between "delivery repos" and "hold-in-custody repos" according to the ownership of the collateral. If

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the ownership of the collateral is transferred to the buyer, the deal is called a "delivery repo". The buyer has the right to use the securities during the term of the repo, but is obliged to return them to the seller on maturity. If the securities are pledged to the buyer, but the ownership remains with the seller, the deal is called a hold-in-custody repo. If the seller defaults on the cash loan at the end of the repo, the ownership of the securities is automatically transferred to the buyer. The proportion of hold-in-custody repo transactions in total transactions is approximately 10-15%, but hold-in-custody repos are excluded from Table 2B in the statistical tables in Part 2.

#### 2.2.2 MEASURES (EITHER PUBLIC OR PRIVATE) TO PROMOTE LIQUIDITY IN THE SECONDARY MARKET

The most important measures taken to promote liquidity in the secondary market have been:

- the calculation and publication of benchmark yields by the Government Debt Management Agency;
- the daily price quotations of primary dealers; and
- the reduction of the number of outstanding bonds and the increase of the amount issued per security (e.g. by increasing the number of tranches).

#### 2.2.3 LIQUIDITY IN THE SECONDARY MARKET

In terms of liquidity, this chapter refers only to government bonds issued by the Hungarian State and denominated in national currency.

The data only include transactions in publicly issued bonds. Private placements were mainly made in the early 1990s. Nevertheless, privately placed bonds were issued again in 2003 in an amount of  $\notin$ 1,850 million. Nowadays there is no significant turnover in these privately placed long-term bonds.

Until the end of 2001, the maximum period of time between the issuance and maturity of bonds was ten years, but this period has risen to fifteen years since the beginning of 2002.

There are also pre-announced and regular (with a set frequency) auctions in Hungary. Treasury bond auctions are usually held monthly, except in the cases of three-year government bonds, for which auctions are held twice a month, and the new fifteen-year bonds, which are issued every three months. The issuing calendar of the Government Debt Management Agency is available on its website.

There is one specific bond in every maturity range, except in that of fifteen years, which is regarded as a benchmark. The calculation of the two, three, five and ten-year benchmark yields is described in Section 3.

| (cf. Table 2B in the statistical tables in Part 2)   |   |   |
|--|---|---|
| Methodological item  | All debt securities   | Long-term debt securities   |
| Repos and reverse repos (if available, the percentage of<br>these transactions in terms of the nominal value of the<br>daily averages of transactions) | Includes delivery repos,<br>which account for less than 1%<br>of the total, but excludes<br>hold-in-custody repos,<br>which account for around<br>10-15% of total transactions.   | Includes delivery repos,<br>which account for less than 1%<br>of the total, but excludes<br>hold-in-custody repos,<br>which account for around<br>10-15% of total transactions. |
| Trading in secondary markets abroad  | Not included  | Not included  |
| Measures to ensure single counting   | The KELER Rt. (Központi Elszámolóház és Értéktár Rt., the Central<br>Clearing House and Depository (Budapest) Ltd.) reports secondary<br>market turnover broken down into individual transactions to Magyar<br>Nemzeti Bank. This avoids double counting. |   |

### Table | Methodological notes on the statistical treatment of secondary market statistics



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### Chart 3 Secondary market activity for debt securities

#### (value of transactions; daily averages; nominal amounts)

(3a) Total turnover (€ millions)







## are carried out daily, mainly between members of the primary dealer system.

One of the most important objectives when establishing the primary dealer system was to ensure the functioning of a liquid and transparent secondary market for investors

(3b) By sector of the issuer (as a percentage of the total)

90

80

70

60

50

40

30

20

10

0

Non-regulated markets (e.g.

over-the-counter market) 99%

2001

(as a percentage of the total)

non-financial and non-monetary financial corporations

100

90

80

70

60

50

40

30

20

10

0

Regulated markets

(stock exchange(s) and other regulated markets)

1%

2003

central government and other general government

2002

(3d) Trading places for long-term debt securities denominated in national currency in 2003

monetary financial institutions

Since the turnover of ten-year bonds is not as significant as that of bonds with shorter maturities, the liquidity of the market for all government bonds is described below.

In Hungary, the secondary market is sufficiently liquid and significant transactions



through primary dealers' active market participation and their obligation to quote twoway prices. Accordingly, the dealers' basic obligation is to quote continuous two-way (bid and offer) prices for the government securities included in the system.

The primary dealers quote bid and offer prices on a continuous basis for the amount stated in their tenders. For fixed rate government bonds and discount Treasury bills, the maximum bid/offer spread for nominal amounts of at least HUF 100 million is 0.5 percentage point in yield terms. For floating rate government bonds in nominal amounts of at least HUF 50 million, the maximum bid/offer spread is 1 percentage point in price terms.

The following table shows the weighted and unweighted monthly average of the bid/offer spread. The weighted average is based on the amount of transactions.

Government securities are traded on the stock exchange and on the OTC market. As mentioned in Sub-section 2.2.1 and shown in Chart 3d, more than 99% of the turnover in government bonds was carried out on the OTC market. The reason for the low volume of trade in government bonds on the stock exchange is high transaction costs. The monthly number of transactions on the two types of secondary market are presented in Table 3.

#### 3 CALCULATION OF THE YIELD

#### 3.1 BENCHMARK YIELD CALCULATIONS BY THE GOVERNMENT DEBT MANAGEMENT AGENCY

The benchmark maturities are three, five, ten and fifteen years, and the criteria for selecting the government bond issues to calculate the benchmark yields are as follows. Government bonds with remaining maturities of more than 90 days, publicly issued and sold by the Hungarian State in the primary dealer system, provide the basis for calculating the yields, taking into account the date of maturity. The bases for calculating the three, five, ten and fifteen-year benchmark yields are the three, five, ten and fifteen-year government bond series whose dates of issue are closest to the date of calculation of the benchmark yield, with the stipulation that, in the case of three and five-year fixed rate bonds, the benchmark yields for the series should be calculated from the date of first sale following the date of issue of the series. This applies only to three and

| (percentage points) |                                     |                                   |
|---------------------|-------------------------------------|-----------------------------------|
|                     | Unweighted average bid/offer spread | Weighted average bid/offer spread |
| January 2003        | 1.26                                | 1.32                              |
| February 2003       | 1.31                                | 1.44                              |
| March 2003          | 1.31                                | 1.57                              |
| April 2003          | 1.32                                | 1.45                              |
| May 2003            | 1.37                                | 1.61                              |
| June 2003           | 1.31                                | 1.49                              |
| July 2003           | 1.35                                | 1.45                              |
| August 2003         | 1.32                                | 1.40                              |
| September 2003      | 1.36                                | 1.26                              |
| October 2003        | 1.36                                | 1.38                              |
| November 2003       | 1.23                                | 1.47                              |
| December 2003       | 1.19                                | 1.41                              |

# Table 2 Monthly average bid/offer spread on the secondary market for publicly issued government bonds

Note: The spreads are based on market prices.



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#### Number of transactions on the Number of transactions on the **OTC** market stock exchange January 2003 100 3.725 February 2003 38 2,564 March 2003 20 1,786 April 2003 11 1,992 May 2003 3.030 11 June 2003 176 4,771 July 2003 52 3,548 August 2003 18 2,143 September 2003 33 2.740 October 2003 86 2,391 November 2003 157 3,374 December 2003 429 3,250

Table 3 Number of transactions per month on the regulated and non-regulated markets

five-year fixed rate bonds. In practice, this stipulation means that the three and five-year fixed rate bonds become a benchmark only when the second tranches have been issued, but the ten and fifteen-year fixed rate bonds become a benchmark after they have been issued (i.e. after the first tranches have been issued).

This means that the benchmark bonds are replaced in order to restrict maturity drift. The Government Debt Management Agency publishes benchmark yields for different maturities, which are given by the original maturities of the benchmark bonds.

The calculation of government securities market yields and prices in Hungary is based on the following methods:

For discount Treasury bills (short-term debt securities issued by the central

#### Table 4 Monthly turnover in publicly issued government bonds on the secondary market

|                | Monthly<br>turnover on<br>the OTC market<br>(HUF millions) | Monthly<br>turnover on the<br>stock exchange<br>(HUF millions) | Total monthly<br>turnover on the<br>secondary market<br>(HUF millions) | Total amount<br>outstanding at the<br>end of the month<br>(HUF millions) | Liquidity<br>ratio |
|----------------|--|--|--|--|--------------------|
| January 2003   | 1,795,149  | 11,580   | 1,806,729  | 4,036,373  | 0.45               |
| February 2003  | 1,002,894  | 2,813  | 1,005,707  | 4,200,079  | 0.24               |
| March 2003     | 805,364  | 1,626  | 806,990  | 4,291,386  | 0.19               |
| April 2003     | 870,883  | 1,136  | 872,020  | 4,353,518  | 0.20               |
| May 2003       | 1,373,040  | 924  | 1,373,964  | 4,521,737  | 0.30               |
| June 2003      | 2,358,963  | 36,258   | 2,395,221  | 4,532,888  | 0.53               |
| July 2003      | 1,692,860  | 6,877  | 1,699,737  | 4,664,896  | 0.36               |
| August 2003    | 949,473  | 2,058  | 951,531  | 4,824,279  | 0.20               |
| September 2003 | 1,310,444  | 4,369  | 1,314,812  | 4,771,148  | 0.28               |
| October 2003   | 1,084,454  | 10,509   | 1,094,963  | 4,912,240  | 0.22               |
| November 2003  | 1,559,362  | 18,794   | 1,578,156  | 4,917,802  | 0.32               |
| December 2003  | 1,420,368  | 52,597   | 1,472,965  | 5,045,820  | 0.29               |



government), the yields and prices can be calculated using the following formulae:

price (%) = 
$$\frac{100\%}{1 + \text{yield* days to maturity / 365}}$$
yield (%) = 
$$\frac{100\% - \text{price (\%)}}{\text{price (\%)}}$$
\* 
$$\frac{365}{\text{days to maturity}} *100$$

- For government bonds (long-term debt securities issued by the central government), the following conventions apply.
  - For bonds paying interest several times a year, the price calculation method depends on the residual maturity of the security. If the residual maturity is 365 days or longer, all interest and redemption payments must be discounted exponentially, while if the residual maturity is shorter than 365 days linear discounting is used.

dirty price (within one year)

 $= \sum \frac{\text{interest payment}}{1 + \text{yield* days to maturity / 365}}$   $+ \frac{1 + \text{yield* days to maturity / 365}}{\text{redemption}}$  dirty price (over one year)  $= \sum \frac{\text{interest payment}}{(1 + \text{yield})^{\text{days to maturity / 365}}}$   $+ \frac{\text{redemption}}{(1 + \text{yield})^{\text{days to maturity / 365}}}$ 

dirty price = clean price + accrued interest

|           | coupon rate *                     |  |  |
|-----------|-----------------------------------|--|--|
|           | (days elapsed from previous       |  |  |
| accrued _ | interest payment date – leap day) |  |  |
| interest  | 365                               |  |  |

For bonds which have the interest rate reset twice during one interest payment period, the proportional part of the nominal interest set for the second period is added to the interest accrued until the interest is reset. In accordance with the Hungarian day-count conventions, no interest is paid for intercalary days in leap years, i.e. the accrued interest on 29 February is the same as on the previous day.

#### 3.2 EXAMPLE OF THE YIELD CALCULATION

The benchmark yields are calculated on the basis of bid and offer prices for benchmark bonds provided by primary dealers. In stock exchange trading, the transactions are based on clean prices, and it is also clean prices that are quoted on the OTC market. Nevertheless, trades made by telephone are usually based on yields, but it is always advisable to agree with the counterparty on the price as well.

ISMA formula 6.3 is applied to the yield calculations, using the value date (i.e. trade date + two business days). For the calculation of average period yields and market prices, all business days were taken into account regardless of whether or not the securities were traded. If the security was not traded, the market closing price (clean price) was carried forward. To obtain the gross price, the interest accrued for all business days was calculated. Then, the arithmetic averages of calculated yields and gross market prices were calculated. For example, the yield to maturity for the 11-year benchmark bond with a fixed coupon of 6.75% (ISIN HU0000402045) is 7.44% per annum, which is based on the average of closeof-market values (price gross of tax plus

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accrued interest) for the reference period from July 2003 to December 2003.

#### 4 INTEREST RATES

#### 4.1 OFFICIAL RATES

The Monetary Council of Magyar Nemzeti Bank sets the central bank base rate. The base rate is equal to the interest rate on two-week voluntary deposits placed by commercial banks with Magyar Nemzeti Bank. To prevent extreme fluctuations in interbank rates, the central bank maintains an overnight interest rate corridor. The interest rate corridor is symmetric (+/-1 percentage point) around the base rate. The following interest rates represent the ceiling and the floor of the interest rate corridor:

- (i) overnight secured loan rate: this interest rate is equal to the base rate plus 1 percentage point and is the upper limit of the interest rate corridor;
- (ii) overnight deposit rate: this rate applies to voluntary deposits by commercial banks with the central bank; it is equal to the base rate minus 1 percentage point and forms the lower bound of the interest rate corridor.

Other official rates are tied to the base rate:

- (i) project loans provided against foreign currency deposits with a maturity of at least five years: the interest rate for such loans is equal to the base rate;
- (ii) maximum applicable penalty rate above interest rates defined in contracts and other legal instruments: this rate is also equal to the base rate.

Magyar Nemzeti Bank also sets the interest rate on the required reserves. The same rate applies to both the reserves built for foreign currency liabilities and for Hungarian forint liabilities.

#### 4.2 MONEY MARKET RATES

Average interbank interest rates are calculated on the basis of the rates applicable to unsecured lending among banks and specialised credit institutions in the money market.

Average money market interest rates are arithmetic averages of daily rates, weighted by the volumes of unsecured lending transactions on the money market.

#### 4.3 BANK INTEREST RATES

The National Bank of Hungary disseminates average interest rates of credit institutions vis-à-vis non-financial corporations (ESA 95 category S.11) and households (S.14). The interest rate statistics for the household sector also include data for non-profit institutions serving households (S.15). The methodology used and the type of published data are the same for both sectors, and the data collection is harmonised with the ECB Regulation ECB/2001/18 regarding MFI interest rate statistics. The source of interest rate data is the monthly returns of banks, specialised credit institutions and 54 cooperative credit institutions. The time series for interest rates contain rates for new business and outstanding amounts, as well as for various maturity bands. The average interest rates on new business are arithmetic average monthly rates, weighted by the amounts of the new deposits or loans. For the outstanding amount categories, the average rates are weighted by the amounts outstanding derived from balance sheet statistics.

The interest rate statistics include all loan and deposit contracts concluded under market conditions, as well as subsidised loans. In the case of subsidised loans, the interest rate statistics refer to the rate of interest received by the credit institution from different sources (e.g. from households, from the State). In that way, the interest rates always reflect market conditions.



#### Chart 4 Interest rate statistics

(percentages per annum; monthly averages unless otherwise indicated; based on new business)



Besides the interest rate shown in the individual contract, Magyar Nemzeti Bank disseminates annualised agreed rates in order to make contracts with different maturities comparable. The agreed and the annualised agreed rates do not include any other charges or fees. In addition to annualised interest rates, the annualised percentage rate of charge, which shows the total cost of credit, is also published for consumer credit and housing loans. The most representative maturity for official rates is the two-week maturity. For the money market rate, the most representative is the overnight maturity and, for bank loan and deposit rates vis-à-vis non-financial corporations and households, it is the short-term maturity (up to one year).

#### 5 AUTHORITIES INVOLVED IN BOND ISSUANCE, BOND MANAGEMENT AND SECURITIES MARKET SUPERVISION

The main authorities involved are:

the Government Debt Management Agency,
 which issues government securities and <sup>2</sup>

manages the domestic and foreign debt of the Government;

- Pénzügyi Szervezetek Állami Felügyelete (Hungarian Financial Supervisory Authority), the aims of which are:
  - to facilitate the smooth operation of the financial markets and promote the protection of customers of financial institutions;
  - to maintain and strengthen confidence in the financial markets; and
- to contribute to the transparency of the markets, raise consumer awareness of financial markets and promote fair competition in the markets.

The Mission Statement and the Basic Principles of Operation of Pénzügyi Szervezetek Állami Felügyelete are available on its website.<sup>2</sup>

2 www.pszaf.hu/english/intro/mission.htm.

## MALTA

#### I MARKET SIZE

#### I.I THE SIZE OF THE NATIONAL DEBT SECURITIES MARKET

The total amount of debt securities outstanding in December 2003 was  $\in$ 3,055 million, which represents 71% of Malta's GDP. Three main sectors contributed to the issuance of these securities. Securities issued by the central government amounted to 87% of the market. The remaining bonds were issued by non-financial and non-monetary financial corporations (9%) and by monetary financial institutions (4%). As highlighted in Chart 1c below, all central government securities were denominated in Maltese lira (MTL). On the primary market, more than half of all government securities (62%) were issued with a maturity of ten years or more, while 18% had an original maturity of five years or more but less than ten years. A significant proportion, 20% of



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the total, was accounted for by issues of Treasury bills with various maturities of up to and including one year.

#### 1.2 EXPECTED ISSUE VOLUME AND MATURITY DISTRIBUTION FOR GOVERNMENT BONDS

The Government intends to issue bonds with different maturities mostly in the form of fungible issues. The indications are that all securities issued by the central government next year will be denominated in Maltese lira. As was the practice in 2002, at the beginning of 2003, the Treasury released a calendar of issues for the year. It is expected that this approach will also be adopted in future years, with issue terms probably in the medium and long-term range. It is currently projected that Malta government securities issues will amount to almost MTL 144 million in 2004. Of this total, just under MTL 46 million represent conversion issues to refinance the two issues that will mature during the year.

#### 2 ACTIVITY IN THE PRIMARY AND SECONDARY MARKET

#### 2.1 THE PRIMARY MARKET

#### 2.1.1 ACTIVITY IN THE PRIMARY MARKET

Primary market activity in debt securities during the period has experienced a moderate increase. In fact, the amounts of issue in 2001, 2002 and 2003 were €1,582 million, €2,008 million and €2,098 million, respectively. The slight increase was attributable to a sharp rise in the issuance of central government long-term securities. The central government continued to resort to the primary Treasury bill market to raise short-term funds. By contrast, the participation of other players in the market as issuers of securities fell by more than a half from the previous year. In 2003, the non-financial and non-monetary financial corporations sector issued almost 3% of the total securities, with the remainder being issued by the central government. In 2001, almost all securities were issued by the central government. In 2002, the non-financial and nonmonetary financial corporations sector issued 6% of the total, with the central government participating heavily in the primary market for Treasury bills. There was no borrowing by the monetary financial institutions sector on the primary market in the last three years.

Over the past three years (2001-2003) the central government generally issued short-term securities rather than long-term debt. In fact, while short-term securities made up slightly more than 91% of total issued in 2002, this percentage fell slightly to 83% in 2003. This reflects the sustained preference, as already mentioned above, of issuing Treasury bills rather than bonds with longer maturities. Longterm national currency debt securities of the central government are issued by auction.

#### 2.1.2 AUCTIONS: REGULARITY, FREQUENCY AND PRE-ANNOUNCEMENT

Long-term debt securities in national currency are issued by the central government at auctions, normally three times a year on preannounced dates. In these auctions, sales are made to the highest bidders, usually subsequent to a process where bids up to a retail maximum amount have been satisfied at a pre-announced fixed price. Treasury bills in national currency are issued on a regular weekly basis through auctions held on Tuesdays, for settlement on Fridays.

#### 2.1.3 MEASURES (EITHER PUBLIC OR PRIVATE) TO PROMOTE THE FUNCTIONING OF THE PRIMARY MARKET

In order to promote the functioning of the primary market, the Government is planning to dematerialise the Treasury bill in the near future. Consultations in this regard between the Treasury and the Malta Stock Exchange have reached an advanced stage. Moreover, in October 2002, a Primary Dealer System Working Group was set up with a view to presenting recommendations for the introduction of a primary dealer system for Malta government securities. The Working Group is composed of representatives of the Central Bank of Malta, the Malta Stock

### Chart 2 Primary market activity for debt securities

#### (gross issuance during the period; nominal amounts)

## (2a) Total gross issuance<sup>1)</sup> (€ millions)



# (2c) By original maturity for the general government sector (as a percentage of the total)



(2b) By sector of the issuer (as a percentage of the total)



(2d) Issuance methods for long-term debt securities in national currency by general government in 2003 (as a percentage of the total)



Source: ECB long-term interest rate statistics. 1) The relatively large volume of gross short-term debt securities issuance in the primary market is attributable to the fact that Treasury bills are normally issued weekly and rolled over within a very short period (usually within three months). As a proportion of outstanding general government debt, the share of short-term securities stood at 16.4%, 21.2% and 20.3% at the end of 2001, 2002 and 2003, respectively. 2) Fixed/variable price (see Sub-section 2.1.2).

Exchange, the Malta Financial Services Authority, the Treasury and local credit institutions. Consultations are underway with the other major market players in this respect. Promotion of the primary market takes place mainly through issuers advertising in the media.

#### 2.2 THE SECONDARY MARKET

#### 2.2.1 ACTIVITY IN THE SECONDARY MARKET

In Malta, there is only one regulated market for debt securities. In 2002, legislation was passed whereby the regulatory responsibility for listed



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securities was transferred from the Malta Stock Exchange to the Malta Financial Services Authority. On the other hand, the market for Treasury bills is non-regulated as such securities are still traded on an over-the-counter (OTC) basis. It is expected that this matter will be addressed once the Treasury bill market has been dematerialised. It is important to highlight the fact that Treasury bill issuance is governed by the Treasury Bills Act of 1952, while government stock issues are governed by the Local Loans (Registered Stocks and Securities) Ordinance of 1959. The Central Bank of Malta quotes two-way prices for Treasury bills and only bid prices for government bonds as from August 2003. In terms of deals, there were more transactions in government stocks than in Treasury Bills. In terms of volume, secondary market trading in Treasury bills amounted to MTL 143 million in 2003, compared with MTL 48 million in government stocks. In contrast to the strong performance of the secondary market for debt securities in 2001, activity declined steadily in 2002 and improved slightly in 2003. The total turnover amounted to €3.1 million in 2001, €1.7 million in 2002 and €1.9 million in 2003. With regard to the sectoral breakdown of the secondary market for debt securities, the market consisted almost entirely of transactions in securities issued by the central government in all three years. All government securities, with the exception of Treasury bills, are traded on the Malta Stock Exchange in accordance with the Malta Stock Exchange Act. In 2002, legislation was passed whereby the exclusivity role of the Malta Stock Exchange was repealed

and trading may be conducted on any recognised investment exchange approved by the Malta Financial Services Authority.

#### 2.2.2 MEASURES (EITHER PUBLIC OR PRIVATE) TO PROMOTE LIQUIDITY IN THE SECONDARY MARKET

The Central Bank of Malta stands ready to buy any amount of Treasury bills and government bonds on a daily basis. It quotes daily two-way prices for Treasury bills.

#### 2.2.3 LIQUIDITY IN THE SECONDARY MARKET (LIQUIDITY OF MALTA GOVERNMENT STOCK)

In terms of the extent to which holders of Malta Government Stock (MGS) can readily sell MGS in the secondary market on demand, the MGS market in Malta is quite liquid. This is due to the fact that, since its inception in 1968, the Central Bank of Malta has published prices at which it was prepared to buy Malta government securities in order to guarantee the liquidity of such instruments, thereby fostering the development of the local secondary market for MGS. However, given that the Central Bank of Malta is precluded from replenishing its trading balances on the primary market, its marketmaking role has effectively become very constrained because it has no stock available for sale. Accordingly, the Central Bank of Malta has constantly been encouraging local banks to participate in the market, with a view to ensuring that, once other market makers mainly the private sector - take over the marketmaking role, the availability of ready sellers and

#### Table | Methodological notes on the statistical treatment of secondary market statistics

| (cf. Table 2B in the statistical tables in Part 2)   |   |                           |
|--|---|---------------------------|
| Mathadalagiaalitam   | All debt securities   | Long town dobt committies |
| Methodological item  | All uebt securities   | Long-term debt securities |
| Repos and reverse repos (if available, the percentage of<br>these transactions in terms of the nominal value of the<br>daily averages of transactions) | Not included  | Not included              |
| Trading in secondary markets abroad  | Not included  | Not included              |
| Measures to ensure single counting   | The Malta Stock Exchange Automated Trading System ensures that<br>there is single-counting of transactions in the secondary market; e.g.<br>a deal between two parties that involves the buying and selling of a<br>particular security is considered as one transaction. |                           |



buyers would enhance the liquidity of the MGS market.

In terms of the extent to which the investing public can readily buy MGS on demand in the secondary market, the market in Malta has tended to be characterised by a very low level of liquidity. This is explained by the fact that the majority of both institutional and private investors in MGS normally prefer to hold their investments until maturity and are generally unwilling to put them on offer in the secondary market. In recent years, this pattern has been accentuated by the collapse of equity prices, which has led to a market preference for fixedincome securities. Moreover, whereas the Central Bank of Malta used to participate in the MGS primary market in order to replenish its trading balances for market-making purposes until the late 1990s, it has refrained from any primary market involvement since late 1999. As a result, while the Central Bank Broker, as already indicated, is readily available to buy MGS in the secondary market, it has virtually no balances to sell.

#### Chart 3 Secondary market activity for debt securities





(3d) Trading places for long-term debt securities denominated in national currency in 2003 (as a percentage of the total)



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For the reasons outlined in the paragraph above, the MGS secondary market is highlighted by very thin trading. In fact, the ratio of MGS secondary market turnover to market capitalisation has fluctuated between only 7% and 17% in recent years.

#### **3** CALCULATION OF THE YIELD

The yields to maturity are the gross redemption yields of each debt security, published by the Central Bank Broker. To calculate the gross redemption yield for a given bond, the process used is iteration, using a formula based on ISMA formula 6.3. In addition, a semi-annual yield is also shown. For example, the yield on a 10-year security (i.e. a 7.8% 2013 bond with a maturity date of 18 october 2013, a settlement date of 6 January 2004 and a bid price on an actual/actual basis of 124.66) was 4.68% using the ISMA formula and 4.63% on a semi-annual basis at the end of 2003.

#### INTEREST RATES

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#### 4.1 OFFICIAL INTEREST RATES

The official rates are quoted by the Central Bank of Malta. Following the introduction of the Bank's open market operations in the second half of the 1990's, the most indicative rate became the Central Intervention Rate, which can only be adjusted by the Central Bank Governor after consultation with the Monetary Policy Advisory Council, which meets on a monthly basis. Following the introduction of the Central Intervention Rate, the discount rate retained only symbolic importance and, accordingly, the Central Bank of Malta ceased publishing the discount rate in late 2002. The Central Bank of Malta conducts weekly auctions of 14-day term deposits, absorbing excess funds at up to 5 basis points below the Central Intervention Rate and injecting funds at up to 5 basis points above the rate. Moreover, the Central Bank of Malta provides a standby marginal lending facility





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(which is very rarely used) and a standby overnight deposit facility (which is normally used by banks at the end of the reserve deposit maintenance period in order to adjust their overnight positions in their reserve deposit accounts). The rates on these standby lending and deposit facilities act as the ceiling and floor for the money market rates.

#### 4.2 MONEY MARKET INTEREST RATES

The most significant money market rates quoted are Treasury bill rates, which range from one month to one year. The three-month Treasury bill rate is the most representative of all the Treasury bill rates shown in the table. Moreover, interbank bid and offer rates from overnight to one year are quoted. These rates represent the cost for credit institutions to obtain additional liquid funds. Interbank dealing is conducted almost exclusively in the overnight and seven-day segments. Turnover is very thin because most banks tend to be on the same side in terms of their liquidity position. In September 2002, the Central Bank of Malta introduced interbank fixing sessions for interbank rates. These rates are used as a basis for the pricing of other money market and foreign exchange products such as swaps.

#### 4.3 BANK INTEREST RATES

The bank interest rates in Chart 4 represent the average weighted commercial lending and deposit rates offered by banks in Malta. The rate on loans extended to non-financial corporations is the most representative, as the personal sector accounts for only about onethird of all bank borrowing in the economy. On the other hand, the rate on deposits with agreed maturity is the most representative of all bank deposit rates.

#### AUTHORITIES INVOLVED IN BOND ISSUANCE, BOND MANAGEMENT AND SECURITIES MARKET SUPERVISION

| Sector of the issuer  | Bond issuance        | Bond management      | Securities market supervision         |
|---|----------------------|----------------------|---------------------------------------|
| Central government and other general government             | Treasury             | Not applicable       | Malta Financial Services<br>Authority |
| Monetary financial institutions <sup>1)</sup>               | Malta Stock Exchange | Not applicable       | Malta Financial Services<br>Authority |
| Non-financial and<br>non-monetary financial<br>institutions | Malta Stock Exchange | Malta Stock Exchange | Malta Financial Services<br>Authority |

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1) Currently applies to credit institutions.



## POLAND

#### I MARKET SIZE

#### I.I THE SIZE OF THE NATIONAL DEBT SECURITIES MARKET

The total amount outstanding of debt securities issued by residents amounted to €69,462 million at the end of December 2003 and represented 38% of GDP. The general government sector was the dominant issuer with a share of almost 85%.<sup>1</sup> The shares of monetary financial institutions and of non-financial and non-monetary financial corporations amounted to 6% and 9% respectively. The main issuer within the group of monetary financial institutions is Narodowy Bank Polski, the National Bank of Poland.

The general government issues were predominantly (84%) denominated in national currency (Polish zloty – PLN). The share of general government issues denominated in euro and other currencies amounted to 16%.

 Data for general government only cover central government. The total amount outstanding for other general government sectors is relatively small.

## Chart | Debt securities by original maturity, sector of the issuer and currency of denomination

(amounts outstanding at the end of December 2003; nominal amounts)





(1c) Debt securities issued by general government, by currency of denomination (as a percentage of the total)



(1d) Debt securities issued by general government in national currency, by original maturity (t) (as a percentage of the total)



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According to the maturity structure, 37% of outstanding debt securities issued by the general government in national currency had an original maturity of five years or more but less than ten years. Debt securities with a maturity of over one year but less than five years constituted 25% of the total. Short-term debt securities with a maturity of up to and including one year represented 21% of the total. The share of general government debt securities with an original maturity of ten years or more was the smallest and amounted to 17%.

#### I.2 EXPECTED ISSUEVOLUME AND MATURITY DISTRIBUTION FOR GOVERNMENT BONDS

Ministerstwo Finansow (the Ministry of Finance) follows developments in the market and offerings of new instruments. The type and maturities of these instruments depend on the strategic objectives of debt management policy and reflect demand from investors. Before new instruments are issued, market participants are consulted.

In January 2004, the range of wholesale Treasury securities on offer was enlarged by the issuance of floating rate bonds with maturities of three and seven years (with a coupon based on WIBOR rates). Apart from these issues, Ministerstwo Finansow is undertaking market research on opening a new segment of wholesale bonds for inflation-indexed bonds with a long maturity. This possible new instrument will be mainly addressed to pension funds and insurance companies.

#### 2 ACTIVITY IN THE PRIMARY AND SECONDARY MARKETS

#### 2.1 THE PRIMARY MARKET

#### 2.1.1 ACTIVITY IN THE PRIMARY MARKET

In the period from 2001 to 2003, gross issuance of debt securities by residents on the primary market decreased by 3%, to €84,168 million in 2003. The main reason was the depreciation of the Polish zloty against the euro from PLN 3.3668

in 2001 (average-of-period exchange rate) to PLN 4.3964 in 2003. According to the sector breakdown, the role of issues of monetary financial institutions on the primary market, predominantly Narodowy Bank Polski (NBP) bills,<sup>1</sup> decreased significantly from 67% in 2001 to 48% in 2003. This decline took place mainly in 2002. The share of non-financial and non-monetary financial corporations amounted to around 15%. The structure of debt securities issued by the central government changed significantly between 2001 and 2003, as the share of short-term securities decreased from 52% in 2001 to 42% in 2003 and, consequently, the share of long-term securities increased from 48% in 2001 to 58% in 2003. Between 2001 and 2003, there was a notable 47% increase in Treasury bond issuance.

Auctions were the predominant issuance method for long-term debt securities in national currency issued by the central government in 2003, being used for almost all issues. NBP bills were the main factor driving activity in the primary market for debt securities issued by monetary financial institutions.

#### 2.1.2 AUCTIONS: REGULARITY, FREQUENCY AND PRE-ANNOUNCEMENT

All Treasury bond (T-bond) auctions are preannounced and the information about any auction to be held is provided two days before the auction day. The auctions are held according to the issue calendar:

- zero-coupon T-bonds are offered on the first Wednesday each month;
- floating rate T-bonds are offered, alternating with 10-year and 20-year fixed rate T-bonds, on the second Wednesday of each month; and
- five-year fixed rate T-bonds are offered on the third Wednesday of a month, but not every month (depending both on the budget and on investors' needs).
- 1 NBP bills are debt securities with a maturity of less than one year that are issued by the central bank to absorb liquidity in the banking sector. Issuance of 28-day NBP bills was the main type of open market operation conducted by Narodowy Bank Polski until December 2002; since January 2003, 14-day NBP bills have been issued.

#### Chart 2 Primary market activity for debt securities

#### (gross issuance during the period; nominal amounts)

#### (2a) Total gross issuance (€ millions)



### (2c) By original maturity for the general government sector (as a percentage of the total)



## (2b) By sector of the issuer (as a percentage of the total)



(2d) Issuance methods for long-term debt securities in national currency by general government in 2003 (as a percentage of the total)



#### 2.1.3 MEASURES (EITHER PUBLIC OR PRIVATE) TO PROMOTE THE FUNCTIONING OF THE PRIMARY MARKET

There is a system of primary dealers (Treasury securities dealers). In the primary market for Treasury securities, these dealers are obliged to participate in all types of auctions and, in each quarter of any year, to purchase no less than 2% of the nominal value of all T-bonds sold and no less than 2% of the nominal value of all T-bills sold. Primary dealers whose bids were accepted at an auction can participate in a non-competitive auction organised after each auction.

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#### 2.2 THE SECONDARY MARKET

#### 2.2.1 ACTIVITY IN THE SECONDARY MARKET

In the period from 2001 to 2003, total turnover – in terms of the daily average transaction value in nominal amounts – increased by 158%. The secondary domestic market for debt securities was dominated by central government issues. The turnover in this segment amounted to 95.8% of all secondary market activity in debt securities in 2003.

Treasury debt securities denominated in the national currency were predominantly traded on non-regulated markets (the over-the-counter (OTC) market). The turnover on regulated markets increased from 0.2% in 2001 to 3.2% in 2003. The creation of a new electronic market for government securities was the main factor behind the increased transaction volume on regulated markets.

#### 2.2.2 MEASURES (EITHER PUBLIC OR PRIVATE) TO PROMOTE LIQUIDITY IN THE SECONDARY MARKET

Twelve primary dealers (Treasury securities dealers) are obliged to quote two-way prices for the benchmark T-bonds on Elektroniczny Rynek Skarbowych Papierow Wartosciowych, the Electronic Treasury Securities Market. The list of the benchmark T-bonds is determined by the Minister of Finance. The minimum daily duration of quotations is six hours.

#### 2.2.3 LIQUIDITY OF THE SECONDARY MARKET FOR TREASURY SECURITIES

Over the past few years, the liquidity of the secondary market for Treasury securities has increased considerably. In 2003, the liquidity ratio (defined as the total monthly market turnover divided by the annual average of the amounts outstanding, calculated for fixedincome securities) reached a level of almost 190%. This was mainly due to a larger volume of issues, to increasing activity of foreign investors and open pension funds on the market and to the improved settlement and clearing system. The most liquid segment of the market is formed by the benchmark five-year (original maturity) bonds with a fixed coupon rate. These securities are frequently bought by foreign investors - at end-December 2003, 25% of all five-year bonds were held by non-residents.

The benchmark issues are characterised by the highest liquidity, which decreases as the redemption day approaches. In most cases, these bonds are securities with a residual maturity of at least one year and they are still offered in the primary market (bonds on the run). The choice of benchmark bond depends on market analysis and market participants' acceptance.<sup>2</sup>

In the period from 2001 to 2003, there was strong growth in the size of the largest

2 In particular, that of Treasury securities dealers.

| (cf. Table 2B in the statistical tables in Part 2)   |   |                           |
|--|---|---------------------------|
| Methodological item  | All debt securities   | Long-term debt securities |
| Repos and reverse repos (if available, the percentage of<br>these transactions in terms of the nominal value of the<br>daily averages of transactions) | Included <sup>1)</sup>  | Included                  |
| Trading in secondary markets abroad  | Not included  | Not included              |
| Measures to ensure single counting   | Data on secondary regulated markets are provided by the National<br>Depository for Securities, which acts as a clearing house for<br>tradable Treasury bonds. Data on NBP bills are provided by<br>Narodowy Bank Polski, where the register of these securities is<br>located. Narodowy Bank Polski acts as a clearing house for Treasury<br>bills and NBP bills. |                           |

Table | Methodological notes on the statistical treatment of secondary market statistics

1) In the case of transactions in T-bills, their share is about 92% (together with sell/buy-back transactions). Transactions in T-bonds account for about 16.5%.



#### Chart 3 Secondary market activity for debt securities

#### (value of transactions; daily averages; nominal amounts)

(3a) Total turnover (€ millions)







#### (3b) By sector of the issuer (as a percentage of the total)



(3d) Trading places for long-term debt securities denominated in national currency in 2003 (as a percentage of the total)



individual T-bond issue: at the end of 2001 the largest issue amounted to PLN 6.7 billion and at the end of 2003 it amounted to almost PLN 23 billion. This increasing size of individual T-bond issues has been a factor improving liquidity in the secondary market.

#### CALCULATION OF THE YIELD

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The yields to maturity are calculated according to formula 6.3 of the International Securities Market Association (ISMA).

For example, the yield to maturity is 5.92% per annum for the ten-year debt security in national currency with a fixed coupon of 5.0% issued by the central government on 24 October 2002

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(ISIN PL0000102836).<sup>3</sup> The calculation is based on the average close-of-market value (price gross of tax plus accrued interest).

#### 4 INTEREST RATES

#### 4.1 OFFICIAL INTEREST RATES

The discount rate refers to the interest rate offered by the central bank on commercial banks' purchases of bills, which the latter have already discounted. The use of discount loans is marginal at present.

The deposit rate refers to the interest rate offered by the central bank on short-term (one-day) deposits placed by commercial banks.

The reference rate refers to the minimum yield on 28-day NBP bills,<sup>4</sup> as used by the central bank to absorb liquidity in the banking sector through open market operations. This rate signals the monetary policy stance. The lombard rate refers to the interest rate offered on loans granted by the central bank to commercial banks for very short periods (one day) against collateral in the form of securities (Treasury bills, Treasury bonds). The use of lombard loans by commercial banks is immaterial at present.

#### 4.2 MONEY MARKET INTEREST RATES

Money market rates refer to interbank offered rates (WIBOR). Having analysed actually realised deposit transactions on the interbank market (whose maturity bands in collected statistics differ to some extent from those quoted for WIBOR rates), it was noted that overnight deposits are predominant and can be deemed to be most representative.

- 3 This is the benchmark bond with a scheduled maturity date of 24 October 2013.
- 4 Since January 2003, minimum yield on 14-day NBP bills.

#### **Chart 4 Interest rate statistics** (percentages per annum; monthly averages unless otherwise indicated; based on new business) Official interest and money market rates Capital market and bank interest rates reference rate 1) 2-year government bond yield 5-year government bond yield ····· interbank overnight deposits 10-year government bond yield lending to non-financial corporations lending to households deposits with agreed maturity - - -24 24 26 26 22 22 24 22 24 22 20 20 20 20 18 18 18 18 16 16 16 16 14 14 14 14 12 12 12 12 10 10 10 10 8 8 8 8 6 6 6 6 4 4 4 4 2 2 2 2 0 0 0 0 2000 2001 2002 2003 2000 2001 2002 2003 Source: ECB long-term interest rate statistics. 1) End-of-month rate.



#### POLAND

#### 4.3 BANK INTEREST RATES

Bank rates on loans to non-financial corporations refer to the weighted average interest rates on national currency loans offered by major banks, with rates on loans with a maturity of up to one year (approximately 50% of total loans to nonfinancial corporations) being most representative. Bank rates on loans to households refer to the weighted average interest rates on national currency loans offered by major banks, with rates on loans with a maturity of up to one year (35% of total loans to households) being most representative.

Bank rates on deposits with an agreed maturity refer to the weighted average interest rates offered to households by major banks on national currency deposits with agreed maturity. Deposits with an original maturity of three months are most representative, accounting for about 40% of total deposits by households.

#### 5 AUTHORITIES INVOLVED IN BOND ISSUANCE, BOND MANAGEMENT AND SECURITIES MARKET SUPERVISION

- The Ministry of Finance is responsible for the issuance of T-bills and T-bonds. On the domestic market, sales are effected by issue agents acting under separate agreements concluded with the Ministry of Finance: for institutional investors (wholesale Treasury securities), the agreement is with Narodowy Bank Polski; and for individual investors (retail and savings T-bonds), the agreement is with PKO Bank Polski SA. On foreign markets, issuance is effected by foreign investment banks.

The Ministry of Finance manages State Treasury debt.

 With regard to securities market supervision, the regulated market is supervised by Komisja Papierow Wartosciowych i Gield (Polish Securities and Exchange Commission). Elektroniczny Rynek Skarbowych Papierow Wartosciowych (Electronic Treasury Securities Market) is a non-regulated, organised market. The distinction between regulated and non-regulated markets is made on the basis of Polish law.

Other general government entities with legal personality which issue bonds (mostly local governments) are responsible for bond management.



## **SLOVENIA**

#### I MARKET SIZE

#### I.I THE SIZE OF THE NATIONAL DEBT SECURITIES MARKET

At the end of December 2003 the total amount outstanding of debt securities was  $\notin 11,480$ million. The majority (55%) of these securities were issued by the general government, followed by the monetary financial institutions sector (43%), with the remaining 2% being issued by non-financial and non-monetary financial corporations. The total amount outstanding of debt securities issued by the general government was  $\notin 6,356$  million at the end of December 2003. Of these, 54% were issued in euro, 43% in national currency (Slovenian tolar – SIT) and 3% in other currencies.

The total amount outstanding of debt securities denominated in national currency issued by the general government was  $\notin 2,757$  million at the end of December 2003. Of these, 12% had an original maturity of up to and including one year, 16% had an original maturity of over one



#### **SLOVENIA**

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year but less than five years, 48% had an original maturity of five years or more but less than ten years, and 24% had an original maturity of ten years or more.

The total amount outstanding of debt securities issued by monetary financial institutions (MFI) was  $\notin 4,939$  million at the end of December 2003. The majority (88%) of these securities were Banka Slovenije bills, which are shortterm instruments used for monetary policy purposes and therefore meant only for domestic commercial banks and savings banks. The amount outstanding of Banka Slovenije bills was  $\notin 4,353$  million at the end of December 2003. Of these, 50% were issued in euro, 46% in national currency and 4% in other currencies.

#### 1.2 EXPECTED ISSUE VOLUME AND MATURITY DISTRIBUTION FOR GOVERNMENT AND CORPORATE BONDS

The Government intends to issue more bonds. New issues are announced via the advance release calendar (for the following year). Ministrstvo za finance (Ministry of Finance) publishes this advance release calendar on its website.

#### 2 ACTIVITY IN THE PRIMARY AND SECONDARY MARKETS

#### 2.1 THE PRIMARY MARKET

#### 2.1.1 ACTIVITY IN THE PRIMARY MARKET

The value of all debt securities issued in the primary market rose from  $\notin 13,306$  million in 2001 to  $\notin 17,793$  million in 2002. In 2003 this value fell to  $\notin 17,170$  million.

According to the sector breakdown, the majority of debt securities were issued by monetary financial institutions. MFI issues constituted about 87% of total primary market issuance in 2001. This share decreased to 81% in 2002 and increased to 86% in 2003. The share of debt securities issued by general government was 12% in 2001, 19% in 2002 and 13% in 2003. The share of debt securities

issued by non-financial and non-monetary financial corporations was insignificant.

The majority of debt securities issued by monetary financial institutions were short-term securities. In the case of general government, the share of long-term securities was 41% in 2001, 49% in 2002 and 30% in 2003. In 2003, 72% of long-term securities issued by general government were issued in national currency. All debt securities issued by the general government in 2003 were issued by auction.

#### 2.1.2 AUCTIONS: REGULARITY, FREQUENCY AND PRE-ANNOUNCEMENT

Short-term government paper is issued at regular auctions, which are pre-announced and have a set frequency:

- one-month Treasury bills weekly;
- three-month Treasury bills monthly;
- six and twelve-month Treasury bills monthly.

Long-term government paper is also issued by auction, but the auctions – although preannounced – are not regular.

#### 2.1.3 MEASURES (EITHER PUBLIC OR PRIVATE) TO PROMOTE THE FUNCTIONING OF THE PRIMARY MARKET

There are no specific measures being taken to promote the functioning of the primary market.

#### 2.2 THE SECONDARY MARKET

#### 2.2.1 ACTIVITY IN THE SECONDARY MARKET

The average daily turnover on the secondary debt securities market rose from  $\notin 1.7$  million in 2001 to  $\notin 5.0$  million in 2002 and then decreased to  $\notin 4.6$  million in 2003.

Activity in the secondary market is very low in comparison with primary market activity. Most secondary market activity involved general government debt securities. In 2001, trade in such securities accounted for 89% of all secondary market activity, in 2002 98% and in 2003 90%. Trade in debt securities issued by



#### **SLOVENIA**

### Chart 2 Primary market activity for debt securities

#### (gross issuance during the period; nominal amounts)

#### (2a) Total gross issuance (€ millions)







monetary financial institutions represented 9% of all secondary market activity in 2001, 2% in 2002 and 7% in 2003.

Most of the trading in general government debt securities concerned long-term instruments. In 2001, long-term debt securities represented 72% of all debt securities issued by the general (2b) By sector of the issuer (as a percentage of the total)



(2d) Issuance methods for long-term debt securities in national currency by general government in 2003 (as a percentage of the total)



government, in 2002 this figure was 47% and in 2003 it was 61%.

In 2003, 79% of long-term debt securities denominated in national currency were traded on regulated markets, with the rest being traded on non-regulated markets.



#### Table | Methodological notes on the statistical treatment of secondary market statistics

| (cf. Table 2B in the statistical tables in Part 2)   |   |                           |
|--|---|---------------------------|
| Methodological item  | All debt securities   | Long-term debt securities |
| Repos and reverse repos (if available, the percentage of<br>these transactions in terms of the nominal value of the<br>daily averages of transactions) | Not included  | Not included              |
| Trading in secondary markets abroad  | Not included  | Not included              |
| Measures to ensure single counting   | In the organised market, all transactions are carried out by Ljubljanska borza vrednostnih papirjev, which reports a transaction only once. In the unorganised market, only one party to the transaction is obliged to make the book entry and report it to Agencija za trg vrednostnih papirjev. |                           |

#### 2.2.2 MEASURES (EITHER PUBLIC OR PRIVATE) TO PROMOTE LIQUIDITY IN THE SECONDARY MARKET

All publicly issued bonds are automatically listed on Ljubljanska borza vrednostnih papirjev, the Ljubljana Stock Exchange.

With the intention to promote liquidity on the secondary market for Treasury bills, Banka Slovenije (the National Bank of Slovenia) and Ministrstvo za finance have started publishing quotations for Treasury bills on the basis of the quotations provided by the market-makers. The banks chosen to be official market-makers are obliged to quote daily the ask and bid prices. The quotations are for information only, however, since there is still a need for bilateral agreements. The deals are carried out with simultaneous cash and securities settlement in real time.

#### 2.2.3 LIQUIDITY OF THE SECONDARY MARKET

The total turnover of bonds on the organised market was €56 million in December 2003, while the turnover ratio (published in the Monthly Bulletin of Banka Slovenije), which expresses turnover in the period as a proportion of the market capitalisation at the end of the period, was 0.015.

#### 3 CALCULATION OF THE YIELD

The yields to maturity are calculated according to the International Securities Market Association (ISMA) formula 6.3. For example, the yield to maturity for the tenyear debt security issued in national currency by the central government on 15 October 2003 with a fixed coupon of 5.75% (ISIN SI0002102059) is 5.37% per annum. The calculation is based on the average close-ofmarket value (price gross of tax plus accrued interest) for the reference period from July to December 2003, which is 102.47.

#### 4 INTEREST RATES

#### 4.1 OFFICIAL RATES

Within the framework of the standing Lombard facility, Banka Slovenije provides one-day Lombard loans to commercial banks and savings banks, with securities being used as collateral. The pledged securities should amount to 110% of the amount of the Lombard loan.

The overnight deposit interest rate is an interest rate applied to the deposits placed by banks and savings banks with Banka Slovenije for an overnight term.

The Lombard rate and the overnight deposit interest rate are Banka Slovenije interest rates representing respectively the ceiling and the floor for money market interest rates.

#### **SLOVENIA**

### Chart 3 Secondary market activity for debt securities

#### (value of transactions; daily averages; nominal amounts)

(3a) Total turnover (€ millions)



(3c) By original maturity for the general government sector (as a percentage of the total)



#### (3b) By sector of the issuer (as a percentage of the total)



(3d) Trading places for long-term debt securities denominated in national currency in 2003 (as a percentage of the total)



#### 4.2 MONEY MARKET RATES

Banka Slovenije publishes data on the interbank market deposit rates for overnight deposits and deposits with a maturity of up to and including 30 days. Data on quoted bank interest rates for deposits from other banks have also been available since January 2002. SITIBID (asked) and SITIBOR (offered) are interest rates for unsecured banking deposits.

#### 4.3 CAPITAL MARKET INTEREST RATES

Banka Slovenije publishes the long-term interest rate in accordance with the Maastricht convergence criteria.

#### 4.4 BANK INTEREST RATES

All bank interest rates are nominal interest rates. Except for short-term interest rates, they



## Chart 4 Interest rate statistics

(percentages per annum; monthly averages unless otherwise indicated; based on new business)



Source: ECB long-term interest rate statistics

 End-of-month rate.
 Data refer to bond yields adjusted using the tolar indexation clause (TOM). This clause is an annual interest rate determined by Banka Slovenije and used for the indexation of financial liabilities and assets.

are given in real terms and then computed to overall nominal rates using the SIT indexation clause. Short-term interest rates are given in nominal terms.

The most representative maturity for deposit interest rates is up to 90 days. That makes deposit interest rates comparable with interest rates on three-month Treasury bills.

#### 5 AUTHORITIES INVOLVED IN BOND ISSUANCE, BOND MANAGEMENT AND SECURITIES MARKET SUPERVISION

The main authorities involved are the following:

 Agencija za trg vrednostnih papirjev (Securities Market Agency), which is responsible for the issuance of operating licences to financial institutions (Ljubljanska borza vrednostnih papirjev, Centralna klirinško depotna družba – Central Securities Clearing Corporation (KDD), brokerage firms, fund management companies and investment funds).

- It approves and oversees public offerings on the primary market. It is in charge of the surveillance of activities of authorised participants in the secondary market, of the Stock Exchange and of the KDD with regard to insider trading.
- One further responsibility is the preparation of regulations, which form the legal basis for the securities markets. The Agency also prepares and maintains public registers and other data related to the securities markets.
- Ljubljanska borza vrednostnih papirjev (Ljubljanska Stock Exchange), which is the organised part of the secondary securities market. Securities may be traded on the official market segment or on the free market segment. Shares and bonds are traded on both market segments, while shares of investment companies and short-

term securities are traded on the free market segment only. Trades on each of the market segments are only conducted through the electronic trading system.

- Centralna klirinško depotna družba (Central Securities Clearing Corporation (KDD)), which offers services relating to the issuance, transfer, payment and recording of securities. Most of the existing securities are already in book-entry form. The system is compatible with that of the electronic trading system used at Ljubljanska borza vrednostnih papirjev.
- Ministrstvo za finance (Ministry of Finance); The issuance of foreign debt securities in the Republic of Slovenia is only allowed after permission has been granted by Ministrstvo za finance.
- Banka Slovenije (Bank of Slovenia); According to the Foreign Exchange Law, authorised participants in the securities markets, insurance companies and banks must report to Banka Slovenije on all residents' operations in securities abroad and all non-residents' operations in securities in the Republic of Slovenia. Resident issuers of debt securities must report their issues of securities abroad. Banka Slovenije may stipulate the terms and conditions governing operations in securities by non-residents.

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## **SLOVAKIA**

#### I MARKET SIZE

#### I.I THE SIZE OF THE NATIONAL DEBT SECURITIES MARKET

The size of the Slovakian debt securities market, as measured by the total amount outstanding at the end of December 2003, was  $\notin 10,992$  million, which represented 38% of GDP. Of this amount, the largest share consisted of debt securities issued by the general government (89% or  $\notin 9,724$  million), followed by those issued by non-financial and non-monetary financial corporations (6% or  $\notin$ 700 million). Debt securities issued by monetary financial institutions represented the smallest portion (5% or  $\notin$ 567 million).

Of all the debt securities issued by the general government, debt securities denominated in the national currency (Slovakian koruna – SKK) accounted for the largest share (82%), while debt securities denominated in euro represented 18%.



#### **SLOVAKIA**

With regard to debt securities issued by the general government in national currency, 21% of the total amount outstanding had an original maturity of up to and including one year, 17% had an original maturity of more than one year but less than five years, 40% had an original maturity of five or more but less than ten years, and 22% had an original maturity of ten years or more.

#### 1.2 EXPECTED ISSUE VOLUME AND MATURITY DISTRIBUTION FOR GOVERNMENT BONDS

In 2004 Agentúra pre riadenie dlhu a likvidity (ARDAL), the Debt Management Office (DMO) took responsibility for government debt and liquidity management and the ARDAL started to draw up and publish an annual schedule for government securities issues. All the government bond issues in 2004 have been "taps". The ARDAL has sought to attract investment in domestic government bonds by launching new products such as a three-year zero coupon bond and a five-year floating rate bond. In addition, it intends to add new maturities to those already on offer, with plans to issue a 15-year government bond.

#### 2 ACTIVITY IN THE PRIMARY AND SECONDARY MARKETS

#### 2.1 THE PRIMARY MARKET

#### 2.1.1 ACTIVITY IN THE PRIMARY MARKET

In 2001 the total amount of debt securities issued on the primary market was  $\notin$ 4,963 million. This was followed by a decrease in issuance to  $\notin$ 3,749 million in 2002 and an increase to  $\notin$ 5,274 million in 2003, i.e. a 41% increase in comparison with the previous year.

Developments in primary market activity by the sector of the issuer showed that the general government's share decreased from 98% ( $\notin$ 4,871 million) in 2001 to 96% ( $\notin$ 3,616 million) in 2002. The share of government issues in 2003 constituted about 85% ( $\notin$ 4,468 million) of the total primary market.

With regard to the original maturity split, long-term debt securities (including the additional three-year government bond issues) accounted for 66% (€3,219 million) of the total (€4,871 million) in 2001. In 2002 longterm debt securities accounted for 22% (€792 million) of the total (€3,616 million). As part of a restructuring of banks, six floating yield issues (linked to the six-month BRIBOR) amounting to €2,456 million were made in 2001, with maturities of five, seven and ten years. In 2001 a new type of primary sale of government bonds (taps) was introduced.

In 2003 long-term debt securities issued by the general government accounted for 63% ( $\in 2,802$  million) of the total amount issued by the same sector (€4,468 million). There were important changes to the issuance policy concerning the setting of interest yield and allowing an unlimited rate of issue (i.e. enabling the sale of government bonds at a discount). For the first time, the general government decided to place six zero coupon issues with an unlimited price and determined only the total volume of the issues. The maturity of these issues was between one and one-and-a-half years. Another important change was in the setting of the maturity period: bonds with longer maturities than in previous years were issued. In 2003 the individual issues were placed more evenly, according to their maturity, to establish a complete government bond yield curve to satisfy investors' demands.

As in the previous year, all issues were placed on the primary market by American auction. Of the total number of issues, five were taps.

#### 2.1.2 AUCTIONS: REGULARITY, FREQUENCY AND PRE-ANNOUNCEMENT

Government debt securities are sold by auction. The frequency of the auctions varies from weekly to monthly.

The quarterly schedule for issues of government securities is published approximately one week before the beginning of each quarter. It includes the maturity structure, but the amount is not given in the published version.

#### **SLOVAKIA**

### Chart 2 Primary market activity for debt securities

#### (gross issuance during the period; nominal amounts)







(as a percentage of the total)



(2b) By sector of the issuer (as a percentage of the total)



(2d) Issuance methods for long-term debt securities in national currency by general government in 2003 (as a percentage of the total)



The final terms of the government bonds are published seven days before the date of issue, which usually means five days before an auction date (the issue date is usually two days after the auction date). The issuing conditions of Treasury bills are usually published three working days before the auction. The final terms for both government bonds and Treasury bills are published on Reuters pages NBSK05 and NBSK06, respectively, one day before they are published in the newspapers and, on the same day, the terms are sent to the information vendors (such as Telerate and Bloomberg).
### Table | Methodological notes on the statistical treatment of secondary market statistics

| (cf. Table 2B in the statistical tables in Part 2)   |   |                           |
|--|---|---------------------------|
| Methodological item  | All debt securities   | Long-term debt securities |
| Repos and reverse repos (if available, the percentage of<br>these transactions in terms of the nominal value of the<br>daily averages of transactions) | Not included  | Not included              |
| Trading in secondary markets abroad  | Not included  | Not included              |
| Measures to ensure single counting   | Single counting is ensured by calculating only one side of the transaction, i.e. either the buy or the sell side. All statistics published by Burza cenných papierov v Bratislave (BCPB) only take into account single-counted figures. |                           |

# 2.1.3 MEASURES (EITHER PUBLIC OR PRIVATE) TO PROMOTE THE FUNCTIONING OF THE PRIMARY MARKET

In Slovakia, there is not yet a primary dealer system for government securities. The primary market for government securities, which is organised by Národná banka Slovenska, the National Bank of Slovakia, is open to a wide circle of participants.

As investor interest in the primary market has been growing, new regulations have been introduced since 2000, making certain activities more efficient. For example, communication with investors has been simplified, orders have been made more efficient and the direct participation of foreign institutions in the primary market for government bonds has been allowed.

# 2.2 THE SECONDARY MARKET

#### 2.2.1 ACTIVITY IN THE SECONDARY MARKET

Activity in the secondary market for debt securities, as measured by total turnover, grew by 72% from  $\notin$ 4,672 million in 2000 to  $\notin$ 8,052 million in 2001 and then by 81% to  $\notin$ 14,534 million in 2002. In 2003 the total turnover amounted to  $\notin$ 26,053 million, representing an 79% rise between 2002 and 2003. Debt securities issued by the general government represented, on average, 98% of the value of secondary market transactions in the period from 2001 to 2003.

All long-term debt securities denominated in national currency were traded on Burza cenných

papierov v Bratislave (BCPB), the Bratislava Stock Exchange in 2003.

# 2.2.2 MEASURES (EITHER PUBLIC OR PRIVATE) TO PROMOTE LIQUIDITY IN THE SECONDARY MARKET

Since 1999 Burza cenných papierov v Bratislave has been running a "module" for market-makers in government bonds, the idea being to increase the number of price-making transactions. The market-makers are obliged to provide two-way prices for certain issues of government bonds on a daily basis and these bonds are the benchmark in the domestic market. Thus, the benchmark bonds are traded in the market-maker module of Burza cenných papierov v Bratislave. These bonds are used to construct the yield curve.

#### 2.2.3 LIQUIDITY IN THE SECONDARY MARKET

The most appropriate indicator used by Burza cenných papierov v Bratislave to measure the liquidity of a bond issue is the number of transactions. The number of transactions is calculated as the sum of transactions in the form of both electronic order-book trades and negotiated deals.

#### **CRITERIA FOR A BENCHMARK BOND ISSUE**

A bond issue has to fulfil the following requirements in order to be considered a benchmark:

 it has to be traded in the market-maker module;

#### **SLOVAKIA**

# Chart 3 Secondary market activity for debt securities

#### (value of transactions; daily averages; nominal amounts)

(3a) Total turnover (€ millions)











(3d) Trading places for long-term debt securities denominated in national currency in 2003 (as a percentage of the total)



- it has to be one of the components of the yield curve calculation;
- it has to be a long-term issue; and
- it has to be liquid on Burza cenných papierov v Bratislave.

Slovakian benchmark bonds (components of the yield curve) are used for portfolio pricing (by depositories, asset management companies, etc.) and also by Národná banka Slovenska for constructing the coupon of future government bond issues.

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# Table 2 Figures of the ten-year government bond issue

| (ISIN code: SK4120003229)   |         |         |
|---|---------|---------|
|   | 2002    | 2003    |
| Nominal amount (€ millions)   | 199.18  | 201.89  |
| Yield to maturity as a percentage (annual average of close-of-market values)                    | 6.835   | 4.976   |
| Ask price (annual average of close-of-market values)  | 104.745 | 117.844 |
| Bid price (annual average of close-of-market values)  | 104.268 | 117.116 |
| Market price (annual average of daily average prices)   | 104.604 | 117.742 |
| Value of transactions (annual average of the daily total value; market value                    |         |         |
| in € millions; clean price) <sup>1)</sup>   | 1.714   | 2.189   |
| Liquidity ratio as a percentage (turnover/amount outstanding) <sup>2)</sup>                     | 24.970  | 35.600  |
| Number of transactions (annual average of the daily total number of transactions) <sup>3)</sup> | 0.963   | 0.535   |

Source: Burza cenných papierov v Bratislave.

Notes: The exchange rate of the euro vis-à-vis the Slovakian koruna is as follows: SKK 41.722 as at 31 December 2002; SKK 41.161 as at 31 December 2003.

1) The turnover is calculated as the sum of trading volumes in both electronic order-book trades and negotiated deals.

2) The value of transactions is calculated as the sum of trading volumes in both electronic order-book trades and negotiated deals.

The liquidity ratio is calculated as follows:  $LR = \frac{\sum P_i \times Q_i}{P \times G} \times 100$ 

where  $\Sigma P_i \times Q_i$  is the sum of all electronic order-book trades and  $P \times G$  is the capitalisation of the issue at the end of the year of calculation. The liquidity of the Slovakian secondary bond market is shown in Table 3 below.

3) The number of transactions is used by Burza cenných papierov v Bratislave as the most appropriate measure of the liquidity of a bond issue. The number of transactions is calculated as the sum of transactions in the form of both electronic order-book trades and negotiated deals.

### **3** CALCULATION OF THE YIELD

The yield to maturity is calculated as the sum of all yields to maturity based on the daily average price divided by the number of days during which electronic order-book trades were made. ISMA formula 6.3 is used. For example, the yield to maturity for the ten-year debt security issued on 13 March 2002 by the central government in national currency with a fixed coupon of 7.50% (ISIN SK4120003229) is 5.09% per annum. The calculation is based on the average of daily average market values during the second half of 2003 (price gross of tax plus accrued interest), which amounted to 116.29.

#### Table 3 Trading volumes of government bond issues

(single counted)

| Electronic order-book trades |                           | Negotiated deals   |                       |                           |                    |                       |                                 |
|------------------------------|---------------------------|--------------------|-----------------------|---------------------------|--------------------|-----------------------|---------------------------------|
| Period                       | Volume in<br>SKK billions | Volume in<br>units | No of<br>transactions | Volume in<br>SKK billions | Volume in<br>units | No of<br>transactions | Total volume in<br>SKK billions |
| 2003                         | 115.45                    | 604,569            | 390                   | 935.26                    | 2,584.611          | 2,039                 | 1,050.71                        |
| 2002                         | 46.16                     | 46,361             | 301                   | 546.19                    | 787,817            | 1,465                 | 592.34                          |
| 2001                         | 21.77                     | 74,612             | 150                   | 313.04                    | 471,563            | 939                   | 334.81                          |
| 2000                         | 24.44                     | 57,694             | 338                   | 158.47                    | 856,890            | 921                   | 182.91                          |
| 1999                         | 20.18                     | 279,620            | 269                   | 104.39                    | 1,628,012          | 1,096                 | 124.57                          |
| 1998                         | 16.28                     | 98,076             | 427                   | 178.66                    | 5,487,325          | 1,384                 | 194.94                          |
| 1997                         | 1.77                      | 49,212             | 93                    | 26.58                     | 1,204,176          | 392                   | 28.35                           |
| 1996                         | 3.72                      | 324,769            | 122                   | 6.63                      | 520,093            | 96                    | 10.35                           |
| 1995                         | 0.06                      | 9,257              | 74                    | 11.09                     | 1,085,802          | 118                   | 11.15                           |

Source: Burza cenných papierov v Bratislave.



#### 4 INTEREST RATES

# 4.1 OFFICIAL INTEREST RATES

The official rates, determined by a decision of the Board of Národná banka Slovenska, are as follows:

- The basic interest rate of Národná banka Slovenska, which is its two-week REPO tender limit rate, i.e. the rate for standard two-week repo tenders either for sterilisation or for refinancing. This rate is used as either the lower or the upper limit for relevant twoweek repo operations. This is the main policy rate. The term "basic interest rate" was introduced with effect from 1 January 2003.
- The overnight refinancing and sterilisation rates of the standing facilities of Národná banka Slovenska, which commercial banks may use without any volume restrictions. These are also policy rates.

#### 4.2 MONEY MARKET INTEREST RATES

The interest rates on the interbank deposit market (BRIBOR) are calculated as the average quotations of eight commercial banks (for overnight, one-week, two-week, one-month, two-month, three-month, six-month, ninemonth and 12-month deposits). Since 11 October 2000 the interest rates on the interbank market have been calculated and released by Telerate.

#### 4.3 CAPITAL MARKET INTEREST RATES

After the market closes, Burza cenných papierov v Bratislave publishes a daily price list on the Exchange premises and this list is published on the following day in the national press which covers stock exchange news. The daily price list contains the average price, the closing price or the last price, the minimum price, the maximum price and the volume of transactions for securities in which there was an



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# SLOVAKIA

electronic order-book transaction on that particular day. The average price of an issue is calculated by dividing the transaction volume (electronic order-book transactions) in a given security on a given day by the number of transactions in that security on that day. Yields to maturity are calculated in accordance with ISMA formula 6.3.

# 4.4 BANK INTEREST RATES

The average lending rates are calculated as the weighted arithmetic average of monthly interest rates on loans, broken down by sector (in line with the European System of Accounts 1995 – ESA 95) and by type of loan (purpose). Národná banka Slovenska collects lending rates on new business and according to outstanding amounts. The loans that are most representative are loans with a maturity of up to one year and loans to the private sector.

The average deposit rates are calculated as the weighted arithmetic average of monthly interest rates on deposits based on new business (since January 2003) and outstanding amounts, broken down by sector (in line with the ESA 95) and by maturity (redeemable at notice, overnight, one day, up to seven days, up to one month, up to three months, up to six months, up to one year, up to two years, up to five years and more than five years). The most representative types of maturity are those up to one year (i.e. up to one month, up to three months, up to three months, up to three months, up to three months and up to one year).

# 5 AUTHORITIES INVOLVED IN BOND ISSUANCE, BOND MANAGEMENT AND SECURITIES MARKET SUPERVISION

The main authorities involved are the following:

 Ministerstvo financií Slovenskej republiky (MF SR) (Ministry of Finance); With regard to debt securities issued by the central government, only Ministerstvo financií Slovenskej republiky is authorised to borrow. Ministerstvo financií Slovenskej republiky is the principal debt agency. A specific section of Ministerstvo financií Slovenskej republiky is responsible for cash and debt management.

- Národná banka Slovenska (National Bank of Slovakia), which acts as an agent for Ministerstvo financií Slovenskej republiky, which is the issuer. In this connection, Národná banka Slovenska is responsible for the technical aspects of the primary sale of government bonds issued in national currency and Treasury bills, the settlement of transactions in financial and material terms, and the keeping of a central Treasury bill register.

Národná banka Slovenska is also involved, as an advisor, in setting the issuing conditions and deciding on the method of sale. The primary market for debt securities, which is organised by Národná banka Slovenska, is open to a wide circle of participants. At present, all government securities in domestic currency are sold by auction.

The private market for Treasury bills is also organised by Národná banka Slovenska. These securities are recorded in the Central Register of Short-Term Securities, which is kept by Národná banka Slovenska.

As regards foreign currency borrowing, Národná banka Slovenska is only involved in advisory activities and debt service payments.

– Úrad pre finanèný trh (ÚFT) (Financial Market Authority), which was set up on 1 November 2000 as a state administrative body responsible for the capital markets and the insurance sector in Slovakia. Through its departments, Úrad pre finanèný trh supervises the individual capital market and insurance sector entities. Before 1 November 2000 Ministerstvo financií Slovenskej republiky was responsible for capital market supervision.

# SWEDEN

### I MARKET SIZE

# I.I THE SIZE OF THE NATIONAL DEBT SECURITIES MARKET

At the end of 2003, the overall size of the debt securities market in Sweden, as measured by the total amount outstanding, was  $\in$ 287,000 million, representing 107% of GDP. About half of these securities ( $\in$ 141,000 million or 49%) were issued by the monetary financial institution

(MFI) sector, followed by the general government sector ( $\notin 127,000$  million or 44%) and the non-financial and non-monetary financial corporation sector ( $\notin 19,000$  million or 7%).

Debt securities outstanding in national currency accounted for the largest proportion of the total debt securities issued by the general government sector (85%), while the remaining 15% were issued in other currencies (8%) and in euro (7%).



#### **SWEDEN**

With regard to debt securities issued in national currency by the general government sector, 28% of the total issues outstanding in this sector corresponded to short-term debt securities, whereas 72% had an original maturity of more than one year.

# 1.2 EXPECTED ISSUE VOLUME AND MATURITY DISTRIBUTION FOR GOVERNMENT BONDS

The Government regularly issues bonds at preannounced auctions. The auction conditions are published on Reuters, OM FIE News Feed and the website of the Swedish National Debt Office (www.rgk.se) one week prior to the auction. The conditions state the auction date, the maturity, the volume issued and the time when the issue closes.

# 2 ACTIVITY IN THE PRIMARY AND SECONDARY MARKETS

#### 2.1 THE PRIMARY MARKET

# 2.1.1 ACTIVITY IN THE PRIMARY MARKET

In 2001 the total value of the gross issuance of long-term debt securities amounted to  $\notin$ 40,938 million in nominal terms. This amount increased to  $\notin$ 52,134 million in 2002 and  $\notin$ 58,899 million in 2003.

Issues of long-term debt securities by MFIs accounted for the largest proportion of primary issuance between 2001 and 2003. Issues by this sector represented 63% of total gross issuance in 2001, 58% in 2002 and 69% in 2003. Issues by the central government and other general government sector represented 29% of the total in 2001, 33% in 2002 and 26% in 2003. The contribution of the non-financial and nonmonetary financial corporation sector to the primary market for debt securities was relatively small, representing 8% in 2001 and 9% in 2002, declining to 5% in 2003. Long-term debt securities issued by the central government and other general government sector were offered to the public via auctions during the three-year review period.

#### 2.1.2 AUCTIONS: REGULARITY, FREQUENCY AND PRE-ANNOUNCEMENT

There are pre-announced and regular government debt security auctions in Sweden. Auction dates are published on the website of the Swedish National Debt Office (SNDO) every six months. The auction conditions are published on Reuters, OM FIE News Feed and the SNDO's website one week prior to the auction. Treasury bond auctions are held on Wednesdays, either every other week or every four weeks. Treasury bill auctions are normally held every other Wednesday. Inflation-linked bond auctions are normally held once a month on a Thursday or Friday.

# 2.1.3 MEASURES (EITHER PUBLIC OR PRIVATE) TO PROMOTE THE FUNCTIONING OF THE PRIMARY MARKET

Authorised dealers submit bids for their clients and on their own behalf at all government bond and Treasury bill auctions. They also participate in exchange or buyback operations involving government bonds, for which the SNDO employs a bidding procedure.

# 2.2 THE SECONDARY MARKET

#### 2.2.1 ACTIVITY IN THE SECONDARY MARKET

Activity on the secondary market for debt securities in Sweden totalled  $\notin$ 4,444 million in 2001,  $\notin$ 4,263 million in 2002 and  $\notin$ 4,729 million in 2003.

The debt securities traded in the secondary market were either issued by the central government and other general government sector or by the MFI sector. Secondary market activity in securities issued by the central government and other general government sector decreased from 78% of the total in 2001 to 74% in 2002 and 70% in 2003. However, secondary market activity in debt securities issued by the MFI sector increased to 30% of the total in 2003, compared with 26% in 2002 and 22% in 2001.<sup>1</sup>

1 Data presented in the second paragraph of Sub-section 2.2.1 are estimated.

#### **SWEDEN**

# Chart 2 Primary market activity for debt securities

#### (gross issuance during the period; nominal amounts)

(2a) Total gross issuance (€ millions)





sector (as a percentage of the total) (2b) By sector of the issuer (as a percentage of the total) non-financial and non-monetary financial corporations monetary financial institutions central government and other general government 100 100 90 90 80 80 70 70 60 60 50 50 40 40 30 30 20 20 10 10 0 0 2001 2002 2003

(2d) Issuance methods for long-term debt securities in national currency by general government in 2003 (as a percentage of the total)

Data are not collected Source: ECB long-term interest rate statistics. Notes: Data for short-term debt securities are not available. Charts 2a and 2b show long-term securities only.

The majority of the government bonds traded in the secondary market were long-term debt securities. These represented 68% of the total government bonds traded in 2001, 69% in 2002 and 65% in 2003.

# 2.2.2 MEASURES (EITHER PUBLIC OR PRIVATE) TO PROMOTE LIQUIDITY IN THE SECONDARY MARKET

The authorised dealers are obliged under a contract with the SNDO to actively, and in accordance with sound and customary trading principles, contribute to liquidity in government paper on the secondary market, both through

ECB



### Chart 3 Secondary market activity for debt securities

(3b) By sector of the issuer (as a percentage of the total)









(3d) Trading places for long-term debt securities denominated in national currency in 2003 (as a percentage of the total)

Data are not collected

Source: ECB long-term interest rate statistics. Notes: Information provided in Charts 3b and 3c is based on estimates.

trading on the spot market and by entering into transactions on the derivatives markets. The contracts stipulate that the authorised dealer has to make every reasonable effort to maintain a market share of not less than 2.5% of total turnover in both the electronic trading system and the client market in each quarter.

#### **SWEDEN**

# 2.2.3 LIQUIDITY IN THE PRIMARY AND SECONDARY MARKETS FOR GOVERNMENT BONDS

In the primary market, government bonds are issued through auctions in which the authorised dealers of the SNDO participate. These dealers comprise a number of banks and securities companies with which the SNDO has concluded agreements. At present, there are six to seven such dealers depending on the kind of security to be auctioned. Under the agreements, the dealers undertake to act as market-makers. The role of a market-maker involves an undertaking to make bids for all issues and to quote prices for government securities to customers. Mortgage institutions also issue bonds via the authorised dealers.

In the secondary market, trade is mainly conducted in government and mortgage bonds. Due to their large volumes and low credit risk, government bonds have the highest turnover of all securities in the bond market. Of the total turnover in government bonds, over 98% took place on the secondary market. In 2003 turnover in the primary market, i.e. through new issues, was only about SEK 105 billion (less than 3%).

#### **3** CALCULATION OF THE YIELD

With regard to the calculation of the long-term interest rates used for convergence assessment purposes, Sweden uses the same formula applied by all the other EU Member States.

As mentioned in the introduction of this publication, one single formula was selected,

which is statistically meaningful and robust and complies with the recommendations made by the International Securities Market Association (ISMA).

The yield-to-maturity ISMA formula 6.3 is as follows:

$$P = \sum_{i=1}^{n} CF_i * V^{L_i}$$

where

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- = gross price (i.e. clean price plus accrued interest)
- n = number of future cash flows
- $CF_{i} = i^{th} cash flow (this can be variable)$
- $L_i = time in years to the i<sup>th</sup> cash flow$ 
  - = annualised discounting factor = 1/(1+y) where y is the annualised yield

#### INTEREST RATES

### 4.1 OFFICIAL RATES

#### 4.I.I REPORATE

This is the most important policy rate of Sveriges Riksbank, the National Bank of Sweden, which is used to influence short-term market rates. The reportate is the rate of interest at which banks can borrow funds from or deposit funds at Sveriges Riksbank for a period of seven days.

#### 4.1.2 DEPOSIT RATE

This is the rate of interest that banks receive when they deposit funds in their accounts at Sveriges Riksbank overnight and it is always 0.75 percentage point lower than the repo rate.

| Table   Methodological notes on the statisti   | ical treatment of second   | lary market statistics    |
|--|--|---------------------------|
| (cf. Table 2B in the statistical tables in Part 2)   |  |                           |
| Methodological item  | All debt securities  | Long-term debt securities |
| Repos and reverse repos (if available, the percentage of<br>these transactions in terms of the nominal value of the<br>daily averages of transactions) | Not included   | Not included              |
| Trading in secondary markets abroad  | Not included   | Not included              |
| Measures to ensure single counting   | The transactions reported to Sveriges Riksbank are adjusted f double-counting. |                           |



#### 4.1.3 LENDING RATE

This is the rate of interest paid by the banks when they borrow overnight funds from Sveriges Riksbank and it is always 0.75 percentage point higher than the reportate.

#### 4.1.4 REFERENCE RATE

The reference rate replaces the former discount rate, which was set by the SNDO. It is set by Sveriges Riksbank at six-monthly intervals and is based on the repo rate applying at the end of the previous six-month period, rounded up to the nearest whole or half percentage point.

#### 4.2 MONEY MARKET RATES

#### 4.2.1 FIXING RATE

This rate corresponds to the average of market participants' offer rates. A fixing rate is calculated every day at 11.00 a.m. for Treasury bills and government bonds.

#### 4.2.2 RETAIL BANK INTEREST RATES

Retail bank interest rates refer to actually paid/ received interest rates at the end of each quarter.

# 5 AUTHORITIES INVOLVED IN BOND ISSUANCE, BOND MANAGEMENT AND SECURITIES MARKET SUPERVISION

The authorities involved are:

- Riksgålds Kontoret (Swedish National Debt Office), which issues the government debt securities; andS
- Finansinspektionen (Swedish Financial Supervisory Authority), which is in charge of securities market supervision.



Source: ECB long-term interest rate statistics.

Notes: The official discount rate was replaced on 1 July 2002 by a reference rate set by Sveriges Riksbank every six months. This reference rate corresponds to the reporate at the end of the previous six-month period, rounded up, where necessary, to the nearest half a percentage point. The decision to make this change was taken by the Swedish Riksdag on 16 May 2002. Further information can be found in Government Bill 2001/02:132, which is available on the Riksdag's website (www.riksdagen.se) or the Website of Sveriges Riksbank (www.riksbank.se). Sveriges Riksbank set the reference rate at 4.5% for the period 1 July 2002-31 December 2002, at 4.0% for the period 1 January 2003-30 June 2003 and at 3.0% for the period 1 July 2003-31 December 2003. 1) Middle-of-period rate.

# UNITED KINGDOM

# I MARKET SIZE

# I.I THE SIZE OF THE NATIONAL DEBT SECURITIES MARKET

At the end of 2003, the overall size of the debt securities market in the United Kingdom, as measured by the total amount outstanding, was  $\notin 1,499,002$  million, representing 94% of GDP. More than half of these securities ( $\notin 856,347$ million or 57%) were issued by the monetary financial institution (MFI) sector, followed by the general government sector ( $\notin 468,229$  million or 31%) and the non-financial and nonmonetary financial corporation sector ( $\notin$ 174,426 million or 12%). With regard to the general government sector, all debt securities were issued in national currency.

Although UK corporates issue 60-70% of their bonds in foreign currency, they have not significantly increased issuance of eurodenominated bonds since 1999. Nevertheless, there appears to have been a jump in euro issuance upon the introduction of the single currency.



#### UNITED KINGDOM



There is a large market for asset-backed securities in euro, whereas the sterling market for fixed rate securitised issuance is significantly larger than that in euro.

Short-term debt securities issued by the government sector in national currency accounted for 6% of the total issuance by this sector. The remaining 94% of the total was accounted for by long-term bonds. A proportion of 41% of total issues outstanding in this sector had an original maturity of over one year but less than five years, while 27% had an original maturity of five years or more but less than ten years. The remaining 26% of the total had an original maturity of ten years or more.

# I.2 EXPECTED ISSUE VOLUME AND MATURITY DISTRIBUTION FOR GOVERNMENT BONDS

In the financial year 2003-04 (from the beginning of April 2003 to the end of March 2004), the UK Government held 24 auctions and issued around GBP 47,700 million ( $\notin 68,140$  million) of gilts.

The UK government debt portfolio was split by maturity as follows at the end of June 2004: 21% in 0-3 years maturities; 19% in 3-7 years maturities; 28% in 7-15 years maturities; and 30% in 15+ years.

# 2 ACTIVITY IN THE PRIMARY AND SECONDARY MARKETS

# 2.1 THE PRIMARY MARKET

# 2.1.1 ACTIVITY IN THE PRIMARY MARKET

In 2001 the total value of the gross issuance of long-term debt securities amounted to  $\notin$ 195,170 million in nominal terms. This amount increased to  $\notin$ 223,951 million in 2002 and  $\notin$ 306,550 million in 2003.

Issues of long-term debt securities by the nonfinancial and non-monetary financial corporation sector still accounted for the largest proportion of primary issuance between 2001 and 2003. Even though it has been decreasing for the last years, issuance by this sector represented 55% of total gross issuance in 2001, 46% in 2002 and 44% in 2003. Issues by the MFI sector accounted for 36% of the total in 2001, 38% in 2002 and 34% in 2003. Conversely, the contribution of the central government and other general government sector to the primary market for debt securities has been increasing in the last years. The debt securities traded in the primary market, which were issued by the government sector, were long-term debt securities. In 2001 they represented 9% of the total long-term issuance in the primary market, increasing to 16% in 2002 and 22% in 2003. Long-term debt securities issued by the central government and other general government sector were offered to the public via auctions during the three-year review period.

The City of London plays a significant role in the issuance of euro-denominated bonds and notes and money market instruments by borrowers inside, and more generally, outside the euro area.

On the supply side, UK resident borrowers have been the largest issuers of eurodenominated bonds outside the euro area since 1999, accounting for about 30% of total issuance by non-euro area residents, ahead of US residents who have a 20% share, according to BIS data. Bondware data show that over 60% of euro-denominated bonds issued by non-euro area residents were governed by English law, while more than one-quarter of these were UKlisted.

On the demand side, UK resident investors were the largest non-euro area purchasers on the primary market of euro-denominated bonds issued by non-euro area residents. As intermediaries, market participants in the United Kingdom are highly influential, since they act as bookrunners for 60% of eurodenominated bond issues by non-euro area residents.



#### UNITED KINGDOM

#### 2.1.2 AUCTIONS: REGULARITY, FREQUENCY AND **PRE-ANNOUNCEMENT**

Statistics on the methods of issuance (e.g. auctions, syndications and other issuance methods) are not collected for the nongovernment debt markets.

Unlike in the sterling market, some issuers with large programmes in the euro market auction their issues, as governments do. Most issues in both markets are underwritten. However, many

sterling issues take the form of bought deals which are pre-placed with a number of institutional investors.

Both the sterling and euro bond markets are linked by the euro/sterling foreign exchange (i.e. "cross-currency") swap market and by the credit default swap market. Borrowers can issue in sterling and swap into euro or vice versa, depending on price.

# Chart 2 Primary market activity for debt securities

(gross issuance during the period; nominal amounts)







Source: ECB long-term interest rate statistics. Notes: Data for all debt securities are not available. Charts 2a and 2b show long-term securities only.



#### non-financial and non-monetary financial corporations monetary financial institutions

Auction 100%

(2b) By sector of the issuer (as a percentage of the total)



(2d) Issuance methods for long-term debt securities in national currency by general government in 2003 (as a percentage of the total)



# Chart 3 Secondary market activity for debt securities

Source: ECB long-term interest rate statistics.

# performance of the euro and sterling markets is largely unaffected by documentation, settlement, regulation, tax and law.

# 2.1.3 MEASURES (EITHER PUBLIC OR PRIVATE) TO PROMOTE THE FUNCTIONING OF THE PRIMARY MARKET

Cross-currency and credit default swaps help to link the sterling and euro bond markets and provide transparency by taking currency and credit risks out of the equation. The

#### UNITED KINGDOM

#### 2.2 THE SECONDARY MARKET

# 2.2.1 ACTIVITY IN THE SECONDARY MARKET

Activity on the secondary market for debt securities in the United Kingdom totalled  $\notin 8,281,759$  million in 2001,  $\notin 7,118,899$  million in 2002 and  $\notin 6,262,114$  million in 2003. All debt securities traded in the secondary market corresponded to long-term debt securities.

International Financial Services London (IFSL) has estimated that London has a global market share of secondary trading in Eurobonds of around 70%.

The euro bond market is actively traded upon, for example by fund managers and hedge funds. Trading on both the euro and sterling bond markets is still largely over the counter, but there is some electronic trading, particularly in the euro market.

# 2.2.2 MEASURES (EITHER PUBLIC OR PRIVATE) TO PROMOTE LIQUIDITY IN THE SECONDARY MARKET

The developments in the post-trading industry in the United Kingdom consist of the following:

- (a) the consolidation of UK infrastructure following the CREST (UK securities settlement system) merger with the Euroclear Group (September 2002), the integration of money market settlement into CREST (October 2003) and the merger of the London Clearing House (LCH), the UK central counterparty, with Clearnet (December 2003);
- (b) an increasing use of real-time gross delivery-versus-payment securities settlement in central bank money (introduced for all CREST securities in November 2001 and completed for all UK securities when money market instruments transferred to CREST); and

(c) a growing use of central counterparties for OTC transactions, including the development of LCH's services for OTC fixed interest markets (primarily government bonds and repo).

With regard to future measures, Euroclear has proposed that settlement procedures in each of the central securities depositories within the group be harmonised. In addition, LCH.Clearnet is seeking to expand further its bond market coverage. Harmonisation of the technical platforms of LCH and Clearnet will facilitate an expansion of cross-border services and the group has stated publicly that it is open to further mergers.

# 2.2.3 LIQUIDITY IN THE PRIMARY AND SECONDARY MARKETS FOR GOVERNMENT BONDS

Conventional gilts make up 69% of the government debt stock and index-linked gilts account for 24%. The debt portfolio is split by maturity as follows: 21.4% in 0-3 years maturities; 19.1% in 3-7 years maturities; 28.4% in 7-15 years maturities; and 30.2% in 15+ years.

#### **3** CALCULATION OF THE YIELD

With regard to the calculation of the long-term interest rates used for convergence assessment purposes, the same formula is used across all EU Member States.

As mentioned in the introduction of this publication, one single formula was selected which is statistically meaningful and robust and which complies with the recommendations made by the International Securities Market Association (ISMA).



### Table | Methodological notes on the statistical treatment of secondary market statistics

| (cf. Table 2B in the statistical tables in Part 2)   |                         |                           |
|--|-------------------------|---------------------------|
| Methodological item  | All debt securities     | Long-term debt securities |
| Repos and reverse repos (if available, the percentage of<br>these transactions in terms of the nominal value of the<br>daily averages of transactions) | No statistics collected | No statistics collected   |
| Trading in secondary markets abroad  | No statistics collected | No statistics collected   |
| Measures to ensure single counting   | No statistics collected |                           |

4

The yield-to-maturity ISMA formula 6.3 is as follows:

where 
$$P = \sum_{i=1}^{n} CF_i * V^L$$

- P = gross price (i.e. clean price plus accrued interest)
- n = number of future cash flows
- $CF_i = i^{th} cash flow (can be variable)$
- $L_i = time in years to the i<sup>th</sup> cash flow$
- V = annualised discounting factor = 1/(1+y) where y is the annualised yield.

#### INTEREST RATES

#### 4.1 OFFICIAL RATES

The Bank of England implements monetary policy by lending to the money market at the official reporate chosen by its Monetary Policy Committee. In the United Kingdom, the Bank lends predominantly through gilt sale and repurchase agreements (repo) at the two-week maturity.





#### UNITED KINGDOM

#### 4.2 MONEY MARKET RATES

A change in the official rate is immediately transmitted to short-term sterling wholesale money market rates, e.g. the rates on money market instruments of different maturities (such as repo contracts with maturities other than two weeks) and other short-term rates (such as those on interbank deposits).

# 4.3 RETAIL BANK INTEREST RATES

Soon after an official rate change, the banks adjust their standard lending rates (base rates), usually by the exact amount of the policy change. This quickly affects the interest rates that banks charge their customers for variable rate loans, including overdrafts. Rates on standard variable rate mortgages may also be changed, though this is not automatic and may be delayed. Rates offered to savers are also changed in order to preserve the margin between deposit and lending rates.

# 5 AUTHORITIES INVOLVED IN BOND ISSUANCE, BOND MANAGEMENT AND SECURITIES MARKET SUPERVISION

The Financial Services Authority maintains confidence in the UK financial system. It achieves this by, among other things, supervising exchanges, settlement houses and other market infrastructure providers; conducting market surveillance; and monitoring transactions.

The Debt Management Office (DMO) was established on 1 April 1998. Its aim is to carry out the Government's debt management policy of minimising financing costs over the longer term, taking account of risk, and to manage the aggregate cash needs of the Exchequer in the most cost-effective way. The DMO took responsibility for debt management on 1 April 1998 and for cash management on 3 April 2000.



# **2** ACCESSION COUNTRIES

# BULGARIA

# I MARKET SIZE

# I.I THE SIZE OF THE NATIONAL DEBT SECURITIES MARKET

The size of the market for debt instruments amounted to  $\notin$ 5,270 million in December 2003, which represented 30% of GDP. Broken down by sector, 98% of the debt was central government debt, with a predominance of debt securities denominated in currencies other than the national currency (Bulgarian lev – BGN). These were primarily Brady bonds, which accounted for 46% ( $\notin$ 1,890 million) of the total amount outstanding of long-term debt securities (t  $\geq$  10) of the general government in December 2003. Consequently, debt in the form of government securities issued by the Ministry of Finance (MoF) in terms of Eurobonds, global bonds, external bonds (Bradies) and bonds covering banks' uncollectible loans (Zunks) represented about 83% of the total central government bond market ( $\notin$ 5,135 million).



#### **BULGARIA**



As regards government securities denominated in national currency, the largest share is accounted for by long-term securities ( $5 \le t < 10$ ,  $t \ge 10$ ).<sup>1</sup> These represent 78% of the total amount outstanding of government debt securities denominated in national currency. This is in compliance with the MoF's policy of issuing longer-term securities, applied since the introduction of the currency board.

Another reflection of this policy is the activity in the primary market, where the shares of short-term and long-term issues in the total general government securities issued were 21% and 79% respectively in 2003, compared with 4% and 96% in 2002 and 25% and 75% in 2001.

The total stock of debt securities denominated in both national currency and euro and issued by municipal authorities marked a moderate rise and amounted to  $\notin 5$  million at the end of 2003.

Due to aggressive new issuance, the total stock of locally issued corporate debt securities denominated in national currency, euro and US dollars quadrupled to  $\notin 129$  million at the end of 2003. The bulk was accounted for by bank products, although the share of non-bank debt securities (a quarter of this total) was large enough to equal the sum total of corporate debt securities issued at the end of 2002.

# I.2 EXPECTED ISSUE VOLUME AND MATURITY DISTRIBUTION FOR GOVERNMENT AND CORPORATE BONDS

Pursuing its general debt issue policy of increasing maturities and issue volumes as well as the share of domestic financing, the Bulgarian Government plans to offer long-term securities with maturities of three, five, seven and ten years in the domestic market over the next two years.

New issues of national currency and eurodenominated paper are being effected and prepared by municipal authorities and corporations, mainly in the three to five-year maturity range.

# ACTIVITY IN THE PRIMARY AND SECONDARY MARKETS

# 2.1 THE PRIMARY MARKET

2

# 2.I.I ACTIVITY IN THE PRIMARY MARKET

In 2003, the value of the transactions involving debt securities issued by the central government amounted to €453 million, compared with €2,528 million in 2002 and €662 million in 2001. One characteristic of the primary market is the long-lasting trend of excess demand over supply. Since 2000, the MoF has been offering to re-open government bonds with maturities of two, three and five years in the domestic market. October 2001 saw the first re-opening seven-year issue. The interest demonstrated by participants on the government securities market made the Bulgarian Government include seven-year bonds as well as three and five-year bonds in its regular issue calendar for 2002. Similarly, in 2002 the MoF put in circulation the first ten-year government bond in national currency under the regular issue calendar for the year. The ten-year issue was sold successfully and this maturity was included in the regular issue calendar for 2003. In 2003, the MoF successfully effected all issues announced in the regular issue calendar for the year. During the reporting period, the Government issued securities, denominated in national currency with the following maturities: bills three and 12 months; bonds - three, five, seven and ten years. In 2003, the short-term issues consisted of three-month and 12-month government bills. Three-month government bills are still being retained on account of their importance as an instrument for the calculation of the Basic Interest Rate – BIR (see below).

During the year, two supplementary issues were placed which were not announced in the regular

<sup>1</sup> The Bulgarian Government issues long-term bonds with maturities of two, three, five, seven and ten years.

issue calendar for 2003. In February 2003, the MoF successfully issued the first long-term bond issue (with a maturity of seven years and three months) denominated in euro in the domestic market. The bond was re-opened twice and  $\notin$ 105 million of the originally announced nominal amount were sold by 30 June 2003.

The interest demonstrated by the participants in the market was such that in November 2003 the government decided to put in circulation the second long-term issue with a maturity of 15 years. The MoF announced that the issue would have a nominal value of up to  $\notin$ 200 million and would be re-opened during 2004. As of November 2003,  $\notin$ 20 million of the issue's nominal amount were sold. With the 15-year government bond, the MoF lengthened the original maturity of the government securities' spectrum from ten years to 15 years.

The coupon of issues was gradually reduced during the period from 2002 to 2003 from 5.75% to 5.50% for three-year bonds, from 6.50% to 4.75% for five-year bonds, from 7.0% to 5.875% for seven-year bonds and from 7.50% to 5.75% for ten-year bonds. The 15-year euro-denominated bond was issued with coupon of 6.0% in 2003. The above-mentioned action was taken to conform to the trend of decreased yields at issuance.

An analysis of issuance activity in 2003 shows that the debt instruments issued by the general government amounted to  $\notin$ 454 million in terms of value (2.58% of GDP), and increased activity was also registered in the corporate sector.

Municipal issuance, was confined to a single national currency-denominated bond issue amounting to  $\notin 0.7$  million through the stock exchange.

Corporate issuance rose by half in terms of the number of placements, while the total size of the placements nearly quintupled, to  $\notin 103$ million. Bank placements still dominated, but non-bank issues increased more rapidly and already accounted for nearly a third of the total amount issued. Banks tended to shift from national currency-denominated to euro and US dollar-denominated issues, while non-bank issuers were active in both national currency and euro-denominated instruments, with a prevalence of the former in terms of total size.

#### 2.1.2 AUCTIONS: REGULARITY, FREQUENCY AND PRE-ANNOUNCEMENT

So far, government securities have only been issued by auction. Government securities are issued in accordance with a predetermined schedule, and the frequency differs for different maturities. Until 2003, the schedule for the coming year was prepared and announced by the MoF at the end of the previous year. At the end of 2003, the MoF proclaimed that it would discontinue the practice of announcing a predetermined yearly schedule for forthcoming auctions. Since 2004, the MoF has established the practice of announcing just the basic framework for the issuance of domestic debt, as the concrete monthly calendar is published 30 days before the beginning of the period. For example, the January 2004 monthly schedule was announced in November 2003, providing for the following: on 5 January 2004, opening of a five-year issue, offering a nominal amount of BGN 20 million; on 12 January 2004, an one-year issue in a nominal amount of BGN 20 million; on 19 January 2004, opening of a 15-year issue, offering a nominal amount of €50 million; and on 26 January 2004, a threemonth issue in a nominal amount of BGN 12 million.

Subscription for bonds on the IPO market of the Bulgarian Stock Exchange – Sofia (BSE-Sofia) is effected in the form of auctions, and that was the way the single municipal bond placement in 2003 took place.

# 2.1.3 MEASURES (EITHER PUBLIC OR PRIVATE) TO PROMOTE THE FUNCTIONING OF THE PRIMARY MARKET

There is a system of primary dealers of government securities, who are selected twice a year by a committee comprising representatives of the MoF and the Bulgarian National Bank

# Chart 2 Primary market activity for debt securities

(gross issuance during the period; nominal amounts)



(2c) By original maturity for the general government sector (as a percentage of the total)



(2b) By sector of the issuer (as a percentage of the total)

non-financial and non-monetary financial corporations monetary financial institutions







(BNB). The criteria that primary dealers should meet are publicly announced and are also approved by the MoF and the BNB (see Regulation No. 5 on the Terms and Procedure for the Acquisition, Redemption and Trade in Government Securities and Regulation No.15 on the Control of Transactions Involving Bookentry Government Securities).

#### 2.2 THE SECONDARY MARKET

#### 2.2.1 ACTIVITY IN THE SECONDARY MARKET

The secondary market in Bulgaria developed gradually in terms of the variety of debt instruments offered. It was restricted to trade in the over-the-counter (OTC) market for central government securities, while an increasing

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number of municipal and corporate issues were traded on and outside the stock exchange.

Total turnover in municipal issues (denominated in national currency and in euro) on and off the stock exchange amounted to €2.2 million. Secondary market turnover in corporate (bank and non-bank) bonds (denominated in national currency, in euro and in US dollars) was €89 million. Since issuance took place outside the stock exchange and registration for stock-exchange trading only took place subsequently (meanwhile there were deals outside the bourse), and since a number of issues were traded solely outside the stock exchange, non-stock exchange turnover accounted for more than half this figure. The rate of growth in stock exchange trading, however, is high enough, and turnover therein has nearly quadrupled since 2002.

The secondary market for government securities developed in 2003, driven by a number of factors. As a whole, trade was characterised by the marked predominance of demand for over the supply of deficit-financing issues. This was due mainly to the restricted amount of issues in circulation and the reported excess liquidity in the banking system, which, combined with the shortage of alternative income-generating investment instruments, prompted banks to keep the securities they had already acquired. As of 2003, the number of transactions in government securities rose owing to the increase in market participants.

# 2.2.2 MEASURES (EITHER PUBLIC OR PRIVATE) TO PROMOTE LIQUIDITY IN THE SECONDARY MARKET

As of 2000, the scheme for issuing government securities was changed and the concept of re-opening issues for completion at subsequent auctions was introduced. This change was aimed primarily at increasing the size of new issues, thus creating possibilities for greater liquidity. Since 2001, the MoF has been introducing only re-opening issues of government bonds. The stock exchange has launched COBOS, an internet-based automatic system for the collection of clients' orders and for the confirmation thereof by stock exchange intermediaries, which facilitates the access of clients to the market.

#### 2.2.3 LIQUIDITY OF THE SECONDARY MARKET

The most appropriate indicator used to measure liquidity on the Bulgarian secondary market is the liquidity ratio (turnover/amount outstanding). In 2003, turnover on the secondary market was  $\notin$ 4,682 million (BGN 9,157 million), while the amount outstanding was  $\notin$ 1,132 million (BGN 2,213 million). The liquidity ratio was therefore 4.1.

In accordance with the requirements set for all EU applicant countries, whereby they must

| All debt securities  | Long-term debt securities  |
|--|--|
| Included (for 2001: 35%;<br>for 2002: 25% and<br>for 2003: 23%)  | Included   |
| Not included   | Not Included   |
| Transactions are only counted by the counterparty that holds th<br>securities. It is done by the central depository for corporate an<br>municipal bonds and by the BNB for government securities. TI<br>BNB, which keeps a single register of government securitie<br>functions as a depository of these securities (see Article 43, item<br>of the Law on the BNB). <sup>1)</sup> |  |
|  | Included (for 2001: 35%;<br>for 2002: 25% and<br>for 2003: 23%)<br>Not included<br>Transactions are only counte<br>securities. It is done by the<br>municipal bonds and by the<br>BNB, which keeps a single<br>functions as a depository of th |

FCB



Chart 3 Secondary market activity for debt securities

define long-term interest rates for the purpose of assessing convergence, the MoF has established a single benchmark bond (ISIN code: BG2040303211; issuance date: 2 July 2003; original maturity date: 2 July 2013; coupon rate: fixed rate of 5.75%; type of issue:

reopening issue; average weighted yield to maturity: 6.00%).

100

90

80

70

60

50

40

30

20

10

0

(stock

1%

In accordance with the above, the total volume of transactions in the secondary market in 2003, including the benchmark bond, was €64 million

**BULGARIA** 

(BGN 124 million). There were 144 transactions reported, and the liquidity ratio was 2.48.

#### **3** CALCULATION OF THE YIELD

The method used for the calculation of the yield to maturity is executed in accordance with the methodology approved by the MoF following the yield convention adopted on 1 January 2001, which is ACT/ACT. Since 1 July 2002, the yield calculation has been based on the clean price recorded for the auction concerned.<sup>2</sup>

At the end of 2003, the MoF took a decision to use the ISMA formula for the calculation of the yield on government securities. The formula will be brought into use by 31 December 2004 at latest, along with the start of the new System for Conducting Auctions, which has been developed by the BNB. The convention ACT/ACT adopted on 1 January 2001 remains unchanged.

#### INTEREST RATES

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#### 4.1 OFFICIAL RATES

The BIR is the official (reference) rate. The BNB announces the BIR for the corresponding period, using a method determined by its Managing Board, and publishes it in the State Gazette (Article 35 of the Law on the BNB).<sup>3</sup> According to this method (Decision No. 497/27.11.1997 of the BNB Managing Board), the BIR is the annual yield on three-month government securities, achieved at each primary auction. The BIR comes into effect on the day of issue and is valid up to the date of the next issue of three-month government securities. The BIR shown in chart 4 is presented as an end-of-month rate.

- 2 For the purposes of comparability, the BNB computed the yield at the end of 2000 using the average market price, which in turn was calculated by dividing the total value for all transactions in 2000 by the acquired nominal value (the price is in 100 units, nominal value). The calculation is based on the average close-of-market value in 2000 (price gross of tax plus accrued interest).
- 3 See the BNB's website: www.bnb.bg.







#### 4.2 MONEY MARKET RATES

The rates on interbank deposits are set by the market for trade in free monetary funds between banks. The BNB reports data for overnight deposits and time deposits of one month, three months, six months and 12 months. The most widely used deposits are overnight deposits, the share of which in the total amount of money market deposits was 68%, 74% and 68% at the end of 2001, 2002 and 2003 respectively.

### 4.3 CAPITAL MARKET INTEREST RATES

The yield of government securities denominated in national currency and issued in a primary auction is reported on an annual basis. The data are available for original maturities of two, five, seven and ten years.

#### 4.4 BANK INTEREST RATES

The interest rate statistics on banks cover data on the average weighted rate levels on newly contracted loans to and on newly received deposits from households (S.14 and S.15) and non-financial corporations (S.11). The interest rates on outstanding amounts are only collected for deposits. All maturities are defined on the basis of the original maturity and are most representative for loans and deposits for two sectors, households and non-financial corporations.

Lending interest rate: the most representative maturity band on newly contracted loans to nonfinancial corporations is the short-term maturity band. It includes overdrafts and loans of up to one year. Short-term loans to non-financial corporations account for about 91% of the total amount of newly contracted short-term loans. The most representative maturity on newly contracted loans to households is the long-term maturity (of more than one year). The indicator includes interest rates on long-term loans for consumption, for house purchases and other loans. Long-term loans to households account for about 52% of the overall amount of longterm loans. Deposit interest rate: the most representative interest rates on newly accepted deposits from non-financial corporations refer to overnight deposits whose share was increased from 76% in 2001 to 86% in 2003. The most representative maturity band on newly accepted deposits with agreed maturity from households is up to one month (47%). The proportion of one-month deposits is particularly high for nonfinancial corporations (59%).

# 5 AUTHORITIES INVOLVED IN BOND ISSUANCE, BOND MANAGEMENT AND SECURITIES MARKET SUPERVISION

- The Ministry of Finance (MoF): this sets the issuance policy for government securities in accordance with the State Debt Law.
- Bulgarian National Bank (BNB): auctions and registration of trades are carried out by the BNB. The BNB and the MoF are responsible for supervising the government securities market, in accordance with Regulation No. 15 on the control of transactions involving bookentry government securities.
- Financial Supervision Commission (FSC): as regards debt instruments other than those issued by the central government, the Bulgarian National Securities Commission was merged with the State Insurance Supervision Agency and the Insurance Supervision Agency to form the FSC, a newly created body supervising the non-banking financial sector. As a legal heir to the BNSC, the FSC regulates and supervises the activities of the regulated securities markets (the stock exchange), the Central Depository,<sup>4</sup> investment intermediaries, investment and management companies, securities brokers and investment advisors, public companies and other securities issuers under the Law on the Public Offering of Securities.
- 4 The Central Depository AD is an institution whose function is to open and keep accounts with book-entry securities and to register transactions in these securities. This institution keeps a central (the only) register of book-entry investment securities that have not been issued by the central government.

# ROMANIA

# I MARKET SIZE

# I.I THE SIZE OF THE NATIONAL DEBT SECURITIES MARKET

The total amount outstanding of debt securities issued by the general government was  $\notin$ 4,993 million at the end of December 2003, which represented 9.9% of GDP.<sup>1</sup> Government debt securities issued on the domestic market are classified, according to the purpose of issuance, as marketable or non-marketable securities.

In 2003, 47% of general government debt securities issuance was denominated in national

1 The total amount outstanding refers only to the general government sector. Data for debt securities issued by nonfinancial and non-monetary financial corporations are not available as indicated in the statistical Table 1 in Part II.



Notes: Data for non-financial and non-monetary financial corporations are not available. Chart 1b shows the amount outstanding of general government debt securities as a percentage of GDP.

# ROMANIA



currency (Romanian leu - ROL), 47% was denominated in euro and 6% was denominated in a foreign currency other than the euro.

The maturity distribution of all general government debt securities in 2003 was characterised by a large share (40%) of shortterm debt securities with a maturity of up to and including one year. Looking at the maturity structure of long-term government debt securities, almost 14% of debt securities issued by the general government had an original maturity of over one year but less than five years, 14% had an original maturity of five years or more but less than ten years and 32% had a maturity of ten years or more.

With regard to debt securities issued by the general government in national currency, shortterm debt securities with an original maturity of up to and including one year constituted 83% of the outstanding debt. Government debt securities with an original maturity of over one year but less than five years made up 16% of the total, while those with an original maturity of five years or more but less than ten years accounted for 1%.

# **EUROBOND ISSUES**

Since 2000, Romania has made at least one sovereign bond issue each year on the European markets, which have met with strong investor interest.

After reaching a maximum of 11.50% in 2000, the interest rate on the contracted loans dropped from 2001 onwards, reflecting a better perception by the international financial markets of Romania's economic stability and solvability. The positive effect of the decreasing coupon over the last couple of years has been strengthened by the extension of the government bond maturity curve (first to seven and then to ten years). The aim was to increase the efficiency of public debt management.

Romania's presence on the international capital markets is important not only from the point of view of the low cost of external financing. A good performance by Romanian government bonds may enhance Romania's image. Furthermore, this performance reflects foreign investors' perception of Romania.

The money from the loans contracted on the international capital markets has been used to finance the budget deficit and refinance the public debt.

# I.2 EXPECTED ISSUE VOLUME AND MATURITY DISTRIBUTION FOR GOVERNMENT BONDS

The first regular issuance of government bonds with a five-year maturity on the domestic market took place in 2003. The intention for 2004 is to increase the number and the volume of government bond issues.

# 2 ACTIVITY IN THE PRIMARY AND SECONDARY MARKETS

#### 2.1 THE PRIMARY MARKET

#### 2.I.I ACTIVITY IN THE PRIMARY MARKET

The period from 2001 to 2003 was characterised by decreasing activity in the primary market. In 2001, issues of debt securities by the central government and other general government sector amounted to  $\notin$ 3,246 million, compared with  $\notin$ 6,185 million in 2000. General government issuance decreased by 23% to  $\notin$ 2,511 million in 2002 and then by 33% to  $\notin$ 1,683 million in 2003.

Within the central government and other general government sector, primary market activity in short-term debt securities was the highest. More specifically, these securities represented about 97% of total gross issues in 2001, while the share decreased to 79% in 2002 and further to 69% in 2003.

Government securities are issued in accordance with the provisions of the Law No 81/1991 on public debt and the agreements signed between Ministerul Finanțelor Publice, the Ministry of Public Finance, as issuer, and the assigned agents.

#### ROMANIA

Ministerul Finanțelor Publice issues government securities through:

- its own Treasury, which issues in physical form short-term securities denominated in Romanian lei that are non-tradable, available only to residents and sold by public subscription; and
- Banca Naţională a României, the National Bank of Romania, which issues in dematerialised form short and medium-term securities denominated in Romanian lei, US dollars or euro that are tradable on the secondary market, available to both residents and non-residents, and sold by auction or by public subscription.

A new Regulation on government securities operations, which regulates both the primary and the secondary market, has been in force since 1 December 2002.

The Regulation is based on the following principles:

- Primary dealer system banks and securities companies authorised to operate in Romania can be licensed as primary dealers if they fulfil the terms and conditions in force.
- Authorisation to act as an intermediary on the secondary market – banks and securities companies other than primary dealers authorised to operate in Romania can be licensed as intermediaries on the secondary market if they fulfil the prevailing terms and conditions.
- Government Securities Register the register has two tiers, namely: (i) a Primary Register, maintained by Banca Naţională a României, in which operations conducted by primary and secondary dealers as well as by banks are recorded; and (ii) Secondary Registers, maintained by primary and secondary dealers, in which operations

carried out by the owners of the securities, i.e. the dealers' clients, are recorded.

- *Placement methods* the government securities are sold according to the following procedures: public subscription and/or auction. The auction methods used are the multiple price method and the uniform price method. Bids can be both competitive and non-competitive.
- *Penalties* the Regulation provides for penalties in the event of non-compliance with the legal provisions.
- Professional associations authorised participants may set up professional associations aiming to improve professional standards and to enforce a code of conduct for trading in government securities.

It should be noted that, under current legislation, Banca Națională a României is not entitled to engage in purchasing operations on the primary market for government securities.

### 2.1.2 AUCTIONS: REGULARITY, FREQUENCY AND PRE-ANNOUNCEMENT

At present, Banca Naţională a României is empowered to act as the state agent for the sale, registration, transfer and settlement of government securities.<sup>2</sup> Ministerul Finanţelor Publice is in charge of issuing<sup>3</sup> government securities<sup>4</sup> in dematerialised form according to a pre-announced yearly, half-yearly, quarterly or monthly schedule.

- 2 The legal framework is provided by Convention No 16813/1998, concluded between Ministerul Finanţelor Publice and Banca Naţională a României, and Regulation No 875/2001 on government securities issued in dematerialised form.
- 3 Prior to September 2003, issues of government securities were coded at the national level, as Romania did not use the international ISIN coding system. Since September 2003, Romania has been using the ISIN system.
- 4 Law No 81/1999 on public debt governs the issuance of government securities for budget deficit financing.



# Chart 2 Primary market activity for debt securities

(gross issuance during the period; nominal amounts)









# (2b) By sector of the issuer (as a percentage of the total)

non-financial and non-monetary financial corporations monetary financial institutions



(2d) Issuance methods for long-term debt securities in national currency by general government in 2003 (as a percentage of the total)



Source: ECB long-term interest rate statistics. Note: In Charts 2a and 2b, data for non-financial and non-monetary financial corporations were not available.

Government securities may be issued in either Romanian lei or foreign currency, with maturities of 91, 182 or 364 days, two years, three years and five years. Government

ECB

# securities are issued by public subscription or by auction.<sup>5</sup>

5 In addition, there are special issues aimed at the taking-over into public debt of losses in the economy, known as private placements. For example, such government securities were issued to take over the losses incurred by Bancorex. Usually, these issues have a maturity of more than 12 months and different interest rate conditions.

#### ROMANIA

# 2.1.3. MEASURES (EITHER PUBLIC OR PRIVATE) TO PROMOTE THE FUNCTIONING OF THE PRIMARY MARKET

As already mentioned, a new Regulation on government securities operations was published in 2001 and came into force on 1 December 2002. In accordance with the provisions of this Regulation, the primary dealer system was introduced. Primary dealers may act in their own name or on behalf of their clients and have the obligation to submit bids for a minimum amount established by Ministerul Finanțelor Publice.

#### 2.2 THE SECONDARY MARKET

# 2.2.1 ACTIVITY IN THE SECONDARY MARKET

In the period from 2001 to 2003, turnover of debt securities issued by the general government on the secondary market decreased by 6% to  $\epsilon$ 66 million in 2002 and then by 43% to  $\epsilon$ 38 million in 2003.

Secondary market operations can be concluded: (i) on the basis of direct negotiations between the owners and potential buyers through, but not restricted to, primary and secondary dealers (for all government securities, irrespective of the maturity); or (ii) through Bursa de Valori București the Bucharest Stock Exchange (BSE) (for specific issues of government securities with a maturity of more than one year, which have the specific approval of the Ministerul Finanțelor Publice).

Government securities operations are performed in accordance with the delivery-

versus-payment principle. After confirmation, each transaction must be notified to the Primary or Secondary Register. For transactions between banks, the buyer makes the payment via payment order. The payment system sends the confirmation of payment to the respective register, after which the transfer of the ownership rights takes place.

Banks may also participate in repo/reverse repo auctions involving government securities as collateral, which are organised by Banca Naţională a României for monetary policy purposes. Auction results are automatically recorded in the Primary Register and payment is effected automatically (directly via the bank account, with no payment order being required).

# 2.2.2 MEASURES (EITHER PUBLIC OR PRIVATE) TO PROMOTE LIQUIDITY IN THE SECONDARY MARKET

Under the provisions of the new Regulation, primary and secondary dealers are required, inter alia, to set up and maintain a secondary register for their clients and to quote a certain number of issues on a daily basis. They must give indicative sale-purchase quotations and must, at the request of other dealers/clients, offer firm sale-purchase quotations as well as indicative quotations for any other outstanding issue of government securities.

#### 2.2.3 LIQUIDITY IN THE SECONDARY MARKET

The Romanian securities markets are governed by Law No 52/1994 on securities and the stock exchange (Securities Law). It governs the

| (cf. Table 2B in the statistical tables in Part 2)   |   |                           |  |
|--|---|---------------------------|--|
| Methodological item  | All debt securities   | Long-term debt securities |  |
| Repos and reverse repos (if available, the percentage<br>of these transactions in terms of the nominal value of<br>the daily averages of transactions) | Included<br>0.22%   | Included<br>(NA)          |  |
| Trading in secondary markets abroad  | The market for Romanian<br>government securities is<br>only domestic. |                           |  |



overall activities of the securities markets and financial institutions dealing with securities. The law focuses on investor protection and defines the statute of Comisia Națională a Valorilor Mobiliare, the National Securities Commission (CNVM), which is responsible for any regulation and the supervision of the capital markets, including activities of self-regulated licensed entities.

There are currently two capital markets in Romania, namely that operated by the BSE and the over-the-counter (OTC) market, RASDAQ, both of which trade only in shares issued by private and/or state-owned companies. Those trades that take place on the BSE are settled on this exchange. Those trades that take place on the OTC market are settled by the National Securities Clearing, Settlement and Depository Company (NSCSDC). The shares of companies listed and traded on the BSE cannot be traded on the RASDAQ market and the shares of companies listed on the RASDAQ cannot be traded on the BSE. Each of the responsible institutions (i.e. the BSE and NSCSDC) acts as custodian.

At present, Banca Națională a României is empowered to act as the state agent for the sale, registration, transfer and settlement of government securities.

Government securities are issued by Ministerul Finanțelor Publice, pursuant to the provisions of Law No 81/1991 on public debt, according to an annual, semi-annual, quarterly or monthly provisional schedule. The government securities may be issued in national or foreign currency. The features of government securities issues are announced in an issue prospectus for both primary and secondary market operations.

Banca Națională a României intends to create benchmarks for representative maturities (i.e. one, three, six, nine, 12, 18 and 24 months) through the interpolation of daily dealers' quotations on a yield curve. Regarding long-terms bonds issued by the central government, it is important to note that since 2003 there have been both regular issues of government bonds and special issues aimed at the taking-over into public debt of losses in the economy, known as private placements. These special government securities were issued to take over the losses incurred by Bancorex and Banca Agricola. These government bonds have maturities of more than 12 months (two, three, five or 15 years), different interest rate conditions (e.g. an average lending rate for special issues, compared with a fixed or CPI-linked interest rate for regular issues) and are denominated in Romanian lei or US dollars.

#### **3** CALCULATION OF THE YIELD

No data are available for the time being. Secondary market transactions are only conducted over the counter. Up to the end of 2003, only banks were licensed to operate on the primary market.

#### INTEREST RATES

4

#### 4.1 OFFICIAL INTEREST RATES

The interest rates applied by Banca Naţională a României are the policy rate and the rates on its standing facilities (the Lombard lending facility and the deposit facility). In addition, Banca Naţională a României disseminates the rates applied to commercial banks' national currency and foreign exchange reserves with the central bank.

# 4.2 MONEY MARKET RATES

Money market rates are rates on overnight deposits, as well as one-month, three-month, six-month and 12-month interbank interest rates.

#### ROMANIA

# Chart 3 Secondary market activity for debt securities

#### (value of transactions; daily averages; nominal amounts)

(3a) Total turnover (€ millions)









2002

non-financial and non-monetary financial corporations

0

2003

(3b) By sector of the issuer (as a percentage of the total)

0

2001

(3d) Trading places for all debt securities in 2003 (as a percentage of the total)



Source: ECB long-term interest rate statistics.

Notes: In Chart 3c, data refer to the total secondary market. A maturity breakdown for the general government sector is not available. In Chart 3d, information on trading places for debt securities denominated in national currency is not available. Therefore, data refer to trading places for all long-term debt securities.

### 4.3 BANK INTEREST RATES

Since May 2003, interest rates applied by credit institutions have been calculated according to Banca Națională a României Norm No 2/2003 dated 21 February 2003. In accordance with Norm No 2/2003, banks calculate interest rates based on the amounts outstanding and on new activity in ROL, USD and €. The average lending/deposit rates are calculated as the



#### **Chart 4 Interest rate statistics**

(percentages per annum; monthly averages unless otherwise indicated; based on new business)





**Bank** interest rates

weighted arithmetical average of monthly interest rates on loans/deposits, broken down by sector (e.g. banks, households, government) and by maturity (i.e. sight deposits, loans/ deposits up to one month, up to three months, up to six months, up to one year, up to five years and more than five years).

# 5 AUTHORITIES INVOLVED IN BOND ISSUANCE, BOND MANAGEMENT AND SECURITIES MARKET SUPERVISION

In Romania, the authorities involved in bond issuance, bond management and securities market supervision are Ministerul Finanțelor Publice, Banca Națională a României and Comisia Națională a Valorilor Mobiliare.

 Ministerul Finanţelor Publice (Ministry of Public Finance), which is in charge of bond issuance and management. The bonds issued by the Ministry are for budget deficit financing.

- Banca Națională a României (National Bank of Romania), which licenses dealers on the government securities market and supervises the banks licensed to act as dealers and the secondary markets for government securities other than BSE.
- Comisia Națională a Valorilor Mobiliare (National Securities Commission), which supervises the activity of securities companies licensed as dealers and BSE as a secondary market for government securities.

For the time being, only banks are licensed to operate on the primary market and secondary market transactions only take place over the counter.

PART 2

# STATISTICAL TABLES
## I NON-EURO AREA EU MEMBER STATES

| (December 2003; end-of-period stocks; nominal value | )                        |                            |            |                          |         |  |  |  |
|---|--------------------------|----------------------------|------------|--------------------------|---------|--|--|--|
| Instrument type/currency                            | Total amount outstanding |                            |            |                          |         |  |  |  |
| of denomination                                     |                          | Money market<br>Short-term |            | Bond market<br>Long-term |         |  |  |  |
| Sector of the issuer                                |                          | t ≤ 1                      | 1 < t < 5  | $5 \leq t < 10$          | t ≥ 10  |  |  |  |
|   |                          |                            | € millions |                          |         |  |  |  |
| Central government (S.1311) and other general       |                          |                            |            |                          |         |  |  |  |
| government (S.1312+S.1313+S.1314)                   | 17,866.6                 | 6,357.0                    | 2,160.2    | 4,127.7                  | 5,221.6 |  |  |  |
| Monetary financial institutions (S.121+S.122)       | 24,383.5                 | 21,601.6                   | 91.7       | 2,520.4                  | 169.7   |  |  |  |
| Non-financial and non-monetary financial            |                          |                            |            |                          |         |  |  |  |
| corporations (S.123+S.124+S.125+S.11)               | 2,896.2                  | 0.0                        | 124.4      | 2,184.6                  | 587.3   |  |  |  |
| Total   | 45,146.3                 | 27,958.6                   | 2,376.2    | 8,832.8                  | 5,978.0 |  |  |  |

Sources: Systém krátkodobých dluhopisů, Středisko cenných papírů, Komise pro cenné papíry, Bloomberg. Note: Exchange rate used (end-of-period): 32.405 CZK/€.

## CZECH REPUBLIC

|           |             |       |           | Current    |           | omination |            |       |           |             |     |
|-----------|-------------|-------|-----------|------------|-----------|-----------|------------|-------|-----------|-------------|-----|
| Short-t   | erm (t ≤ 1) |       | Long-t    | erm (1 < t | v         |           | erm (5 ≤ t | < 10) | Long-     | term (t ≥ 1 | 0)  |
| National  | Euro        | Other | National  | Euro       | Other     | National  | Euro       | Other | National  | Euro        | Oth |
| TVational | Luio        | Other | Ivational |            | percentag |           | Euro       | Oulei | Ivational | Euro        | Oui |
|           |             |       |           | m          | percentag | es (70)   |            |       |           |             |     |
| 100.0     | 0.0         |       | 100.0     | 0.0        | 0.0       | 07.0      |            | 0.0   | 01.0      |             | 0   |
| 100.0     | 0.0         | 0.0   | 100.0     | 0.0        | 0.0       | 97.9      | 2.1        | 0.0   | 91.8      | 8.2         | 0   |
| 100.0     | 0.0         | 0.0   | 67.3      | 32.7       | 0.0       | 84.2      | 0.1        | 15.7  | 100.0     | 0.0         | 0   |
|           |             |       |           |            |           |           |            |       |           |             |     |
| 0.0       | 0.0         | 0.0   | 100.0     | 0.0        | 0.0       | 84.5      | 1.0        | 14.5  | 80.1      | 15.3        | 4   |



## (yearly total)

| 1. All debt securities   |           |                  |           |           |                  |           |
|--|-----------|------------------|-----------|-----------|------------------|-----------|
|  | Valu      | e of transaction | 15        | Numb      | er of transactio | ns        |
|  | Nomina    | l value in € mil | lions     | Nu        | mber of issues   |           |
|  | 2001      | 2002             | 2003      | 2001      | 2002             | 2003      |
| Total economy  |           |                  |           |           |                  |           |
| Total primary market, of which:  | 47,867.1  | 72,246.4         | 62,026.7  | 60.0      | 60.0             | 65.0      |
| - auction (% of total)   |           |                  |           |           |                  |           |
| - syndication (% of total)   |           | •                | •         | •         |                  |           |
| - other (e.g. private placement) (% of total)                                      |           |                  |           |           |                  |           |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314) |           |                  |           |           |                  |           |
| Total primary market, of which:  | 16,194.6  | 17,298.2         | 17,790.7  | 47.0      | 42.0             | 45.0      |
| - auction (% of total)   | 100.0 (e) | 100.0 (e)        | 100.0 (e) | 100.0 (e) | 100.0 (e)        | 100.0 (e) |
| - syndication (% of total)   | 0.0       | 0.0              | 0.0       | 0.0       | 0.0              | 0.0       |
| - other (e.g. private placement) (% of total)                                      | 0.0       | 0.0              | 0.0       | 0.0       | 0.0              | 0.0       |
| Monetary financial institutions<br>(S.121+S.122)                                   |           |                  |           |           |                  |           |
| Total primary market, of which:  | 31,332.1  | 54,585.4         | 43,904.3  | 6.0       | 12.0             | 15.0      |
| - auction (% of total)   |           |                  |           |           |                  |           |
| - syndication (% of total)   |           |                  |           |           |                  |           |
| - other (e.g. private placement) (% of total)                                      |           |                  |           |           |                  |           |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)     |           |                  |           |           |                  |           |
| Total primary market, of which:  | 340.4     | 362.8            | 331.7     | 7.0       | 6.0              | 5.0       |
| - auction (% of total)   |           |                  |           |           |                  |           |
| - syndication (% of total)   |           |                  |           |           |                  |           |
| - other (e.g. private placement) (% of total)                                      |           |                  |           |           |                  |           |

#### 2. Long-term debt securities

| 2. Long-term debt securities  |                                     | Value of t                 | ransactions      |       | Numb      | oer of tran | sactions |
|---|-------------------------------------|----------------------------|------------------|-------|-----------|-------------|----------|
|   |                                     | Nominal valu               | ie in € millions |       | Nu        | umber of i  | ssues    |
|   | 2001                                | 2002                       | 20               | 03    | 2001      | 2002        | 2003     |
|   | All long-term<br>debt<br>securities | debt debt debt denominated |                  |       |           |             |          |
| Total economy   |                                     |                            |                  |       |           |             |          |
| Total primary market, of which:   | 2,734.9                             | 4,495.2                    | 5,183.7          | 93.8  | 18.0      | 21.0        | 26.0     |
| - auction (% of total)  |                                     |                            |                  |       |           |             |          |
| <ul> <li>syndication (% of total)</li> <li>other (e.g. private placement) (% of total)</li> </ul> |                                     |                            |                  |       |           | •           | •        |
|   |                                     |                            |                  |       | •         | •           | •        |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314)                |                                     |                            |                  |       |           |             |          |
| Total primary market, of which:   | 2,333.5                             | 3,344.5                    | 4,150.9          | 95.9  | 11.0      | 7.0         | 8.0      |
| - auction (% of total)  | 100.0 (e)                           | 100.0 (e)                  | 100.0 (e)        |       | 100.0 (e) |             |          |
| - syndication (% of total)  | 0.0                                 | 0.0                        | 0.0              | 0.0   |           | 0.0         | 0.0      |
| - other (e.g. private placement) (% of total)   | 0.0                                 | 0.0                        | 0.0              | 0.0   | 0.0       | 0.0         | 0.0      |
| Monetary financial institutions<br>(S.121+S.122)  |                                     |                            |                  |       |           |             |          |
| Total primary market, of which:   | 62.5                                | 788.0                      | 701.0            | 78.4  | 1.0       | 8.0         | 13.0     |
| - auction (% of total)  |                                     |                            |                  |       |           |             |          |
| - syndication (% of total)  |                                     |                            |                  |       |           |             |          |
| - other (e.g. private placement) (% of total)   |                                     |                            |                  |       |           |             |          |
| Non-financial and non-monetary financial  |                                     |                            |                  |       |           |             |          |
| corporations (S.123+S.124+S.125+S.11)   | 220.0                               | 2(2.0                      | 221 5            | 100.0 |           |             | 5.0      |
| Total primary market, of which:<br>– auction (% of total)   | 338.8                               | 362.8                      | 331.7            | 100.0 | 6.0       | 6.0         | 5.0      |
| - syndication (% of total)  |                                     |                            |                  |       | •         |             |          |
| - other (e.g. private placement) (% of total)   |                                     |                            |                  |       |           |             |          |

Sources: Komise pro cenné papíry, Středisko cenných papírů Bloomberg, Systém krátkodobých dluhopisů.

Note: "e" (estimates): Data on methods used to sell securities are not collected. However, for the government sector 100% share of auctions was estimated. All Treasury bonds and bills are issued through auctions and auctions are usually used also by the other government.

### CZECH REPUBLIC

## Table 2B Secondary market activity

#### (daily averages) 1. All debt securities Value of transactions Number of transactions Nominal value in € millions Number of issues 2002 2003 2001 2003 2001 2002 **Total economy** 95.9 (e) 798.2 (e) 740.6 (e) 463.3 (e) 163.9 (e) Total secondary market, of which: 52.4 (e) – regulated markets (Stock Exchange(s) 0.0 (e) and other regulated markets), % of total 0.0 (e) 0.0 (e) 0.0 (e) 0.1 (e) 0.1 (e) - non-regulated markets (e.g. over-the-99.9 (e) counter market (OTC)), % of total 100.0 (e) 100.0 (e) 100.0 (e) 100.0 (e) 99.9 (e) Central government (S.1311) and other general government (S.1312+S.1313+S.1314) 54.0 (e) 43.4 (e) 79.9 (e) % of secondary market for total economy 42.7 (e) 49.2 (e) 77.2 (e) **Monetary financial institutions** (S.121+S.122) % of secondary market for total economy 55.0 (e) 11.2 (e) 43.4 (e) 56.1 (e) 50.8 (e) 14.1 (e) Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11) % of secondary market for total economy 2.6 (e) 1.2 (e) 1.6 (e) 0.0 (e) 8.7 (e) 9.0 (e)

#### 2. Long-term debt securities

| 5   |                                     | Value of t                          | ransactions                         |   | Numb | er of tran | sactions |
|---|-------------------------------------|-------------------------------------|-------------------------------------|---|------|------------|----------|
|   |                                     | Nominal valu                        | ie in € millions                    |   | Nu   | mber of is | sues     |
|   | 2001                                | 2002                                | 20                                  | 03  | 2001 | 2002       | 2003     |
|   | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | of which: %<br>denominated<br>in national<br>currency |      |            |          |
| Total economy   |                                     |                                     |                                     |   |      |            |          |
| Total secondary market, of which:<br>– regulated markets (Stock Exchange(s)   | 239.8 (e)                           | 198.6 (e)                           | 141.7 (e)                           | 100.0 (e)   | . 1  | 36.0 (e)   | 81.2 (e) |
| and other regulated markets), % of total<br>– non-regulated markets (e.g. over-the-   | 0.0 (e)                             | 0.0 (e)                             | 0.0 (e)                             | 0.0   |      | 0.1 (e)    | 0.1 (e)  |
| counter market (OTC)), % of total   | 100.0 (e)                           | 100.0 (e)                           | 100.0 (e)                           | 100.0 (e)   |      | 99.9 (e)   | 99.9 (e) |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314)<br>% of secondary market for total economy | 87.3 (e)                            | 90.5 (e)                            | 91.8 (e)                            | 100.0 (e)   |      | 81.4 (e)   | 84.4 (e) |
| Monetary financial institutions<br>(S.121+S.122)  |                                     |                                     |                                     |   |      |            |          |
| % of secondary market for total economy   | 4.0 (e)                             | 4.8 (e)                             | 2.9 (e)                             | 100.0 (e)   | •    | 8.1 (e)    | 5.0 (e)  |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)  | 9 ( (-)                             |                                     | 5.2 (-)                             | 100.0 (-)   |      | 10.5 (-)   | 10 ( (-) |
| % of secondary market for total economy   | 8.6 (e)                             | 4.6 (e)                             | 5.3 (e)                             | 100.0 (e)   | •    | 10.5 (e)   | 10.0 (e) |

Sources: Burza cenných papírů Praha, Systém krátkodobých dluhopisů.

Note: Number of business days:

Prague Securities Centre: 250 in 2001; 250 in 2002; 251 in 2003.

Short-term bonds system: 252 in 2001; 252 in 2002; 252 in 2003.

"e" (estimates): Trading in the total domestic market (i.e. including transactions in RM-Systém, direct transfers in the Středisko cenných papírů etc.) is estimated as 110% of the transactions registered by Burza cenných papírů Praha. In addition to estimates of market activity for long-term debt securities, also trading in the secondary market for short-term debt securities was estimated from incomplete SKD data in 2001 and 2002. Trading in secondary markets abroad not included. Data reported for number of transactions for 2001 in Table 2B.1 refer to short-term debt securities only.





(December 2003; end-of-period stocks; nominal value)

| Instrument type/currency   | Total amount outstanding |                            |            |                          |          |  |  |  |
|--|--------------------------|----------------------------|------------|--------------------------|----------|--|--|--|
| of denomination  |                          | Money market<br>Short-term |            | Bond market<br>Long-term |          |  |  |  |
| Sector of the issuer   |                          | t ≤ 1                      | 1 < t < 5  | $5 \leq t < 10$          | t ≥ 10   |  |  |  |
|  |                          |                            | € millions |                          |          |  |  |  |
| Central government (S.1311) and other general government (S.1312+S.1313+S.1314)              | 92,216.9                 | 10,436.8                   | 10,549.0   | 17,080.0                 | 54,151.1 |  |  |  |
| Monetary financial institutions (S.121+S.122)  | 270,067.2                | 8,437.1                    |            | 261,630.1                |          |  |  |  |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11) <sup>1)</sup> | 15,504.9                 | 1,674.1                    |            | 13,830.9                 |          |  |  |  |
| Total  | 377,789.0                | 20,547.9                   |            | 357,241.1                |          |  |  |  |

Sources: Danmarks Nationalbank's Securities Databases (DK-CSDB/domestic isues and VPU/foreign issues) and Danmarks Nationalbank's Government Debt Management.

1) The maturity breakdown for long-term debt securities as indicated in Table 1 is not available. Data refer to debt securities with an original maturity of more than one year. These long-term debt securities are issued in national currency - DKK (86.4%) in euro (10.8%) and in other currencies (2.8%) by monetary financial institutions. In addition non-financial and non-monetary financial corporations issued these debt securities in national currency - DKK (17.4%) in euro (43.4%) and in other currencies (39.2%). Note: Exchange rate used (end-of-period): 7.44 DKK/€.



## DENMARK

|          |             |       |          | Currei     | ncy of den | omination |            |       |          |           |     |
|----------|-------------|-------|----------|------------|------------|-----------|------------|-------|----------|-----------|-----|
| Short-te | erm (t ≤ 1) |       | Long-t   | erm (1 < t | t < 5)     | Long-te   | erm (5 ≤ t | < 10) | Long-    | term (t≥1 | 0)  |
| National | Euro        | Other | National | Euro       | Other      | National  | Euro       | Other | National | Euro      | Oth |
|          |             |       |          | in         | percentag  | es (%)    |            |       |          |           |     |
|          |             |       |          |            |            |           |            |       |          |           |     |
| 86.7     | 0.9         | 12.5  | 100.0    | 0.0        | 0.0        | 78.0      | 22.0       | 0.0   | 100.0    | 0.0       | (   |
| 2.0      | 33.4        | 64.6  |          |            |            |           |            |       |          |           |     |
|          |             |       |          |            |            |           |            |       |          |           |     |
| 6.1      | 26.4        | 67.6  |          |            |            |           |            |       |          |           |     |



## (yearly total)

| 1. All debt securities                        |           |                  |           |                   |                   |                    |
|---|-----------|------------------|-----------|-------------------|-------------------|--------------------|
|   | Valu      | e of transactio  | ns        | Numbe             | r of transaction  | s                  |
|   | Nomina    | l value in € mil | lions     | Nun               | iber of issues    |                    |
|   | 2001      | 2002             | 2003      | 2001              | 2002              | 2003               |
| Total economy                                 |           |                  |           |                   |                   |                    |
| Total primary market, of which:               | 103,570.2 | 109,532.0        | 148,247.7 | 810 <sup>1)</sup> | 932 <sup>1)</sup> | 1331 <sup>1)</sup> |
| - auction (% of total)                        | 38.0      | 41.0             | 39.0      | 88.0              | 112.0             | 142.0              |
| - syndication (% of total)                    | 0.0       | 1.0              | 2.0       | 0.0               | 1.0               | 1.0                |
| - other (e.g. private placement) (% of total) | 62.0      | 58.0             | 59.0      | 4 <sup>1)</sup>   | 6 <sup>1)</sup>   | 1 <sup>1)</sup>    |
| Central government (S.1311) and other         |           |                  |           |                   |                   |                    |
| general government (S.1312+S.1313+S.1314)     |           |                  |           |                   |                   |                    |
| Total primary market, of which:               | 15,264.1  | 18,730.8         | 12,863.0  | 16 <sup>1)</sup>  | 19 <sup>1)</sup>  | 14 <sup>1)</sup>   |
| - auction (% of total)                        | 10.9      | 10.2             | 4.1       | 12.0              | 12.0              | 12.0               |
| - syndication (% of total)                    | 0.0       | 8.0              | 17.9      | 0.0               | 1.0               | 1.0                |
| - other (e.g. private placement) (% of total) | 89.1      | 81.8             | 78.0      | 4 <sup>1)</sup>   | 6 <sup>1)</sup>   | 1 1)               |
| Monetary financial institutions               |           |                  |           |                   |                   |                    |
| (S.121+S.122)                                 |           |                  |           |                   |                   |                    |
| Total primary market, of which:               | 78,085.7  | 83,525.4         | 127,355.1 | 481 <sup>1)</sup> | 566 <sup>1)</sup> | 863 1)             |
| - auction (% of total)                        | 47.9      | 52.2             | 44.6      | 76.0              | 100               | 130                |
| - syndication (% of total)                    | 0.0       | 0.0              | 0.0       | 0.0               | 0.0               | 0.0                |
| - other (e.g. private placement) (% of total) | 52.1      | 47.8             | 55.4      | 405 1)            | 466 <sup>1)</sup> | 733 <sup>1)</sup>  |
| Non-financial and non-monetary financial      |           |                  |           |                   |                   |                    |
| corporations (S.123+S.124+S.125+S.11)         |           |                  |           |                   |                   |                    |
| Total primary market, of which:               | 10,220.4  | 7,275.8          | 8,029.6   | 313.0             | 347.0             | 454.0              |
| - auction (% of total)                        | 0.0       | 0.0              | 0.0       | 0.0               | 0.0               | 0.0                |
| - syndication (% of total)                    | 0.0       | 0.0              | 0.0       | 0.0               | 0.0               | 0.0                |
| - other (e.g. private placement) (% of total) | 100.0     | 100.0            | 100       | 313.0             | 347.0             | 454.0              |

#### 2. Long-term debt s riti

| 2. Long-term debt securities   |                                     | Value of t                          | ransactions                         |   | Numb                   | er of trans            | actions                |
|--|-------------------------------------|-------------------------------------|-------------------------------------|---|------------------------|------------------------|------------------------|
|  |                                     | Nominal valu                        | ie in € millions                    |   | Nu                     | mber of is             | sues                   |
|  | 2001                                | 2002                                | 20                                  | 03  | 2001                   | 2002                   | 2003                   |
|  | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | of which: %<br>denominated<br>in national<br>currency |                        |                        |                        |
| Total economy  |                                     |                                     |                                     |   |                        |                        |                        |
| Total primary market, of which:  | 85,717.1                            | 94,558.0                            | 128,614.5                           | 90.0  | 198 <sup>1)</sup>      | 234 1)                 | 313 1)                 |
| - auction (% of total)   | 44.0                                | 46.0                                | 44.0                                | 44.3  | 76.0                   | 100.0                  | 130.0                  |
| - syndication (% of total)   | 0.0                                 | 2.0                                 | 2.0                                 | 0.0   | 0.0                    | 1.0                    | 1.0                    |
| - other (e.g. private placement) (% of total)                                      | 56.0                                | 52                                  | 54.0                                | 55.7  | 122 1)                 | 133 1)                 | 182 1)                 |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314) |                                     |                                     |                                     |   |                        | • 1)                   |                        |
| Total primary market, of which:  | 13,599.1                            | 16,590.2                            | 12,313.0                            | 81.0  | 4 <sup>1)</sup>        | 2 <sup>1)</sup>        | 1 1)                   |
| - auction (% of total)   | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0                    | 0.0                    | 0.0                    |
| - syndication (% of total)   | 0.0                                 | 9.0                                 | 18.7                                | 0.0   | 0.0<br>4 <sup>1)</sup> | 1.0<br>1 <sup>1)</sup> | 1.0<br>0 <sup>1)</sup> |
| - other (e.g. private placement) (% of total)                                      | 100.0                               | 91.0                                | 81.3                                | 100.0   | 4.,                    | 1.7                    | 0.,                    |
| Monetary financial institutions<br>(S.121+S.122)                                   |                                     |                                     |                                     |   |                        |                        |                        |
| Total primary market, of which:  | 68,870.5                            | 75,123.8                            | 111,153.6                           | 85.5  | 156 <sup>1)</sup>      | 211 <sup>1)</sup>      | 267 <sup>1)</sup>      |
| - auction (% of total)   | 54.3                                | 58.0                                | 51.0                                | 49.5  | 76.0                   | 100                    | 130                    |
| <ul> <li>syndication (% of total)</li> </ul>                                       | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0                    | 0.0                    | 0.0                    |
| - other (e.g. private placement) (% of total)                                      | 45.7                                | 42.0                                | 49.0                                | 50.5  | 80 <sup>1)</sup>       | 111 <sup>1)</sup>      | 137 <sup>1)</sup>      |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)     |                                     |                                     |                                     |   |                        |                        |                        |
| Total primary market, of which:  | 3,247.4                             | 2,844.0                             | 5,147.9                             | 16.6  | 38 <sup>1)</sup>       | 21 1)                  | 45 <sup>1)</sup>       |
| - auction (% of total)   | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0                    | 0.0                    | 0.0                    |
| - syndication (% of total)   | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0                    | 0.0                    | 0.0                    |
| - other (e.g. private placement) (% of total)                                      | 100.0                               | 100.0                               | 100.0                               | 100.0   | 38 1)                  | 21 1)                  | 45 <sup>1)</sup>       |

Sources: Danmarks Nationalbank's Securities Databases (DK-CSDB/domestic isues and VPU/foreign issues) and Danmarks Nationalbank's Government Debt Management.

Note: "e" (estimates): A distinction between syndications and private placements is not available except for government bonds. 1) = + tap-issues.

### DENMARK

## Table 2B Secondary market activity

|   | Value   | of transactions | s       | Numbe            | r of transaction | S       |  |
|---|---------|-----------------|---------|------------------|------------------|---------|--|
|   | Nominal | value in € mill | ions    | Number of issues |                  |         |  |
|   | 2001    | 2002            | 2003    | 2001             | 2002             | 2003    |  |
| Total economy   |         |                 |         |                  |                  |         |  |
| Total secondary market, of which:<br>– regulated markets (Stock Exchange(s)   |         |                 |         |                  |                  |         |  |
| and other regulated markets), % of total<br>– non-regulated markets (e.g. over-the-<br>counter market (OTC)), % of total      | 2,830.9 | 3,027.3         | 3,485.3 | 4,227.0          | 4,154.0          | 5,109.0 |  |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314)<br>% of secondary market for total economy | 41.4    | 36.3            | 31.0    |                  |                  |         |  |
| Monetary financial institutions<br>(S.121+S.122)  | 50.0    | (2.2            | (8.0    |                  |                  |         |  |
| % of secondary market for total economy   | 59.0    | 63.3            | 68.9    | •                |                  | •       |  |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)  |         |                 |         |                  |                  |         |  |
| % of secondary market for total economy   | 0e      | 0.4             | 0.2     |                  |                  |         |  |

### 2. Long-term debt securities

| <u> </u>   |                                     | Value of t                          | ransactions                         |   | Numbe | r of transa | ictions |
|--|-------------------------------------|-------------------------------------|-------------------------------------|---|-------|-------------|---------|
|  |                                     | Nominal valu                        | ie in € millions                    |   | Nun   | nber of iss | ues     |
|  | 2001                                | 2002                                | 20                                  | 03  | 2001  | 2002        | 2003    |
|  | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | of which: %<br>denominated<br>in national<br>currency |       |             |         |
| Total economy<br>Total secondary market, of which:<br>- regulated markets (Stock Exchange(s)<br>and other regulated markets), % of total<br>- non-regulated markets (e.g. over-the-<br>counter market (OTC)), % of total | . 2,724.4                           | . 2,933.2                           | . 3,402.1                           | •   |       | •           | •       |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314)<br>% of secondary market for total economy  | 39.1                                | 34.3                                | 29.3                                |   |       |             |         |
| Monetary financial institutions<br>(S.121+S.122)<br>% of secondary market for total economy  | 60.9                                | 65.3                                | 70.6                                |   |       |             |         |
| Non-financial and non-monetary financial<br>corporations (S.123+S.124+S.125+S.11)<br>% of secondary market for total economy   | 0.0                                 | 0.4                                 | 0.2                                 |   |       |             |         |

Source: Copenhagen Stock Exchange. Notes: Number of business days: 260 in 2003. Data for non-regulated markets are not collected, therefore the total secondary market activity can not be reported.

5

(December 2003; end-of-period stocks; nominal value)

| of denomination   |       | Money market<br>Short-term |            | Bond market<br>Long-term |        |  |
|---|-------|----------------------------|------------|--------------------------|--------|--|
| Sector of the issuer  |       | t ≤ 1                      | 1 < t < 5  | $5 \leq t < 10$          | t ≥ 10 |  |
|   |       |                            | € millions |                          |        |  |
| Central government (S.1311) and other general government (S.1312+S.1313+S.1314) | 113.9 | 2.6                        | 0.9        | 106.6                    | 3.8    |  |
| Monetary financial institutions (S.121+S.122)                                   | 91.4  | 52.6                       | 22.8       | 16.0                     | 0.0    |  |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)  | 62.6  | 8.0                        | 46.9       | 4.8                      | 2.9    |  |
| Total   | 267.9 | 63.2                       | 70.6       | 127.4                    | 6.7    |  |

Source: Tallinn Stock Exchange.

Note: Exchange rate used (end-of-period):EEK/€ 15.64664.

## ESTONIA

|          |                  |       |                       | Curre | ncy of den             | omination |                    |       |          |      |    |
|----------|------------------|-------|-----------------------|-------|------------------------|-----------|--------------------|-------|----------|------|----|
| Short-te | ort-term (t ≤ 1) |       | Long-term (1 < t < 5) |       | Long-term (5 ≤ t < 10) |           | Long-term (t ≥ 10) |       | 0)       |      |    |
| National | Euro             | Other | National              | Euro  | Other                  | National  | Euro               | Other | National | Euro | Ot |
|          |                  |       |                       | in    | percentag              | es (%)    |                    |       |          |      |    |
|          |                  |       |                       |       |                        |           |                    |       |          |      |    |
| 100.0    | 0.0              | 0.0   | 100.0                 | 0.0   | 0.0                    | 6.2       | 93.8               | 0.0   | 100.0    | 0.0  |    |
| 100.0    | 0.0              | 0.0   | 83.0                  | 17.0  | 0.0                    | 0.0       | 100.0              | 0.0   | 0.0      | 0.0  |    |
|          |                  |       |                       |       |                        |           |                    |       |          |      |    |
| 100.0    | 0.0              | 0.0   | 91.0                  | 9.0   | 0.0                    | 53.9      | 17.2               | 28.9  | 100.0    | 0.0  |    |



## (yearly total)

| 1. All debt securities |  |
|------------------------|--|
|------------------------|--|

|  | Value     | of transactions  |       | Number | of transactions |       |
|--|-----------|------------------|-------|--------|-----------------|-------|
|  | Nominal v | alue in € millio | ons   | Numl   | oer of issues   |       |
|  | 2001      | 2002             | 2003  | 2001   | 2002            | 2003  |
| Total economy  |           |                  |       |        |                 |       |
| Total primary market, of which:  | 74.0      | 308.8            | 127.4 | 35.0   | 58.0            | 38.0  |
| - auction (% of total)   | 0.0       | 0.0              | 0.0   | 0.0    | 0.0             | 0.0   |
| - syndication (% of total)   | 0.0       | 0.0              | 0.0   | 0.0    | 0.0             | 0.0   |
| - other (e.g. private placement) (% of total)                                      | 100.0     | 100.0            | 100.0 | 100.0  | 100.0           | 100.0 |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314) |           |                  |       |        |                 |       |
| Total primary market, of which:  | 7.6       | 100.9            | 2.6   | 6.0    | 2.0             | 1.0   |
| - auction (% of total)   | 0.0       | 0.0              | 0.0   | 0.0    | 0.0             | 0.0   |
| - syndication (% of total)   | 0.0       | 0.0              | 0.0   | 0.0    | 0.0             | 0.0   |
| - other (e.g. private placement) (% of total)                                      | 100.0     | 100.0            | 100.0 | 100.0  | 100.0           | 100.0 |
| Monetary financial institutions<br>(S.121+S.122)                                   |           |                  |       |        |                 |       |
| Total primary market, of which:  | 30.8      | 152.6            | 95.0  | 0.1    | 0.3             | 0.1   |
| - auction (% of total)   | 0.0       | 0.0              | 0.0   | 0.0    | 0.0             | 0.0   |
| - syndication (% of total)   | 0.0       | 0.0              | 0.0   | 0.0    | 0.0             | 0.0   |
| - other (e.g. private placement) (% of total)                                      | 1.0       | 1.0              | 1.0   | 1.0    | 1.0             | 1.0   |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)     |           |                  |       |        |                 |       |
| Total primary market, of which:  | 35.6      | 55.3             | 29.9  | 22.0   | 28.0            | 23.0  |
| - auction (% of total)   | 0.0       | 0.0              | 0.0   | 0.0    | 0.0             | 0.0   |
| - syndication (% of total)   | 0.0       | 0.0              | 0.0   | 0.0    | 0.0             | 0.0   |
| - other (e.g. private placement) (% of total)                                      | 100.0     | 100.0            | 100   | 100.0  | 100.0           | 100.0 |

### 2. Long-term debt securities

| 2. Long-term debt securities  |                                     | Value of t                          | ransactions                         |   | Numbe | er of trans | actions |
|---|-------------------------------------|-------------------------------------|-------------------------------------|---|-------|-------------|---------|
|   |                                     | Nominal valu                        | ie in € millions                    |   | Nur   | nber of iss | ues     |
|   | 2001                                | 2002                                | 20                                  | 03  | 2001  | 2002        | 2003    |
|   | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | of which: %<br>denominated<br>in national<br>currency |       |             |         |
| Total economy   |                                     |                                     |                                     |   |       |             |         |
| Total primary market, of which:   | 5.8                                 | 136.8                               | 28.6                                | 94.1  | 5.0   | 13.0        | 18.0    |
| - auction (% of total)  | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0   | 0.0         | 0.0     |
| <ul> <li>syndication (% of total)</li> </ul>  | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0   | 0.0         | 0.0     |
| - other (e.g. private placement) (% of total)   | 100.0                               | 100.0                               | 100.0                               | 100.0   | 100.0 | 100.0       | 100.0   |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314)<br>Total primary market, of which: | 0.0                                 | 100.0                               | 2.6                                 | 100.0   | 0.0   | 1.0         | 1.0     |
| - auction (% of total)  | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0   | 0.0         | 0.0     |
| - syndication (% of total)  | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0   | 0.0         | 0.0     |
| - other (e.g. private placement) (% of total)   | 0.0                                 | 100.0                               | 100.0                               | 100.0   | 0.0   | 100.0       | 100.0   |
| Monetary financial institutions<br>(S.121+S.122)  |                                     |                                     |                                     |   |       |             |         |
| Total primary market, of which:   | 0.0                                 | 19.1                                | 0.0                                 | 0.0   | 0.0   | 4.0         | 0.0     |
| <ul> <li>auction (% of total)</li> </ul>  | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0   | 0.0         | 0.0     |
| <ul> <li>syndication (% of total)</li> </ul>  | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0   | 0.0         | 0.0     |
| - other (e.g. private placement) (% of total)   | 0.0                                 | 100.0                               | 0.0                                 | 0.0   | 0.0   | 100.0       | 0.0     |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)  |                                     |                                     |                                     |   |       |             |         |
| Total primary market, of which:   | 5.8                                 | 17.7                                | 26.1                                | 93.5  | 5.0   | 8.0         | 17.0    |
| - auction (% of total)  | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0   | 0.0         | 0.0     |
| <ul> <li>syndication (% of total)</li> </ul>  | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0   | 0.0         | 0.0     |
| - ther (e.g. private placement) (% of total)  | 100.0                               | 100.0                               | 100.0                               | 100.0   | 100.0 | 100.0       | 100.0   |

Source: Eesti Väärtpaberite Keskregister.

## ESTONIA

## Table 2B Secondary market activity

|   | Value o   | of transactions  |      | Number of transactions |      |      |  |
|---|-----------|------------------|------|------------------------|------|------|--|
|   | Nominal v | alue in € millio | ns   | Number of issues       |      |      |  |
|   | 2001      | 2002             | 2003 | 2001                   | 2002 | 2003 |  |
| Total economy   |           |                  |      |                        |      |      |  |
| Total secondary market, of which:<br>– regulated markets (Stock Exchange(s)   | 0.2       | 0.4              | 0.3  | 5.4                    | 2.5  | 3.1  |  |
| and other regulated markets), % of total<br>– non-regulated markets (e.g. over-the-   | 8.5       | 1.7              | 9.7  | 56.8                   | 18.4 | 3.6  |  |
| counter market (OTC)), % of total   | 91.5      | 98.3             | 90.3 | 43.2                   | 81.6 | 96.4 |  |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314)<br>% of secondary market for total economy | 9.1       | 4.5              | 8.7  | 3.9                    | 4.1  | 2.8  |  |
| Monetary financial institutions<br>(S.121+S.122)  |           |                  |      |                        |      |      |  |
| % of secondary market for total economy   | 8.6       | 58.3             | 38.6 | 1.2                    | 21.1 | 16.1 |  |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)  |           |                  |      |                        |      |      |  |
| % of secondary market for total economy   | 82.3      | 37.2             | 52.7 | 94.9                   | 74.8 | 81.1 |  |

### 2. Long-term debt securities

|   |                                     | Value of t                          |                                     | Number of transactions                                |      |             |      |
|---|-------------------------------------|-------------------------------------|-------------------------------------|---|------|-------------|------|
|   |                                     | Nominal valu                        | ue in € millions                    |   | Nu   | nber of iss | ues  |
|   | 2001                                | 2002                                | 2003                                |   | 2001 | 2002        | 2003 |
|   | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | of which: %<br>denominated<br>in national<br>currency |      |             |      |
| Total economy   |                                     |                                     |                                     |   |      |             |      |
| Total secondary market, of which:<br>– regulated markets (Stock Exchange(s)   | 0.1                                 | 0.1                                 | 0.2                                 | 91.3  | 4.3  | 1.4         | 2.3  |
| and other regulated markets), % of total<br>– non-regulated markets (e.g. over-the-   | 16.7                                | 7.8                                 | 14.8                                | 16.2  | 70.0 | 34.4        | 4.8  |
| counter market (OTC)), % of total   | 83.3                                | 92.2                                | 85.2                                | 83.8  | 30.0 | 65.6        | 95.2 |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314)<br>% of secondary market for total economy | 3.1                                 | 17.9                                | 12.7                                | 13.9  | 0.2  | 5.6         | 3.3  |
| Monetary financial institutions<br>(S.121+S.122)  |                                     |                                     |                                     |   |      |             |      |
| % of secondary market for total economy   | 0.0                                 | 18.2                                | 18.6                                | 15.1  | 0.0  | 11.8        | 6.7  |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)  |                                     |                                     |                                     |   |      |             |      |
| % of secondary market for total economy   | 96.9                                | 63.9                                | 68.7                                | 71.0  | 99.8 | 82.6        | 90.0 |

Source: Eesti Väärtpaberite Keskregister. Note: Number of business days: 255 in 2001; 251 in 2002; 252 in 2003.

Table | Market size Debt securities by original maturity, sector of the issuer and currency of denomination (December 2003; end-of-period stocks; nominal value)

| Instrument type/currency  | Total amount outstanding |                            |            |                          |         |  |  |  |  |
|---|--------------------------|----------------------------|------------|--------------------------|---------|--|--|--|--|
| of denomination   |                          | Money market<br>Short-term |            | Bond market<br>Long-term |         |  |  |  |  |
| Sector of the issuer  |                          | t ≤ 1                      | 1 < t < 5  | $5 \leq t < 10$          | t ≥ 10  |  |  |  |  |
|   |                          |                            | € millions |                          |         |  |  |  |  |
| Central government (S.1311) and other general government (S.1312+S.1313+S.1314) | 5,536.6                  | 867.7                      | 1,031.6    | 2,340.1                  | 1,297.2 |  |  |  |  |
| Monetary financial institutions (S.121+S.122)                                   | 1,420.4                  | 0.0                        | 281.7      | 281.9                    | 856.7   |  |  |  |  |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)  | 48.9                     | 0.0                        | 17.4       | 31.5                     | 0.0     |  |  |  |  |
| Total   | 7,005.9                  | 867.7                      | 1,330.7    | 2,653.5                  | 2,154.0 |  |  |  |  |

Sources: Central Bank of Cyprus, Cyprus Stock Exchange, General Government and Non Financial Corporations. Note: Exchange rate used: Mid market exchange rate of €/CYP prevailing at the end of the reporting period: 1.7054.



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|          |  |       |                        | Currer | icy of den | omination          |      |       |          |      |     |
|----------|--|-------|------------------------|--------|------------|--------------------|------|-------|----------|------|-----|
| Short-te | Short-term (t $\leq$ 1)Long-term (1 < t < 5) |       | Long-term (5 ≤ t < 10) |        |            | Long-term (t ≥ 10) |      |       |          |      |     |
| National | Euro   | Other | National               | Euro   | Other      | National           | Euro | Other | National | Euro | Oth |
|          |  |       |                        | in     | percentag  | es (%)             |      |       |          |      |     |
|          |  |       |                        |        |            |                    |      |       |          |      |     |
| 78.0     | 22.0   | 0.0   | 100.0                  | 0.0    | 0.0        | 88.0               | 12.0 | 0.0   | 30.6     | 69.4 | (   |
| 0.0      | 0.0  | 0.0   | 9.5                    | 90.5   | 0.0        | 98.9               | 1.1  | 0.0   | 9.0      | 91.0 | 0   |
|          |  |       |                        |        |            |                    |      |       |          |      |     |
| 0.0      | 0.0  | 0.0   | 100.0                  | 0.0    | 0.0        | 100.0              | 0.0  | 0.0   | 0.0      | 0.0  | (   |



## (yearly total)

| 1. All debt securities                        |         |                  |         |        |                 |       |
|---|---------|------------------|---------|--------|-----------------|-------|
|   | Value   | of transactions  | 6       | Number | of transactions |       |
|   | Nominal | value in € milli | ions    | Num    | per of issues   |       |
|   | 2001    | 2002             | 2003    | 2001   | 2002            | 2003  |
| Total economy                                 |         |                  |         |        |                 |       |
| Total primary market, of which:               | 3,508.5 | 2,851.7          | 3,161.5 | 118.0  | 73.0            | 77.0  |
| - auction (% of total)                        | 54.2    | 55.4             | 61.2    | 49.2   | 56.1            | 49.4  |
| - syndication (% of total)                    | 0.0     | 19.3             | 0.0     | 0.0    | 1.4             | 0.0   |
| - other (e.g. private placement) (% of total) | 45.8    | 25.3             | 38.8    | 50.8   | 42.5            | 50.6  |
| Central government (S.1311) and other         |         |                  |         |        |                 |       |
| general government (S.1312+S.1313+S.1314)     |         |                  |         |        |                 |       |
| Total primary market, of which:               | 2,933.5 | 2,818.9          | 2,397.9 | 107.0  | 70.0            | 63.0  |
| - auction (% of total)                        | 64.8    | 56.1             | 80.6    | 54.2   | 58.6            | 60.3  |
| - syndication (% of total)                    | 0.0     | 19.5             | 0.0     | 0.0    | 1.4             | 0.0   |
| - other (e.g. private placement) (% of total) | 35.2    | 24.4             | 19.4    | 45.8   | 40.0            | 39.7  |
| Monetary financial institutions               |         |                  |         |        |                 |       |
| (S.121+S.122)                                 |         |                  |         |        |                 |       |
| Total primary market, of which:               | 568.8   | 25.0             | 736.0   | 7.0    | 1.0             | 10.0  |
| - auction (% of total)                        | 0.0     | 0.0              | 0.0     | 0.0    | 0.0             | 0.0   |
| - syndication (% of total)                    | 0.0     | 0.0              | 0.0     | 0.0    | 0.0             | 0.0   |
| - other (e.g. private placement) (% of total) | 100.0   | 100.0            | 100.0   | 100.0  | 100.0           | 100.0 |
| Non-financial and non-monetary financial      |         |                  |         |        |                 |       |
| corporations (S.123+S.124+S.125+S.11)         |         |                  |         |        |                 |       |
| Total primary market, of which:               | 6.1     | 7.9              | 27.6    | 4.0    | 2.0             | 4.0   |
| - auction (% of total)                        | 0.0     | 0.0              | 0.0     | 0.0    | 0.0             | 0.0   |
| - syndication (% of total)                    | 0.0     | 0.0              | 0.0     | 0.0    | 0.0             | 0.0   |
| - other (e.g. private placement) (% of total) | 100.0   | 100.0            | 100.0   | 100.0  | 100.0           | 100.0 |

### 2. Long-term debt securities

| 2. Long-term debt securities   |                                     | Value of t                          | ransactions                         |   | Numbe | er of transa | ictions |
|--|-------------------------------------|-------------------------------------|-------------------------------------|---|-------|--------------|---------|
|  |                                     | Nominal valu                        | ie in € millions                    |   | Nur   | nber of iss  | ues     |
|  | 2001                                | 2002                                | 20                                  | 03  | 2001  | 2002         | 2003    |
|  | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | of which: %<br>denominated<br>in national<br>currency |       |              |         |
| Total economy  |                                     |                                     |                                     |   |       |              |         |
| Total primary market, of which:  | 1,309.2                             | 1,486.2                             | 2,087.1                             | 78.1  | 51.0  | 31.0         | 49.0    |
| - auction (% of total)   | 54.5                                | 59.6                                | 57.1                                | 73.1  | 47.0  | 80.7         | 49.0    |
| <ul> <li>syndication (% of total)</li> </ul>                                       | 0.0                                 | 37.0                                | 0.0                                 | 0.0   | 0.0   | 3.2          | 0.0     |
| - other (e.g. private placement) (% of total)                                      | 45.5                                | 3.4                                 | 42.9                                | 26.9  | 53.0  | 16.1         | 51.0    |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314) |                                     |                                     |                                     |   |       | ••••         |         |
| Total primary market, of which:  | 735.1                               | 1,453.3                             | 1,323.5                             | 100.0   | 41.0  | 28.0         | 35.0    |
| - auction (% of total)   | 97.1                                | 60.9                                | 90.0                                | 90.0  | 58.5  | 89.3         | 68.6    |
| - syndication (% of total)   | 0.0                                 | 37.9                                | 0.0                                 | 0.0   | 0.0   | 3.6          | 0.0     |
| - other (e.g. private placement) (% of total)                                      | 2.9                                 | 1.2                                 | 10.0                                | 10.0  | 41.5  | 7.1          | 31.4    |
| Monetary financial institutions<br>(S.121+S.122)                                   |                                     |                                     |                                     |   |       |              |         |
| Total primary market, of which:  | 568.8                               | 25.0                                | 736.0                               | 37.8  | 7.0   | 1.0          | 10.0    |
| <ul> <li>auction (% of total)</li> </ul>   | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0   | 0.0          | 0.0     |
| - syndication (% of total)   | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0   | 0.0          | 0.0     |
| - other (e.g. private placement) (% of total)                                      | 100.0                               | 100.0                               | 100.0                               | 100.0   | 100.0 | 100.0        | 100.0   |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)     |                                     |                                     |                                     |   |       |              |         |
| Total primary market, of which:  | 5.2                                 | 7.9                                 | 27.6                                | 100.0   | 3.0   | 2.0          | 4.0     |
| - auction (% of total)   | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0   | 0.0          | 0.0     |
| - syndication (% of total)   | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0   | 0.0          | 0.0     |
| - other (e.g. private placement) (% of total)                                      | 100.0                               | 100.0                               | 100.0                               | 100.0   | 100.0 | 100.0        | 100.0   |

Sources: Central Bank of Cyprus, General Government and non-financial corporations.



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## Table 2B Secondary market activity

(daily are

| A ATT 1 1 /   |           |                  |       |                        |       |       |  |
|---|-----------|------------------|-------|------------------------|-------|-------|--|
| 1. All debt securities  | Value     | of transactions  |       | Number of transactions |       |       |  |
|   | Nominal v | alue in € millio | ons   | Num                    |       |       |  |
|   | 2001      | 2002             | 2003  | 2001                   | 2002  | 2003  |  |
| Total economy   |           |                  |       |                        |       |       |  |
| Total secondary market, of which:<br>– regulated markets (Stock Exchange(s)   | 0.035     | 0.020            | 0.018 | 355.0                  | 392.0 | 385.0 |  |
| and other regulated markets), % of total<br>– non-regulated markets (e.g. over-the-<br>counter market (OTC)), % of total      | 100.0     | 100.0            | 100.0 | 100.0<br>-             | 100.0 | 100.0 |  |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314)<br>% of secondary market for total economy | 70.0      | 36.7             | 59.0  | 21.7                   | 9.7   | 14.0  |  |
| Monetary financial institutions<br>(S.121+S.122)  | 15.5      | 20.6             | 24.1  | 28.2                   | 52.5  | 25.0  |  |
| % of secondary market for total economy   | 15.5      | 30.6             | 24.1  | 28.2                   | 52.5  | 35.9  |  |
| Non-financial and non-monetary financial<br>corporations (S.123+S.124+S.125+S.11)   |           |                  |       |                        |       |       |  |
| % of secondary market for total economy   | 14.5      | 32.7             | 16.9  | 50.1                   | 37.8  | 50.1  |  |

### 2. Long-term debt securities

|   |                                     | Value of t                          |                                     | Number of transactions                                |                  |       |       |
|---|-------------------------------------|-------------------------------------|-------------------------------------|---|------------------|-------|-------|
|   |                                     | Nominal valu                        | ie in € millions                    |   | Number of issues |       |       |
|   | 2001                                | 2002                                | 2003                                |   | 2001             | 2002  | 2003  |
|   | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | of which: %<br>denominated<br>in national<br>currency |                  |       |       |
| Total economy   |                                     |                                     |                                     |   |                  |       |       |
| Total secondary market, of which:<br>– regulated markets (Stock Exchange(s)   | 0.035                               | 0.020                               | 0.018                               | 100.0   | 355.0            | 392.0 | 385.0 |
| and other regulated markets), % of total<br>– non-regulated markets (e.g. over-the-<br>counter market (OTC)), % of total      | 100.0                               | 100.0                               | - 100.0                             | 100.0   | 100.0<br>-       | 100.0 | 100.0 |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314)<br>% of secondary market for total economy | 70.0                                | 36.7                                | 59.0                                | 59.0  | 21.7             | 9.7   | 14.0  |
| Monetary financial institutions<br>(S.121+S.122)  | 15.5                                | 20.6                                | 24.1                                | 24.1  | 28.2             | 52.5  | 25.0  |
| % of secondary market for total economy<br>Non-financial and non-monetary financial<br>corporations (S.123+S.124+S.125+S.11)  | 15.5                                | 30.6                                | 24.1                                | 24.1  | 28.2             | 52.5  | 35.9  |
| % of secondary market for total economy   | 14.5                                | 32.7                                | 16.9                                | 16.9  | 50.1             | 37.8  | 50.1  |

Source: Cyprus Stock Exchange. Note: Number of business days: 249 in 2001; 246 in 2002; 245 in 2003.

(December 2003; end-of-period stocks; nominal value)

| Instrument type/currency<br>of denomination                                     |            | Money market<br>Short-term |           | Bond market<br>Long-term |        |  |  |  |  |
|---|------------|----------------------------|-----------|--------------------------|--------|--|--|--|--|
| Sector of the issuer  |            | t ≤ 1                      | 1 < t < 5 | $5 \leq t < 10$          | t ≥ 10 |  |  |  |  |
|   | € millions |                            |           |                          |        |  |  |  |  |
| Central government (S.1311) and other general government (S.1312+S.1313+S.1314) | 983.0      | 81.0                       | 24.0      | 734.0                    | 144.0  |  |  |  |  |
| Monetary financial institutions (S.121+S.122)                                   | 74.8       | 4.0                        | 22.0      | 46.4                     | 2.4    |  |  |  |  |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)  | 40.0       | 0.0                        | 0.0       | 0.0                      | 40.0   |  |  |  |  |
| Total   | 1.097.8    | 85.0                       | 46.0      | 780.4                    | 186.4  |  |  |  |  |

Source: Latvian Central Depository.

Note: Exchange rate used (end-of-period): LVL/€ 0.674.

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| _ |            |     |     |   |

|          |                    |       |                       | Currei | ncy of den | omination              |      |       |                    |      |     |
|----------|--------------------|-------|-----------------------|--------|------------|------------------------|------|-------|--------------------|------|-----|
| Short-t  | erm (t ≤ 1)        |       | Long-term (1 < t < 5) |        | Long-t     | Long-term (5 ≤ t < 10) |      |       | Long-term (t ≥ 10) |      |     |
| National | Euro               | Other | National              | Euro   | Other      | National               | Euro | Other | National           | Euro | Oth |
|          | in percentages (%) |       |                       |        |            |                        |      |       |                    |      |     |
|          |                    |       |                       |        |            |                        |      |       |                    |      |     |
| 100.0    | 0.0                | 0.0   | 100.0                 | 0.0    | 0.0        | 42.0                   | 58.0 | 0.0   | 100.0              | 0.0  | (   |
| 76.0     | 5.0                | 19.0  | 100.0                 | 0.0    | 0.0        | 58.0                   | 19.0 | 23.0  | 100.0              | 0.0  | 0   |
|          |                    |       |                       |        |            |                        |      |       |                    |      |     |
| 0.0      | 0.0                | 0.0   | 0.0                   | 0.0    | 0.0        | 0.0                    | 0.0  | 0.0   | 100.0              | 0.0  | (   |



## (yearly total)

| 1. All | debt | securities |  |
|--------|------|------------|--|
|--------|------|------------|--|

| 1. All debt securities   | Value     | of transactions  |       | Number | of transactions |       |
|--|-----------|------------------|-------|--------|-----------------|-------|
|  | Nominal v | alue in € millio | ons   | Numl   | per of issues   |       |
|  | 2001      | 2002             | 2003  | 2001   | 2002            | 2003  |
| Total economy  |           |                  |       |        |                 |       |
| Total primary market, of which:  | 450.0     | 151.0            | 317.0 | 41.0   | 27.0            | 40.0  |
| - auction (% of total)   | 100.0     | 91.0             | 87.0  | 100.0  | 74.0            | 90.0  |
| - syndication (% of total)   | 0.0       | 0.0              | 0.0   | 0.0    | 0.0             | 0.0   |
| - other (e.g. private placement) (% of total)                                      | 0.0       | 9.0              | 13.0  | 0.0    | 26.0            | 10.0  |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314) |           |                  |       |        |                 |       |
| Total primary market, of which:  | 444.0     | 108.0            | 262.0 | 36.0   | 17.0            | 32.0  |
| - auction (% of total)   | 100.0     | 100.0            | 100.0 | 100.0  | 100.0           | 100.0 |
| - syndication (% of total)   | 0.0       | 0.0              | 0.0   | 0.0    | 0.0             | 0.0   |
| - other (e.g. private placement) (% of total)                                      | 0.0       | 0.0              | 0.0   | 0.0    | 0.0             | 0.0   |
| Monetary financial institutions<br>(S.121+S.122)                                   |           |                  |       |        |                 |       |
| Total primary market, of which:  | 6.0       | 43.0             | 17.0  | 5.0    | 10.0            | 7.0   |
| - auction (% of total)   | 100.0     | 69.8             | 76.0  | 100.0  | 30.0            | 57.0  |
| - syndication (% of total)   | 0.0       | 0.0              | 0.0   | 0.0    | 0.0             | 0.0   |
| - other (e.g. private placement) (% of total)                                      | 0.0       | 30.2             | 24.0  | 0.0    | 70.0            | 43.0  |
| Non-financial and non-monetary financial<br>corporations (S.123+S.124+S.125+S.11)  |           |                  |       |        |                 |       |
| Total primary market, of which:  | 0.0       | 0.0              | 38.0  | 0.0    | 0.0             | 1.0   |
| - auction (% of total)   | 0.0       | 0.0              | 0.0   | 0.0    | 0.0             | 0.0   |
| - syndication (% of total)   | 0.0       | 0.0              | 0.0   | 0.0    | 0.0             | 0.0   |
| - other (e.g. private placement) (% of total)                                      | 0.0       | 0.0              | 100.0 | 0.0    | 0.0             | 100.0 |

#### 2. Long-term debt securities

| 2. Long-term debt securities   |                                     | Value of t                          | ransactions                         |   | Numbe                      | er of transa               | ictions                     |
|--|-------------------------------------|-------------------------------------|-------------------------------------|---|----------------------------|----------------------------|-----------------------------|
|  |                                     | Nominal valu                        | ie in € millions                    |   | Nur                        | nber of iss                | ues                         |
|  | 2001                                | 2002                                | 20                                  | 03  | 2001                       | 2002                       | 2003                        |
|  | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | of which: %<br>denominated<br>in national<br>currency |                            |                            |                             |
| Total economy  |                                     |                                     |                                     |   |                            |                            |                             |
| Total primary market, of which:  | 384.0                               | 93.0                                | 244.0                               | 100.0   | 10.0                       | 11.0                       | 25.0                        |
| <ul> <li>auction (% of total)</li> </ul>   | 100.0                               | 100.0                               | 84.0                                | 84.0  | 100.0                      | 100.0                      | 96.0                        |
| <ul> <li>syndication (% of total)</li> </ul>   | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0                        | 0.0                        | 0.0                         |
| - other (e.g. private placement) (% of total)  | 0.0                                 | 0.0                                 | 16.0                                | 16.0  | 0.0                        | 0.0                        | 4.0                         |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314)<br>Total primary market, of which:<br>– auction (% of total)<br>– syndication (% of total)<br>– other (e.g. private placement) (% of total) | 378.0<br>100.0<br>0.0<br>0.0        | 63.0<br>100.0<br>0.0<br>0.0         | 193.0<br>100.0<br>0.0<br>0.0        | 100.0<br>100.0<br>0.0<br>0.0                          | 5.0<br>100.0<br>0.0<br>0.0 | 8.0<br>100.0<br>0.0<br>0.0 | 20.0<br>100.0<br>0.0<br>0.0 |
| Monetary financial institutions<br>(S.121+S.122)   |                                     |                                     |                                     |   |                            |                            |                             |
| Total primary market, of which:  | 6.0                                 | 30.0                                | 13.0                                | 100.0   | 5.0                        | 3.0                        | 4.0                         |
| - auction (% of total)   | 100.0                               | 100.0                               | 100.0                               | 100.0   | 100.0                      | 100.0                      | 100.0                       |
| <ul> <li>syndication (% of total)</li> </ul>   | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0                        | 0.0                        | 0.0                         |
| - other (e.g. private placement) (% of total)  | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0                        | 0.0                        | 0.0                         |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)   |                                     |                                     |                                     |   |                            |                            |                             |
| Total primary market, of which:  | 0.0                                 | 0.0                                 | 38.0                                | 100.0   | 0.0                        | 0.0                        | 1.0                         |
| - auction (% of total)   | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0                        | 0.0                        | 0.0                         |
| <ul> <li>syndication (% of total)</li> </ul>   | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0                        | 0.0                        | 0.0                         |
| - other (e.g. private placement) (% of total)  | 0.0                                 | 0.0                                 | 100.0                               | 100.0   | 0.0                        | 0.0                        | 100.0                       |

Source: Latvian Central Depository.

## LATVIA

## Table 2B Secondary market activity

|   | Value of transactions |                  |      | Number of transactions |               |      |  |
|---|-----------------------|------------------|------|------------------------|---------------|------|--|
|   | Nominal v             | alue in € millio | ns   | Numb                   | oer of issues |      |  |
|   | 2001                  | 2002             | 2003 | 2001                   | 2002          | 2003 |  |
| Total economy   |                       |                  |      |                        |               |      |  |
| Total secondary market, of which:<br>– regulated markets (Stock Exchange(s)   | 2.8                   | 1.4              | 1.3  | 4.2                    | 4.1           | 7.6  |  |
| and other regulated markets), % of total<br>– non-regulated markets (e.g. over-the-   | 5.1                   | 8.7              | 7.0  | 27.0                   | 20.0          | 15.0 |  |
| counter market (OTC)), % of total   | 94.9                  | 91.3             | 93.0 | 73.0                   | 80.0          | 85.0 |  |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314)<br>% of secondary market for total economy | 98.0                  | 82.0             | 77.0 | 81.0                   | 71.0          | 76.0 |  |
| Monetary financial institutions<br>(S.121+S.122)  |                       |                  |      |                        |               |      |  |
| % of secondary market for total economy   | 2.0                   | 18.0             | 23.0 | 19.0                   | 29.0          | 24.0 |  |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)  |                       |                  |      |                        |               |      |  |
| % of secondary market for total economy   | 0.0                   | 0.0              | 0.0  | 0.0                    | 0.0           | 0.0  |  |

## 2. Long-term debt securities

|   |                                     | Value of t                          |                                     | Number of transactions                                |                  |      |      |  |
|---|-------------------------------------|-------------------------------------|-------------------------------------|---|------------------|------|------|--|
|   |                                     | Nominal valu                        | ie in € millions                    |   | Number of issues |      |      |  |
|   | 2001                                | 2002                                | 2003                                |   | 2001             | 2002 | 2003 |  |
|   | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | of which: %<br>denominated<br>in national<br>currency |                  |      |      |  |
| Total economy   |                                     |                                     |                                     |   |                  |      |      |  |
| Total secondary market, of which:<br>– regulated markets (Stock Exchange(s)   | 2.8                                 | 1.3                                 | 1.1                                 | 97.0  | 3.9              | 3.9  | 6.9  |  |
| and other regulated markets), % of total<br>– non-regulated markets (e.g. over-the-   | 5.1                                 | 8.7                                 | 7.0                                 | 7.2   | 28.0             | 20.0 | 15.0 |  |
| counter market (OTC)), % of total   | 94.9                                | 91.3                                | 93.0                                | 92.8  | 72.0             | 80.0 | 85.0 |  |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314)<br>% of secondary market for total economy | 98.0                                | 81.0                                | 76.0                                | 75.4  | 80.0             | 69.0 | 36.0 |  |
| Monetary financial institutions<br>(S.121+S.122)  |                                     | 10.0                                | 21.0                                |   | 20.0             | 21.0 | (1.0 |  |
| % of secondary market for total economy   | 2.0                                 | 19.0                                | 24.0                                | 24.6  | 20.0             | 31.0 | 64.0 |  |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)  | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0              | 0.0  | 0.0  |  |
| % of secondary market for total economy   | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0              | 0.0  | 0.0  |  |

Source: Latvian Central Depository.





(December 2003; end-of-period stocks; nominal value)

| Instrument type/currency  | Total amount outst | Total amount outstanding   |            |                          |        |  |  |  |  |  |
|---|--------------------|----------------------------|------------|--------------------------|--------|--|--|--|--|--|
| of denomination   |                    | Money market<br>Short-term |            | Bond market<br>Long-term |        |  |  |  |  |  |
| Sector of the issuer  |                    | t ≤ 1                      | 1 < t < 5  | $5 \leq t < 10$          | t ≥ 10 |  |  |  |  |  |
|   |                    |                            | € millions |                          |        |  |  |  |  |  |
| Central government (S.1311) and other general government (S.1312+S.1313+S.1314) | 2,539.6            | 154.8                      | 340.6      | 1,135.8                  | 908.4  |  |  |  |  |  |
| Monetary financial institutions (S.121+S.122)                                   | 57.0               | 7.0                        | 50.0       | 0.0                      | 0.0    |  |  |  |  |  |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)  | 64.0               | 0.0                        | 64.0       | 0.0                      | 0.0    |  |  |  |  |  |
| Total   | 2,660.6            | 161.8                      | 454.6      | 1,135.8                  | 908.4  |  |  |  |  |  |

Sources: Lietuvos bankas, Lithuanian Securities Commission.

Note: Exchange rate used (end-of-period): LTL/€ 3.4528; USD/€ 1.2501.

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|          |  |       |                        | Currei | ncv of den | omination          |      |       |          |      |     |
|----------|--|-------|------------------------|--------|------------|--------------------|------|-------|----------|------|-----|
| Short-te | Short-term ( $t \le 1$ ) Long-term ( $1 \le t \le 5$ ) |       | Long-term (5 ≤ t < 10) |        |            | Long-term (t ≥ 10) |      |       |          |      |     |
| National | Euro   | Other | National               | Euro   | Other      | National           | Euro | Other | National | Euro | Oth |
|          | in percentages (%)                                     |       |                        |        |            |                    |      |       |          |      |     |
|          |  |       |                        |        |            |                    |      |       |          |      |     |
| 100.0    | 0.0  | 0.0   | 100.0                  | 0.0    | 0.0        | 31.8               | 68.2 | 0.0   | 11.9     | 88.1 | 0   |
| 100.0    | 0.0  | 0.0   | 0.0                    | 100.0  | 0.0        | 0.0                | 0.0  | 0.0   | 0.0      | 0.0  | 0   |
|          |  |       |                        |        |            |                    |      |       |          |      |     |
| 0.0      | 0.0  | 0.0   | 81.2                   | 18.8   | 0.0        | 0.0                | 0.0  | 0.0   | 0.0      | 0.0  | 0   |



## (yearly total)

| 1. | All | debt | securities |
|----|-----|------|------------|
|    |     |      |            |

| 1. All debt securities   | Value   | of transactions   |       | Number | of transactions |       |
|--|---------|-------------------|-------|--------|-----------------|-------|
|  | Nominal | value in € millio | ons   | Numl   | oer of issues   |       |
|  | 2001    | 2002              | 2003  | 2001   | 2002            | 2003  |
| Total economy  |         |                   |       |        |                 |       |
| Total primary market, of which:  | 703.5   | 923.5             | 938.7 | 35.0   | 24.0            | 28.0  |
| - Auction (% of total)   | 57.1    | 51.0              | 51.0  | 71.4   | 79.2            | 78.6  |
| <ul> <li>Syndication (% of total)</li> </ul>                                       | 34.4    | 47.6              | 42.6  | 5.7    | 8.3             | 3.6   |
| - Other (e.g. private placement) (% of total)                                      | 8.5     | 1.4               | 6.4   | 22.9   | 12.5            | 17.9  |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314) |         |                   |       |        |                 |       |
| Total primary market, of which:  | 601.8   | 910.9             | 878.9 | 26.0   | 21.0            | 23.0  |
| - Auction (% of total)   | 66.8    | 51.7              | 54.5  | 96.2   | 90.5            | 95.7  |
| - Syndication (% of total)   | 33.2    | 48.3              | 45.5  | 3.8    | 9.5             | 4.3   |
| - Other (e.g. private placement) (% of total)                                      | 0.0     | 0.0               | 0.0   | 0.0    | 0.0             | 0.0   |
| Monetary financial institutions<br>(S.121+S.122)                                   |         |                   |       |        |                 |       |
| Total primary market, of which:  | 11.2    | 0.0               | 57.0  | 1.0    | 0.0             | 3.0   |
| - Auction (% of total)   | 0.0     | 0.0               | 0.0   | 0.0    | 0.0             | 0.0   |
| - Syndication (% of total)   | 0.0     | 0.0               | 0.0   | 0.0    | 0.0             | 0.0   |
| - Other (e.g. private placement) (% of total)                                      | 100.0   | 0.0               | 100.0 | 100.0  | 0.0             | 100.0 |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)     |         |                   |       |        |                 |       |
| Total primary market, of which:  | 90.5    | 12.6              | 2.8   | 8.0    | 3.0             | 2.0   |
| - Auction (% of total)   | 0.0     | 0.0               | 0.0   | 0.0    | 0.0             | 0.0   |
| - Syndication (% of total)   | 46.2    | 0.0               | 0.0   | 12.5   | 0.0             | 0.0   |
| - Other (e.g. private placement) (% of total)                                      | 53.8    | 100.0             | 100.0 | 87.5   | 100.0           | 100.0 |

### 2. Long-term debt securities

| 2. Long-term debt securities   |                                     | Value of t                          | ransactions                         |   | Numbe                      | er of transa               | actions                     |
|--|-------------------------------------|-------------------------------------|-------------------------------------|---|----------------------------|----------------------------|-----------------------------|
|  |                                     | Nominal valu                        | ie in € millions                    |   | Nur                        | nber of iss                | ues                         |
|  | 2001                                | 2002                                | 20                                  | 03  | 2001                       | 2002                       | 2003                        |
|  | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | of which: %<br>denominated<br>in national<br>currency |                            |                            |                             |
| Total economy  |                                     |                                     |                                     |   |                            |                            |                             |
| Total primary market, of which:  | 467.1                               | 681.1                               | 740.7                               | 33.3  | 14.0                       | 13.0                       | 13.0                        |
| <ul> <li>Auction (% of total)</li> </ul>   | 40.6                                | 40.3                                | 38.9                                | 99.1  | 71.4                       | 76.9                       | 69.2                        |
| - Syndication (% of total)   | 51.8                                | 58.7                                | 54.0                                | 0.0   | 14.3                       | 7.7                        | 7.7                         |
| - Other (e.g. private placement) (% of total)  | 7.6                                 | 1.0                                 | 7.1                                 | 0.9   | 14.3                       | 15.4                       | 23.1                        |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314)<br>Total primary market, of which:<br>– Auction (% of total)<br>– Syndication (% of total)<br>– Other (e.g. private placement) (% of total) | 389.7<br>48.7<br>51.3<br>0.0        | 674.3<br>40.7<br>59.3<br>0.0        | 687.9<br>41.9<br>58.1<br>0.0        | 41.9<br>100.0<br>0.0<br>0.0                           | 11.0<br>90.9<br>9.1<br>0.0 | 11.0<br>90.9<br>9.1<br>0.0 | 10.0<br>90.0<br>10.0<br>0.0 |
|  | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0                        | 0.0                        | 0.0                         |
| Monetary financial institutions<br>(S.121+S.122)<br>Total primary market, of which:<br>– Auction (% of total)  | 0.0<br>0.0                          | 0.0<br>0.0                          | 50.0<br>0.0                         | 0.0   | 0.0                        | 0.0                        | 1.0<br>0.0                  |
| - Syndication (% of total)   | 0.0<br>0.0                          | 0.0<br>0.0                          | 0.0<br>100.0                        | 0.0<br>0.0  | 0.0<br>0.0                 | 0.0<br>0.0                 | 0.0<br>100.0                |
| <ul> <li>Other (e.g. private placement) (% of total)</li> <li>Non-financial and non-monetary financial<br/>corporations (S.123+S.124+S.125+S.11)</li> </ul>  | 0.0                                 | 0.0                                 | 100.0                               | 0.0   | 0.0                        | 0.0                        | 100.0                       |
| Total primary market, of which:  | 77.4                                | 6.8                                 | 2.8                                 | 100.0   | 3.0                        | 2.0                        | 2.0                         |
| - Auction (% of total)   | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0                        | 0.0                        | 0.0                         |
| - Syndication (% of total)   | 54.1                                | 0.0                                 | 0.0                                 | 0.0   | 33.3                       | 0.0                        | 0.0                         |
| - Other (e.g. private placement) (% of total)  | 45.9                                | 100.0                               | 100.0                               | 100.0   | 66.7                       | 100.0                      | 100.0                       |

Sources: Lietuvos bankas, Lithuanian Securities Commission.

Note: Exchange rate used (annual average): LTL/€ 3.5849 for 2001; LTL/€ 3.4605 for 2002; LTL/€ 3.4528 for 2003.

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## Table 2B Secondary market activity

| (daily averages)  |                             |                 |      |                        |      |      |  |
|---|-----------------------------|-----------------|------|------------------------|------|------|--|
| 1. All debt securities  |                             |                 |      |                        |      |      |  |
|   | Value o                     | of transactions |      | Number of transactions |      |      |  |
|   | Nominal value in € millions |                 |      | Number of issues       |      |      |  |
|   | 2001                        | 2002            | 2003 | 2001                   | 2002 | 2003 |  |
| Total economy   |                             |                 |      |                        |      |      |  |
| Total secondary market, of which:<br>– regulated markets (Stock Exchange(s)   | 1.2                         | 1.7             | 1.7  | 7.8                    | 7.3  | 6.7  |  |
| and other regulated markets), % of total<br>– non-regulated markets (e.g. over-the-   | 95.8                        | 92.8            | 95.4 | 70.9                   | 80.5 | 92.9 |  |
| counter market (OTC)), % of total   | 4.2                         | 7.3             | 4.6  | 29.2                   | 19.5 | 7.2  |  |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314)<br>% of secondary market for total economy | 99.0                        | 99.5            | 99.8 | 98.3                   | 96.6 | 98.4 |  |
| Monetary financial institutions<br>(S.121+S.122)<br>% of secondary market for total economy                                   | 0.0                         | 0.0             | 0.0  | 0.0                    | 0.0  | 0.0  |  |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)  |                             |                 |      |                        |      |      |  |
| % of secondary market for total economy   | 1.0                         | 0.5             | 0.2  | 1.7                    | 3.4  | 1.7  |  |

### 2. Long-term debt securities

| 0   |                                     | Value of t                          |                                     | Number of transactions                                |                  |       |       |  |
|---|-------------------------------------|-------------------------------------|-------------------------------------|---|------------------|-------|-------|--|
|   |                                     | Nominal valu                        | ie in € millions                    |   | Number of issues |       |       |  |
|   | 2001                                | 2001 2002 2003                      |                                     | 2001  | 2002             | 2003  |       |  |
|   | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | of which: %<br>denominated<br>in national<br>currency |                  |       |       |  |
| Total economy   |                                     |                                     |                                     |   |                  |       |       |  |
| Total secondary market, of which:<br>– regulated markets (Stock Exchange(s)   | 0.4                                 | 1.2                                 | 1.3                                 | 100.0   | 5.4              | 5.9   | 5.4   |  |
| and other regulated markets), % of total<br>– non-regulated markets (e.g. over-the-   | 91.9                                | 94.4                                | 94.8                                | 94.8  | 59.0             | 77.1  | 94.1  |  |
| counter market (OTC)), % of total   | 8.1                                 | 5.6                                 | 5.2                                 | 5.2   | 41.0             | 22.9  | 5.9   |  |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314)<br>% of secondary market for total economy | 100.0                               | 100.0                               | 100.0                               | 100.0   | 100.0            | 100.0 | 100.0 |  |
| Monetary financial institutions<br>(S.121+S.122)  |                                     |                                     |                                     |   |                  |       |       |  |
| % of secondary market for total economy   | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0              | 0.0   | 0.0   |  |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)  |                                     |                                     |                                     |   |                  |       |       |  |
| % of secondary market for total economy   | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0              | 0.0   | 0.0   |  |

Source: National Stock Exchange of Lithuania.

Notes: Number of business days: 253 in 2001; 253 in 2002; 254 in 2003. Exchange rate used (annual average): LTL/€ 3.5849 for 2001, LTL/€ 3.4605 for 2002; LTL/€ 3.4528 for 2003.



(December 2003; end-of-period stocks; nominal value)

| Total amount outs | tanding                      |  |  |   |  |  |  |
|-------------------|------------------------------|--|--|---|--|--|--|
|                   | Money market<br>Short-term   |  | Bond market<br>Long-term                                     |   |  |  |  |
|                   | t ≤ 1                        | 1 < t < 5  | $5 \leq t < 10$  | t ≥ 10  |  |  |  |
| € millions        |                              |  |  |   |  |  |  |
| 36,032.0          | 7,996.1                      | 8,186.6  | 12,605.5   | 7,243.8   |  |  |  |
| 8,826.2           | 0.0                          | 3,914.1  | 2,435.3  | 2,476.8   |  |  |  |
| 631.7             | 156.2                        | 115.1  | 158.7  | 201.8   |  |  |  |
| 45,489.9          | 8,152.2                      | 12,215.8   | 15,199.5   | 9,922.4   |  |  |  |
|                   | 36,032.0<br>8,826.2<br>631.7 | Money marker           Short-term           t ≤ 1           36,032.0         7,996.1           8,826.2         0.0           631.7         156.2 | Money market<br>Short-term           t ≤ 1         1 < t < 5 | Money market<br>Short-term         Bond market<br>Long-term           t ≤ 1         1 < t < 5 |  |  |  |

Source: Magyar Nemzeti Bank.

Note: Exchange rate used (end-of-period): HUF/€ 262.23.

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|          |             |       |          | Curre      | ncy of den | omination              |      |       |                          |      |     |
|----------|-------------|-------|----------|------------|------------|------------------------|------|-------|--------------------------|------|-----|
| Short-te | erm (t ≤ 1) |       | Long-t   | erm (1 < t | t < 5)     | Long-term (5 ≤ t < 10) |      | Long- | Long-term ( $t \ge 10$ ) |      |     |
| National | Euro        | Other | National | Euro       | Other      | National               | Euro | Other | National                 | Euro | Oth |
|          |             |       |          | in         | percentag  | es (%)                 |      |       |                          |      |     |
|          |             |       |          |            |            |                        |      |       |                          |      |     |
| 100.0    | 0.0         | 0.0   | 100.0    | 0.0        | 0.0        | 55.6                   | 39.7 | 4.7   | 100.0                    | 0.0  | 0   |
| 0.0      | 0.0         | 0.0   | 100.0    | 0.0        | 0.0        | 75.3                   | 10.3 | 14.4  | 0.0                      | 19.7 | 80  |
|          |             |       |          |            |            |                        |      |       |                          |      |     |
| 100.0    | 0.0         | 0.0   | 100.0    | 0.0        | 0.0        | 100.0                  | 0.0  | 0.0   | 100.0                    | 0.0  | 0   |



## (yearly total)

| 1. All debt securities                        | ¥7.1     |                   |          | NT 1             | 6. J.           |      |  |
|---|----------|-------------------|----------|------------------|-----------------|------|--|
|   |          | e of transaction  | -        |                  | of transactions |      |  |
|   | Nomina   | l value in € mill | ions     | Number of issues |                 |      |  |
|   | 2001     | 2002              | 2003     | 2001             | 2002            | 2003 |  |
| Total economy                                 |          |                   |          |                  |                 |      |  |
| Total primary market, of which:               | 22,712.1 | 21,519.8          | 25,774.3 | 130.0            | 106.0           | 81.0 |  |
| <ul> <li>auction (% of total)</li> </ul>      | 95.6     | 99.8              | 85.1     | 99.2             | 99.1            | 91.4 |  |
| <ul> <li>syndication (% of total)</li> </ul>  | 0.0      | 0.0               | 0.0      | 0.0              | 0.0             | 0.0  |  |
| - other (e.g. private placement) (% of total) | 4.4      | 0.2               | 14.9     | 0.8              | 0.9             | 8.6  |  |
| Central government (S.1311) and other         |          |                   |          |                  |                 |      |  |
| general government (S.1312+S.1313+S.1314)     |          |                   |          |                  |                 |      |  |
| Total primary market, of which:               | 13,743.4 | 18,782.9          | 25,774.3 | 78.0             | 76.0            | 81.0 |  |
| - auction (% of total)                        | 92.7     | 99.8              | 85.1     | 98.7             | 98.7            | 91.4 |  |
| - syndication (% of total)                    | 0.0      | 0.0               | 0.0      | 0.0              | 0.0             | 0.0  |  |
| - other (e.g. private placement) (% of total) | 7.3      | 0.2               | 14.9     | 1.3              | 1.3             | 8.6  |  |
| Monetary financial institutions               |          |                   |          |                  |                 |      |  |
| (\$.121+\$.122)                               |          |                   |          |                  |                 |      |  |
| Total primary market, of which:               | 8,968.7  | 2,736.9           | 0.0      | 52.0             | 30.0            | 0.0  |  |
| - auction (% of total)                        | 100.0    | 100.0             | 0.0      | 100.0            | 100.0           | 0.0  |  |
| - syndication (% of total)                    | 0.0      | 0.0               | 0.0      | 0.0              | 0.0             | 0.0  |  |
| - other (e.g. private placement) (% of total) | 0.0      | 0.0               | 0.0      | 0.0              | 0.0             | 0.0  |  |
| Non-financial and non-monetary financial      |          |                   |          |                  |                 |      |  |
| corporations (S.123+S.124+S.125+S.11)         |          |                   |          |                  |                 |      |  |
| Total primary market, of which:               |          |                   |          |                  |                 |      |  |
| - auction (% of total)                        |          |                   |          |                  |                 |      |  |
| - syndication (% of total)                    |          |                   |          |                  |                 |      |  |
| - other (e.g. private placement) (% of total) |          |                   |          |                  |                 |      |  |

#### 2. Long-term debt securities

| 2. Long-term debt securities  |                                     | Value of t                          | ransactions                         |   | Numbe            | r of transa | ctions |  |
|---|-------------------------------------|-------------------------------------|-------------------------------------|---|------------------|-------------|--------|--|
|   |                                     | Nominal valu                        | ie in € millions                    |   | Number of issues |             |        |  |
|   | 2001                                | 2002                                | 20                                  | 03  | 2001             | 2002        | 2003   |  |
|   | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | of which: %<br>denominated<br>in national<br>currency |                  |             |        |  |
| Total economy   |                                     |                                     |                                     |   |                  |             |        |  |
| Total primary market, of which:   | 6,247.7                             | 6,622.0                             | 11,970.3                            | 83.3  | 11.0             | 9.0         | 15.0   |  |
| - auction (% of total)  | 84.0                                | 99.4                                | 67.8                                | 67.8  | 90.9             | 88.9        | 53.3   |  |
| - syndication (% of total)  | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0              | 0.0         | 0.0    |  |
| - other (e.g. private placement) (% of total)   | 16.0                                | 0.6                                 | 32.2                                | 32.2  | 9.1              | 11.1        | 46.7   |  |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314)<br>Total primary market, of which: | 6,247.7                             | 6,622.0                             | 11,970.3                            | 83.3  | 11.0             | 9.0         | 15.0   |  |
| - auction (% of total)  | 84.0                                | 99.4                                | 67.8                                | 67.8  | 90.9             | 88.9        | 53.3   |  |
| - syndication (% of total)  | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0              | 0.0         | 0.0    |  |
| - other (e.g. private placement) (% of total)   | 16.0                                | 0.6                                 | 32.2                                | 32.2  | 9.1              | 11.1        | 46.7   |  |
| Monetary financial institutions<br>(S.121+S.122)  |                                     |                                     |                                     |   |                  |             |        |  |
| Total primary market, of which:   | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0              | 0.0         | 0.0    |  |
| - auction (% of total)  | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0              | 0.0         | 0.0    |  |
| - syndication (% of total)  | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0              | 0.0         | 0.0    |  |
| - other (e.g. private placement) (% of total)   | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0              | 0.0         | 0.0    |  |
| Non-financial and non-monetary financial<br>corporations (S.123+S.124+S.125+S.11)                                     |                                     |                                     |                                     |   |                  |             |        |  |
| Total primary market, of which:   |                                     |                                     |                                     |   |                  |             |        |  |
| - auction (% of total)  |                                     |                                     |                                     |   | •                | •           | •      |  |
| - syndication (% of total)  |                                     |                                     |                                     |   | •                |             |        |  |
| - other (e.g. private placement) (% of total)   |                                     |                                     |                                     | •   | •                | •           | •      |  |

Sources: Government Debt Management Agency; Magyar Nemzeti Bank.

### HUNGARY

## Table 2B Secondary market activity

|   | Value     | of transactions  |       | Number of transactions |       |       |  |
|---|-----------|------------------|-------|------------------------|-------|-------|--|
|   | Nominal v | alue in € millio | ons   | Number of issues       |       |       |  |
|   | 2001      | 2002             | 2003  | 2001                   | 2002  | 2003  |  |
| Total economy   |           |                  |       |                        |       |       |  |
| Total secondary market, of which:<br>– regulated markets (Stock Exchange(s)   | 180.5     | 270.5            | 348.3 | 137.9                  | 177.4 | 220.0 |  |
| and other regulated markets), % of total<br>– non-regulated markets (e.g. over-the-   | 0.0       | 0.0              | 0.0   | 5.8                    | 5.6   | 9.5   |  |
| counter market (OTC)), % of total   | 100.0     | 100.0            | 100.0 | 94.2                   | 94.4  | 90.5  |  |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314)<br>% of secondary market for total economy | 91.1      | 99.0             | 98.8  | 91.2                   | 99.4  | 98.9  |  |
| Monetary financial institutions<br>(S.121+S.122)  |           |                  |       |                        |       |       |  |
| % of secondary market for total economy   | 8.7       | 0.9              | 1.1   | 8.6                    | 0.4   | 0.8   |  |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)  |           |                  |       |                        |       |       |  |
| % of secondary market for total economy   | 0.1       | 0.1              | 0.1   | 0.2                    | 0.1   | 0.3   |  |

### 2. Long-term debt securities

|   | Value of transactions               |                                     |                                     |   |                  | Number of transactions |       |  |  |
|---|-------------------------------------|-------------------------------------|-------------------------------------|---|------------------|------------------------|-------|--|--|
|   |                                     | Nominal valu                        | ie in € millions                    |   | Number of issues |                        |       |  |  |
|   | 2001                                | 2002                                | 2003                                |   | 2001             | 2002                   | 2003  |  |  |
|   | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | of which: %<br>denominated<br>in national<br>currency |                  |                        |       |  |  |
| Total economy   |                                     |                                     |                                     |   |                  |                        |       |  |  |
| Total secondary market, of which:<br>– regulated markets (Stock Exchange(s)   | 148.0                               | 228.8                               | 283.0                               | 100.0   | 106.7            | 139.9                  | 166.4 |  |  |
| and other regulated markets), % of total<br>– non-regulated markets (e.g. over-the-   | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 7.5              | 7.1                    | 11.4  |  |  |
| counter market (OTC)), % of total   | 100.0                               | 100.0                               | 100.0                               | 100.0   | 92.5             | 92.9                   | 88.6  |  |  |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314)<br>% of secondary market for total economy | 99.8                                | 99.8                                | 98.5                                | 98.5  | 99.6             | 99.7                   | 98.5  |  |  |
| Monetary financial institutions<br>(S.121+S.122)  |                                     |                                     |                                     |   |                  |                        |       |  |  |
| % of secondary market for total economy   | 0.0                                 | 0.1                                 | 1.3                                 | 1.3   | 0.1              | 0.1                    | 1.1   |  |  |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)  |                                     |                                     |                                     |   |                  |                        |       |  |  |
| % of secondary market for total economy   | 0.2                                 | 0.1                                 | 0.1                                 | 0.1   | 0.3              | 0.2                    | 0.4   |  |  |

Source: Magyar Nemzeti Bank. Note: Number of business days: 245 in 2001; 244 in 2002; 246 in 2003.



| (December 2003; end-of-period stocks; nominal value) |  |
|--|--|
|--|--|

| of denomination                               |            | Money market |           | Bond market     |         |  |  |
|---|------------|--------------|-----------|-----------------|---------|--|--|
|   |            | Short-term   |           | Long-term       |         |  |  |
| Sector of the issuer                          |            | t ≤ 1        | 1 < t < 5 | $5 \leq t < 10$ | t ≥ 10  |  |  |
|   | € millions |              |           |                 |         |  |  |
| Central government (S.1311) and other general |            |              |           |                 |         |  |  |
| government (S.1312+S.1313+S.1314)             | 2,652.9    | 538.0        | 0.0       | 478.4           | 1,636.5 |  |  |
| Monetary financial institutions (S.121+S.122) | 121.6      | 0.0          | 0.0       | 46.3            | 75.3    |  |  |
| Non-financial and non-monetary financial      |            |              |           |                 |         |  |  |
| corporations (S.123+S.124+S.125+S.11)         | 280.9      | 0.0          | 14.4      | 158.8           | 107.8   |  |  |
| Total   | 3,055.4    | 538.0        | 14.4      | 683.5           | 1,819.6 |  |  |

Sources: Malta Stock Exchange, Treasury. Note: Exchange rate used (end-of-period): 2.3163.

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|          |            |       |          | Curre      | ncy of den | omination |            |       |          |             |     |
|----------|------------|-------|----------|------------|------------|-----------|------------|-------|----------|-------------|-----|
| Short-te | rm (t ≤ 1) |       | Long-t   | erm (1 < t | < 5)       | Long-te   | erm (5 ≤ t | < 10) | Long-    | term (t ≥ 1 | 0)  |
| National | Euro       | Other | National | Euro       | Other      | National  | Euro       | Other | National | Euro        | Oth |
|          |            |       |          | in         | percentag  | es (%)    |            |       |          |             |     |
|          |            |       |          |            |            |           |            |       |          |             |     |
| 100.0    | 0.0        | 0.0   | 0.0      | 0.0        | 0.0        | 100.0     | 0.0        | 0.0   | 100.0    | 0.0         | 0   |
| 0.0      | 0.0        | 0.0   | 0.0      | 0.0        | 0.0        | 100.0     | 0.0        | 0.0   | 61.5     | 0.0         | 38  |
|          |            |       |          |            |            |           |            |       |          |             |     |
| 0.0      | 0.0        | 0.0   | 100.0    | 0.0        | 0.0        | 91.1      | 8.9        | 0.0   | 100.0    | 0.0         | (   |



## (yearly total)

|   | Value   | of transactions  | Number  | of transactions |               |       |
|---|---------|------------------|---------|-----------------|---------------|-------|
|   | Nominal | value in € milli | ions    | Num             | ber of issues |       |
|   | 2001    | 2002             | 2003    | 2001            | 2002          | 2003  |
| Total economy                                 |         |                  |         |                 |               |       |
| Total primary market, of which:               | 1,581.7 | 2,008.0          | 2,098.1 | 641.0           | 641.0         | 465.0 |
| - auction (% of total)                        | 100.0   | 100.0            | 100.0   | 100.0           | 100.0         | 100.0 |
| - syndication (% of total)                    | 0.0     | 0.0              | 0.0     | 0.0             | 0.0           | 0.0   |
| - other (e.g. private placement) (% of total) |         |                  |         |                 |               |       |
| Central government (S.1311) and other         |         |                  |         |                 |               |       |
| general government (S.1312+S.1313+S.1314)     |         |                  |         |                 |               |       |
| Total primary market, of which:               | 1,578.0 | 1,883.6          | 2,040.6 | 640.0           | 630.0         | 460.0 |
| - auction (% of total)                        | 100.0   | 100.0            | 100.0   | 100.0           | 100.0         | 100.0 |
| - syndication (% of total)                    | 0.0     | 0.0              | 0.0     | 0.0             | 0.0           | 0.0   |
| - other (e.g. private placement) (% of total) | 0.0     | 0.0              | 0.0     | 0.0             | 0.0           | 0.0   |
| Monetary financial institutions               |         |                  |         |                 |               |       |
| (S.121+S.122)                                 |         |                  |         |                 |               |       |
| Total primary market, of which:               | 0.0     | 0.0              | 0.0     | 0.0             | 0.0           | 0.0   |
| - auction (% of total)                        | 0.0     | 0.0              | 0.0     | 0.0             | 0.0           | 0.0   |
| - syndication (% of total)                    | 0.0     | 0.0              | 0.0     | 0.0             | 0.0           | 0.0   |
| - other (e.g. private placement) (% of total) | 0.0     | 0.0              | 0.0     | 0.0             | 0.0           | 0.0   |
| Non-financial and non-monetary financial      |         |                  |         |                 |               |       |
| corporations (S.123+S.124+S.125+S.11)         |         |                  |         |                 |               |       |
| Total primary market, of which:               | 3.7     | 124.4            | 57.5    | 1.0             | 11.0          | 5.0   |
| - auction (% of total)                        | 100.0   | 100.0            | 100.0   | 100.0           | 100.0         | 100.0 |
| - syndication (% of total)                    | 0.0     | 0.0              | 0.0     | 0.0             | 0.0           | 0.0   |
| - other (e.g. private placement) (% of total) |         |                  |         |                 |               |       |

#### 2. Long-term debt securities

| 2. Long-term debt securities  |                                     | Value of t                          | ransactions                         |   | Numbe | er of transa | actions |
|---|-------------------------------------|-------------------------------------|-------------------------------------|---|-------|--------------|---------|
|   |                                     | Nominal valu                        | ie in € millions                    |   | Nur   | nber of iss  | ues     |
|   | 2001                                | 2002                                | 20                                  | 03  | 2001  | 2002         | 2003    |
|   | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | of which: %<br>denominated<br>in national<br>currency |       |              |         |
| Total economy   |                                     |                                     |                                     |   |       |              |         |
| Total primary market, of which:   | 387.7                               | 285.4                               | 402.4                               | 94.8  | 6.0   | 16.0         | 11.0    |
| - auction (% of total)  | 100.0                               | 100.0                               | 100.0                               | 100.0   | 100.0 | 100.0        | 100.0   |
| - syndication (% of total)  | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0   | 0.0          | 0.0     |
| - other (e.g. private placement) (% of total)   | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0   | 0.0          | 0.0     |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314)<br>Total primary market, of which: | 384.0                               | 161.0                               | 344.9                               | 100.0   | 5.0   | 5.0          | 6.0     |
| - auction (% of total)  | 100.0                               | 100.0                               | 100.0                               | 100.0   | 100.0 | 100.0        | 100.0   |
| - syndication (% of total)  | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0   | 0.0          | 0.0     |
| - other (e.g. private placement) (% of total)   | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0   | 0.0          | 0.0     |
| Monetary financial institutions<br>(S.121+S.122)  |                                     |                                     |                                     |   |       |              |         |
| Total primary market, of which:   | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0   | 0.0          | 0.0     |
| - auction (% of total)  | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0   | 0.0          | 0.0     |
| - syndication (% of total)  | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0   | 0.0          | 0.0     |
| - other (e.g. private placement) (% of total)   | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0   | 0.0          | 0.0     |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)  |                                     |                                     |                                     |   |       |              |         |
| Total primary market, of which:   | 3.7                                 | 124.4                               | 57.5                                | 63.4  | 1.0   | 11.0         | 5.0     |
| - auction (% of total)  | 100.0                               | 100.0                               | 100.0                               | 100.0   | 100.0 | 100.0        | 100.0   |
| - syndication (% of total)  | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0   | 0.0          | 0.0     |
| - other (e.g. private placement) (% of total)   |                                     |                                     |                                     |   |       | •            |         |

Source: Malta Stock Exchange. 1) The relatively large volume of gross short-term debt securities issuance in the primary market is attributable to the fact that Treasury bills are normally issued weekly and rolled over within a very short period (usually within three months). As a proportion of outstanding general government debt, the share of short-term securities stood at 16.4%, 21.2% and 20.3% at the end of 2001, 2002 and 2003, respectively.



## Table 2B Secondary market activity

| 1. All debt securities  | Value o   | of transactions  |      | Number |      |      |
|---|-----------|------------------|------|--------|------|------|
|   | Nominal v | alue in € millio | ns   | Numb   |      |      |
|   | 2001      | 2002             | 2003 | 2001   | 2002 | 2003 |
| Total economy   |           |                  |      |        |      |      |
| Total secondary market, of which:<br>– regulated markets (Stock Exchange(s)   | 3.1       | 1.7              | 1.9  | 18.5   | 17.2 | 22.0 |
| and other regulated markets), % of total<br>– non-regulated markets (e.g. over-the-   | 47.8      | 31.1             | 29.1 | 79.9   | 81.9 | 84.9 |
| counter market (OTC)), % of total   | 52.2      | 68.9             | 70.9 | 20.1   | 18.1 | 15.1 |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314)<br>% of secondary market for total economy | 94.6      | 93.0             | 95.0 | 76.0   | 60.6 | 62.7 |
| Monetary financial institutions<br>(S.121+S.122)  |           |                  |      |        |      |      |
| % of secondary market for total economy   | 3.7       | 3.4              | 0.8  | 14.4   | 13.9 | 7.3  |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)  |           |                  |      |        |      |      |
| % of secondary market for total economy   | 1.7       | 3.6              | 4.2  | 9.6    | 25.5 | 30.0 |

### 2. Long-term debt securities

| 0   |                                     | Value of t                          | Numbe                               | Number of transactions                                |       |             |       |
|---|-------------------------------------|-------------------------------------|-------------------------------------|---|-------|-------------|-------|
|   |                                     | Nominal valu                        | ıe in € millions                    |   | Nur   | nber of iss | sues  |
|   | 2001                                | 2002                                | 20                                  | 03  | 2001  | 2002        | 2003  |
|   | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | of which: %<br>denominated<br>in national<br>currency |       |             |       |
| Total economy   |                                     |                                     |                                     |   |       |             |       |
| Total secondary market, of which:<br>– regulated markets (Stock Exchange(s)   | 1.5                                 | 0.5                                 | 0.6                                 | 96.1  | 14.7  | 14.1        | 19.9  |
| and other regulated markets), % of total<br>– non-regulated markets (e.g. over-the-   | 100.0                               | 100.0                               | 100.0                               | 100.0   | 100.0 | 100.0       | 100.0 |
| counter market (OTC)), % of total   | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0   | 0.0         | 0.0   |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314)<br>% of secondary market for total economy | 88.6                                | 76.5                                | 82.7                                | 86.1  | 70.0  | 51.9        | 58.8  |
| Monetary financial institutions<br>(S.121+S.122)  |                                     |                                     |                                     |   |       |             |       |
| % of secondary market for total economy   | 7.8                                 | 11.5                                | 2.7                                 | 1.8   | 18.0  | 17.0        | 8.1   |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)  |                                     |                                     |                                     |   |       |             |       |
| % of secondary market for total economy   | 3.6                                 | 11.9                                | 14.6                                | 12.1  | 12.0  | 31.1        | 33.1  |

Sources: Malta Stock Exchange, Central Bank of Malta. Note: Number of business days: 235 in 2001; 254 in 2002; 246 in 2003.

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(December 2003; end-of-period stocks; nominal value)

| Instrument type/currency  | Total amount outstanding |                            |            |                          |          |  |  |  |  |
|---|--------------------------|----------------------------|------------|--------------------------|----------|--|--|--|--|
| of denomination   |                          | Money market<br>Short-term |            | Bond market<br>Long-term |          |  |  |  |  |
| Sector of the issuer  |                          | t ≤ 1                      | 1 < t < 5  | $5 \leq t < 10$          | t ≥ 10   |  |  |  |  |
|   |                          |                            | € millions |                          |          |  |  |  |  |
| Central government (S.1311) and other general government (S.1312+S.1313+S.1314) <sup>1)</sup> | 58,867.7                 | 10,190.3                   | 12,736.8   | 19,572.8                 | 16,367.8 |  |  |  |  |
| Monetary financial institutions (S.121+S.122)   | 4,514.5                  | 1,923.0                    | 374.4      | 230.2                    | 1,987.0  |  |  |  |  |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)                | 6,079.4                  | 2,120.1                    | 1,008.8    | 2,004.4                  | 946.1    |  |  |  |  |
| Total   | 69,461.6                 | 14,233.3                   | 14,120.0   | 21,807.3                 | 19,300.9 |  |  |  |  |

Sources: Ministry of Finance, Narodowy Bank Polski, Fitch Polska S.A.

Notes: Exchange rate used (end-of-period): 4.7170 €/PLN. Maturity and currency structure was estimated.

1) Data refer to central government only.



| D | 0 |   | A | M |   |
|---|---|---|---|---|---|
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|          |             |       |          | Curre       | ncy of den | omination |            |       |          |           |     |
|----------|-------------|-------|----------|-------------|------------|-----------|------------|-------|----------|-----------|-----|
| Short-to | erm (t ≤ 1) |       | Long-t   | term (1 < 1 | t < 5)     | Long-t    | erm (5 ≤ t | < 10) | Long-    | term (t≥1 | 0)  |
| National | Euro        | Other | National | Euro        | Other      | National  | Euro       | Other | National | Euro      | Oth |
|          |             |       |          | in          | percentag  | es (%)    |            |       |          |           |     |
|          |             |       |          |             |            |           |            |       |          |           |     |
| 100.0    | 0.0         | 0.0   | 96.1     | 3.9         | 0.0        | 93.3      | 0.0        | 6.7   | 52.7     | 28.3      | 19  |
| 100.0    | 0.0         | 0.0   | 57.2     | 40.5        | 2.3        | 31.6      | 51.2       | 17.2  | 83.4     | 16.6      | 0   |
|          |             |       |          |             |            |           |            |       |          |           |     |
| 99.5     | 0.5         | 0.0   | 45.1     | 54.7        | 0.2        | 11.9      | 88.0       | 0.1   | 0.4      | 32.4      | 67  |



#### (yearly total)

| 1. All debt securities   | ¥7. 1    | <b>6</b> ( )      |          |       |                  |         |
|--|----------|-------------------|----------|-------|------------------|---------|
| _  |          | e of transaction  | -        |       | r of transaction | 18      |
|  | Nomina   | l value in € mill | lions    | Nur   | nber of issues   |         |
|  | 2001     | 2002              | 2003     | 2001  | 2002             | 2003    |
| Total economy  |          |                   |          |       |                  |         |
| Total primary market, of which:  | 87,026.9 | 79,199.9          | 84,168.3 | 200.0 | 2,655.0          | 6,777.0 |
| - auction (% of total)   | 88.9     | 82.8              | 80.4     | 79.5  | 5.2              | 11.4    |
| - syndication (% of total)   | 0.1      | 0.2               | 0.3      | 1.0   | 0.1              | 0.1     |
| - other (e.g. private placement) (% of total)                                      | 11.1     | 17.0              | 19.4     | 19.5  | 94.7             | 88.5    |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314) |          |                   |          |       |                  |         |
| Total primary market, of which:  | 27,851.1 | 31,710.5          | 31,792.4 | 87.0  | 90.0             | 121.0   |
| - auction (% of total)   | 96.4     | 96.8              | 98.2     | 91.9  | 86.7             | 87.6    |
| - syndication (% of total)   | 0.2      | 0.5               | 0.7      | 2.3   | 4.4              | 5.0     |
| - other (e.g. private placement) (% of total)                                      | 3.4      | 2.7               | 1.1      | 5.8   | 8.9              | 7.4     |
| Monetary financial institutions<br>(S.121+S.122)                                   |          |                   |          |       |                  |         |
| Total primary market, of which:  | 58,521.4 | 36,916.5          | 39,961.9 | 96.0  | 61.0             | 721.0   |
| - auction (% of total)   | 86.3     | 94.5              | 91.2     | 82.3  | 98.4             | 92.8    |
| - syndication (% of total)   |          |                   |          |       |                  |         |
| - other (e.g. private placement) (% of total)                                      | 13.7     | 5.5               | 8.8      | 17.7  | 1.6              | 7.2     |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)     |          |                   |          |       |                  |         |
| Total primary market, of which:  | 654.4    | 10,572.9          | 12,414.0 | 17.0  | 2,504.0          | 5,935.0 |
| - auction (% of total)   |          |                   |          |       |                  |         |
| - syndication (% of total)   |          |                   |          |       |                  |         |
| - other (e.g. private placement) (% of total)                                      | 100.0    | 100.0             | 100.0    | 100.0 | 100.0            | 100.0   |

#### 2. Long-term debt securities

| 2. Long-term debt securities  |                                     | Value of t                          | ransactions                         |   | Numbe        | r of transa  | ictions |
|---|-------------------------------------|-------------------------------------|-------------------------------------|---|--------------|--------------|---------|
|   |                                     | Nominal valu                        | ie in € millions                    |   | Nur          | nber of iss  | ues     |
|   | 2001                                | 2002                                | 20                                  | 03  | 2001         | 2002         | 2003    |
|   | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | of which: %<br>denominated<br>in national<br>currency |              |              |         |
| Total economy   |                                     |                                     |                                     |   |              |              |         |
| Total primary market, of which:   | 14,212.8                            | 21,759.3                            | 21,721.1                            | 86.7  | 64.0         | 90.0         | 179.0   |
| - auction (% of total)  | 87.1                                | 83.6                                | 82.6                                | 95.3  | 56.3         | 34.4         | 14.5    |
| <ul> <li>syndication (% of total)</li> </ul>  | 0.5                                 | 0.7                                 | 1.0                                 | 0.0   | 3.1          | 4.4          | 3.4     |
| - other (e.g. private placement) (% of total)   | 12.3                                | 15.7                                | 16.4                                | 4.7   | 40.6         | 61.1         | 82.1    |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314)<br>Total primary market, of which: | 13,434.3                            | 19,256.9                            | 18,517.5                            | 97.4  | 43.0         | 43.0         | 41.0    |
| - auction (% of total)  | 92.2                                | 94.5                                | 96.9                                | 97.4  | 43.0<br>83.7 | 43.0<br>72.1 | 63.4    |
| - syndication (% of total)  | 92.2                                | 0.8                                 | 1.2                                 | 0.0   | 4.7          | 9.3          | 14.6    |
| - other (e.g. private placement) (% of total)   | 7.2                                 | 4.7                                 | 1.2                                 | 0.5   | 4.7<br>11.6  | 18.6         | 22.0    |
| Monetary financial institutions<br>(S.121+S.122)  | 1.2                                 | ,                                   | 1.9                                 | 0.5   | 11.0         | 10.0         | 22.0    |
| Total primary market, of which:   | 150.0                               | 2,027.2                             | 1,247.8                             | 99.8  | 5.0          | 1.0          | 62.0    |
| - auction (% of total)  | 0.0                                 | 0.0                                 | 0.0                                 | 99.5  | 0.0          | 0.0          | 0.0     |
| - syndication (% of total)  | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0          | 0.0          | 0.0     |
| - other (e.g. private placement) (% of total)   | 100.0                               | 100.0                               | 100.0                               | 0.5   | 100.0        | 100.0        | 100.0   |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)  |                                     |                                     |                                     |   |              |              |         |
| Total primary market, of which:   | 628.5                               | 475.2                               | 1,955.8                             | 95.9  | 16.0         | 46.0         | 76.0    |
| - auction (% of total)  | 0.0                                 | 0.0                                 | 0.0                                 | 99.5  | 0.0          | 0.0          | 0.0     |
| - syndication (% of total)  | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0          | 0.0          | 0.0     |
| - other (e.g. private placement) (% of total)   | 100.0                               | 100.0                               | 100.0                               | 0.5   | 100.0        | 100.0        | 100.0   |

Sources: Ministry of Finance, Narodowy Bank Polski, National Depository for Securities Poland, Warsaw Stock Exchange. Note: Exchange rate used (average-of-period €/PLN): 3.3668 in 2001; 3.8557 in 2002; 4.3964 in 2003.

### POLAND

2003

38.9

61.1

97.1

2.8

0.1

## Table 2B Secondary market activity

#### (daily averages) 1. All debt securities Value of transactions Number of transactions Nominal value in € millions Number of issues 2002 2001 2003 2001 2002 **Total economy** 1,410.7 2,382.1 3,639.3 1,051.9 1,151.2 1,213.3 Total secondary market, of which: - regulated markets (Stock Exchange(s) 0.2 0.1 and other regulated markets), % of total 3.2 49.7 28.4 - non-regulated markets (e.g. over-thecounter market (OTC)), % of total 99.8 99 9 96.8 50.3 71.6 Central government (S.1311) and other general government (S.1312+S.1313+S.1314) 89.6 96.4 95.8 98.8 99.5 % of secondary market for total economy **Monetary financial institutions** (S.121+S.122) 10.4 4.2 1.2 0.5 % of secondary market for total economy 3.6 Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11) % of secondary market for total economy 0.0

#### 2. Long-term debt securities

| 0  |                                     | Value of t                          | Number of transactions              |   |       |             |       |
|--|-------------------------------------|-------------------------------------|-------------------------------------|---|-------|-------------|-------|
|  |                                     | Nominal valu                        | ie in € millions                    |   | Nur   | nber of iss | sues  |
|  | 2001                                | 2001 2002                           |                                     | 2003  |       | 2002        | 2003  |
|  | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | of which: %<br>denominated<br>in national<br>currency |       |             |       |
| Total economy  |                                     |                                     |                                     |   |       |             |       |
| Total secondary market, of which:  | 704.9                               | 1,180.2                             | 1,793.9                             | 100.0   | 743.6 | 822.0       | 812.4 |
| <ul> <li>regulated markets (Stock Exchange(s)<br/>and other regulated markets), % of total</li> <li>non-regulated markets (e.g. over-the-</li> </ul> | 0.4                                 | 0.2                                 | 5.6                                 | 5.6   | 70.4  | 39.8        | 58.0  |
| counter market (OTC)), % of total  | 99.6                                | 99.8                                | 94.4                                | 94.4  | 29.6  | 60.2        | 42.0  |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314)<br>% of secondary market for total economy                        | 100.0                               | 100.0                               | 99.5                                | 99.5  | 100.0 | 100.0       | 95.3  |
| Monetary financial institutions<br>(S.121+S.122)   |                                     |                                     | 0.5                                 | 0.5   |       |             | 4.4   |
| % of secondary market for total economy  |                                     |                                     | 0.5                                 | 0.5   | •     | •           | 4.4   |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)   |                                     |                                     |                                     |   |       |             |       |
| % of secondary market for total economy  |                                     |                                     | 0.0                                 | 0.0   |       |             | 0.3   |

Sources: Ministry of Finance, Narodowy Bank Polski, National Depository for Securities Poland, Warsaw Stock Exchange. Notes: Exchange rate used (average-of-period €/PLN): 3.3668 in 2001; 3.8557 in 2002; 4.3964 in 2003. Number of business days: 252 in 2001; 251 in 2002; 251 in 2003. Data reported for non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11) refer only to transactions on the regulated market.


Table | Market size Debt securities by original maturity, sector of the issuer and currency of denomination

(December 2003; end-of-period stocks; nominal value)

| Instrument type/currency<br>of denomination                                    | Total amount outst | anung                      |            |                          |         |  |
|--|--------------------|----------------------------|------------|--------------------------|---------|--|
| of denomination  |                    | Money market<br>Short-term |            | Bond market<br>Long-term |         |  |
| Sector of the issuer   |                    | t ≤ 1                      | 1 < t < 5  | $5 \leq t < 10$          | t ≥ 10  |  |
|  |                    |                            | € millions |                          |         |  |
| Central government (S.1311) and other general                                  |                    |                            |            |                          |         |  |
| government (S.1312+S.1313+S.1314)  | 6,355.6            | 338.1                      | 431.3      | 2,048.0                  | 3,538.1 |  |
| Monetary financial institutions (S.121+S.122)                                  | 4,939.2            | 4,352.5                    | 303.7      | 283.0                    | 0.0     |  |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11) | 185.2              | 0.0                        | 10.5       | 146.4                    | 28.4    |  |
| Total  | 11,480.0           | 4,690.6                    | 745.5      | 2,477.4                  | 3,566.5 |  |

Sources: Banka Slovenije, Centralna klirinško depotna družba. Note: Exchange rate used (end-of-period): 236.6903 SIT/€.

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|          |                 |       |                       | Curre | ncy of den             | omination |                    |       |          |       |    |
|----------|-----------------|-------|-----------------------|-------|------------------------|-----------|--------------------|-------|----------|-------|----|
| Short-te | rt-term (t ≤ 1) |       | Long-term (1 < t < 5) |       | Long-term (5 ≤ t < 10) |           | Long-term (t ≥ 10) |       | 0)       |       |    |
| National | Euro            | Other | National              | Euro  | Other                  | National  | Euro               | Other | National | Euro  | Ot |
|          |                 |       |                       | in    | percentag              | es (%)    |                    |       |          |       |    |
| 100.0    | 0.0             | 0.0   | 100.0                 | 0.0   | 0.0                    | 64.4      | 35.6               | 0.0   | 18.9     | 76.1  |    |
| 45.8     | 50.1            | 4.1   | 70.6                  | 29.4  | 0.0                    | 33.5      | 66.5               | 0.0   | 0.0      | 0.0   |    |
|          |                 |       |                       |       |                        |           |                    |       |          |       |    |
| 0.0      | 0.0             | 0.0   | 28.3                  | 71.7  | 0.0                    | 20.3      | 79.7               | 0.0   | 0.0      | 100.0 |    |



### Table 2A Primary market activity

#### (yearly total)

| 1. All debt securities                        |          |                   |          |         |                  |         |
|---|----------|-------------------|----------|---------|------------------|---------|
|   | Valu     | e of transaction  | S        | Numbe   | r of transaction | IS      |
|   | Nominal  | l value in € mill | ions     | Nun     | nber of issues   |         |
|   | 2001     | 2002              | 2003     | 2001    | 2002             | 2003    |
| Total economy                                 |          |                   |          |         |                  |         |
| Total primary market, of which:               | 13,306.0 | 17,792.7          | 17,170.3 | 3,777.0 | 3,330.0          | 3,020.0 |
| - auction (% of total)                        | 9.7      | 24.7              | 22.1     | 2.0     | 4.3              | 4.5     |
| - syndication (% of total)                    | 3.5      | 0.1               | 0.0      | 0.1     | 0.0              | 0.0     |
| - other (e.g. private placement) (% of total) | 86.9     | 75.2              | 77.9     | 98.0    | 95.7             | 95.5    |
| Central government (S.1311) and other         |          |                   |          |         |                  |         |
| general government (S.1312+S.1313+S.1314)     |          |                   |          |         |                  |         |
| Total primary market, of which:               | 1,646.0  | 3,410.0           | 2,301.0  | 71.0    | 103.0            | 86.0    |
| - auction (% of total)                        | 72.7     | 100.0             | 100.0    | 98.6    | 100.0            | 100.0   |
| - syndication (% of total)                    | 27.3     | 0.0               | 0.0      | 1.4     | 0.0              | 0.0     |
| - other (e.g. private placement) (% of total) | 0.0      | 0.0               | 0.0      | 0.0     | 0.0              | 0.0     |
| Monetary financial institutions               |          |                   |          |         |                  |         |
| (\$.121+\$.122)                               |          |                   |          |         |                  |         |
| Total primary market, of which:               | 11,608.0 | 14,331.7          | 14,782.3 | 3,686.0 | 3,203.0          | 2,910.0 |
| - auction (% of total)                        | 0.8      | 6.9               | 10.1     | 0.1     | 1.2              | 1.7     |
| - syndication (% of total)                    | 0.1      | 0.1               | 0.0      | 0.0     | 0.0              | 0.0     |
| - other (e.g. private placement) (% of total) | 99.1     | 93.0              | 89.9     | 99.9    | 98.8             | 98.3    |
| Non-financial and non-monetary financial      |          |                   |          |         |                  |         |
| corporations (S.123+S.124+S.125+S.11)         |          |                   |          |         |                  |         |
| Total primary market, of which:               | 52.0     | 51.0              | 87.0     | 20.0    | 24.0             | 24.0    |
| - auction (% of total)                        | 0.0      | 0.0               | 0.0      | 0.0     | 0.0              | 0.0     |
| - syndication (% of total)                    | 0.0      | 0.0               | 0.0      | 0.0     | 0.0              | 0.0     |
| - other (e.g. private placement) (% of total) | 100.0    | 100.0             | 100.0    | 100.0   | 100.0            | 100.0   |

#### 2. Long-term debt securities

| 2. Long-term debt securities  |                                     | Value of t                          | ransactions                         |   | Numbe | er of transa | actions |
|---|-------------------------------------|-------------------------------------|-------------------------------------|---|-------|--------------|---------|
|   |                                     | Nominal valu                        | ie in € millions                    |   | Nur   | nber of iss  | ues     |
|   | 2001                                | 2002                                | 20                                  | 03  | 2001  | 2002         | 2003    |
|   | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | of which: %<br>denominated<br>in national<br>currency |       |              |         |
| Total economy   |                                     |                                     |                                     |   |       |              |         |
| Total primary market, of which:   | 800.0                               | 1,789.0                             | 1,027.0                             | 67.3  | 27.0  | 42.0         | 33.0    |
| - auction (% of total)  | 29.1                                | 93.1                                | 68.0                                | 71.0  | 44.4  | 64.3         | 33.3    |
| <ul> <li>syndication (% of total)</li> </ul>  | 57.5                                | 0.8                                 | 0.0                                 | 0.0   | 7.4   | 2.4          | 0.0     |
| - other (e.g. private placement) (% of total)   | 13.4                                | 6.1                                 | 32.0                                | 29.0  | 48.1  | 33.3         | 66.7    |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314)<br>Total primary market, of which: | 683.0                               | 1,666.0                             | 681.0                               | 72.0  | 13.0  | 27.0         | 10.0    |
| - auction (% of total)  | 34.1                                | 100.0                               | 100.0                               | 100.0   | 92.3  | 100.0        | 100.0   |
| - syndication (% of total)  | 65.9                                | 0.0                                 | 0.0                                 | 0.0   | 7.7   | 0.0          | 0.0     |
| - other (e.g. private placement) (% of total)   | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0   | 0.0          | 0.0     |
| Monetary financial institutions<br>(S.121+S.122)  |                                     |                                     |                                     |   |       |              |         |
| Total primary market, of which:   | 69.0                                | 93.0                                | 292.0                               | 60.7  | 7.0   | 8.0          | 13.0    |
| <ul> <li>auction (% of total)</li> </ul>  | 0.0                                 | 0.0                                 | 5.8                                 | 0.0   | 0.0   | 0.0          | 7.7     |
| <ul> <li>syndication (% of total)</li> </ul>  | 14.5                                | 15.1                                | 0.0                                 | 0.0   | 14.3  | 12.5         | 0.0     |
| - other (e.g. private placement) (% of total)   | 85.5                                | 84.9                                | 94.2                                | 100.0   | 85.7  | 87.5         | 92.3    |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)  |                                     |                                     |                                     |   |       |              |         |
| Total primary market, of which:   | 48.0                                | 30.0                                | 54.0                                | 44.4  | 7.0   | 7.0          | 10.0    |
| - auction (% of total)  | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0   | 0.0          | 0.0     |
| <ul> <li>syndication (% of total)</li> </ul>  | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0   | 0.0          | 0.0     |
| - other (e.g. private placement) (% of total)   | 100.0                               | 100.0                               | 100.0                               | 100.0   | 100.0 | 100.0        | 100.0   |

Sources: Agencija za trg vrednostnih papirjev, Banka Slovenije.

#### **SLOVENIA**

#### Table 2B Secondary market activity

|   | Value o    | of transactions |       | Number | of transactions |       |
|---|------------|-----------------|-------|--------|-----------------|-------|
|   | Nominal va | lue in € millio | ns 1) | Num    | oer of issues   |       |
|   | 2001       | 2002            | 2003  | 2001   | 2002            | 2003  |
| Total economy   |            |                 |       |        |                 |       |
| Total secondary market, of which:<br>– regulated markets (Stock Exchange(s)   | 1.7        | 5.0             | 4.6   | 43.6   | 70.2            | 126.8 |
| and other regulated markets), % of total<br>– non-regulated markets (e.g. over-the-   | 61.4       | 39.6            | 48.3  | 92.1   | 89.7            | 93.5  |
| counter market (OTC)), % of total   | 38.6       | 60.4            | 51.7  | 7.9    | 10.3            | 6.5   |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314)<br>% of secondary market for total economy | 88.5       | 97.5            | 90.2  | 87.0   | 94.6            | 97.4  |
| Monetary financial institutions<br>(S.121+S.122)  |            |                 |       |        |                 |       |
| % of secondary market for total economy   | 9.3        | 1.9             | 7.0   | 9.4    | 4.1             | 1.8   |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)  |            |                 |       |        |                 |       |
| % of secondary market for total economy   | 2.2        | 0.6             | 2.8   | 3.6    | 1.3             | 0.7   |

#### 2. Long-term debt securities

| Ŭ,   |                                     | Value of t                          | ransactions                         |   | Number of transactions |            |       |  |
|--|-------------------------------------|-------------------------------------|-------------------------------------|---|------------------------|------------|-------|--|
|  |                                     | Nominal valu                        | e in € millions <sup>1</sup>        |   | Nu                     | mber of is | sues  |  |
|  | 2001                                | 2002                                | 20                                  | 03  | 2001                   | 2002       | 2003  |  |
|  | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | of which: %<br>denominated<br>in national<br>currency |                        |            |       |  |
| Total economy  |                                     |                                     |                                     |   |                        |            |       |  |
| Total secondary market, of which:  | 1.2                                 | 2.5                                 | 2.8                                 | 44.3  | 43.0                   | 67.6       | 120.6 |  |
| <ul> <li>regulated markets (Stock Exchange(s)<br/>and other regulated markets), % of total</li> <li>non-regulated markets (e.g. over-the-</li> </ul> | 77.5                                | 80.7                                | 78.9                                | 79.1  | 93.2                   | 93.0       | 98.3  |  |
| counter market (OTC)), % of total  | 22.5                                | 19.3                                | 21.1                                | 20.9  | 6.8                    | 7.0        | 1.7   |  |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314)<br>% of secondary market for total economy                        | 84.7                                | 94.8                                | 90.3                                | 89.9  | 86.8                   | 94.4       | 97.5  |  |
| Monetary financial institutions<br>(S.121+S.122)   |                                     |                                     |                                     |   |                        |            |       |  |
| % of secondary market for total economy  | 12.4                                | 4.0                                 | 7.1                                 | 6.5   | 9.6                    | 4.2        | 1.8   |  |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)   |                                     |                                     |                                     |   |                        |            |       |  |
| % of secondary market for total economy  | 3.0                                 | 1.2                                 | 2.7                                 | 3.7   | 3.7                    | 1.3        | 0.7   |  |

Sources: Ljubljanska borza vrednostnih papirjev, Agencija za trg vrednostnih papirjev, Banka Slovenije. Notes: Number of business days: 247 in 2001; 247 in 2002; 251 in 2003. Eurobonds issued by the Republic of Slovenia are excluded. 1) Market values are used.

Table | Market size Debt securities by original maturity, sector of the issuer and currency of denomination

| (December 2003; end-of-period stocks; nominal value) |
|--|
|--|

| Instrument type/currency  | Total amount outstanding |                            |           |                          |         |  |  |  |  |  |
|---|--------------------------|----------------------------|-----------|--------------------------|---------|--|--|--|--|--|
| of denomination   |                          | Money market<br>Short-term |           | Bond market<br>Long-term |         |  |  |  |  |  |
| Sector of the issuer  |                          | t ≤ 1                      | 1 < t < 5 | $5 \leq t < 10$          | t ≥ 10  |  |  |  |  |  |
|   |                          | € millions                 |           |                          |         |  |  |  |  |  |
| Central government (S.1311) and other general government (S.1312+S.1313+S.1314) | 9,724.4                  | 1,666.3                    | 2,135.6   | 3,667.5                  | 2,255.0 |  |  |  |  |  |
| Monetary financial institutions (S.121+S.122)                                   | 567.3                    | 0.0                        | 0.0       | 445.8                    | 121.5   |  |  |  |  |  |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)  | 700.4                    | 0.7                        | 109.3     | 471.5                    | 118.9   |  |  |  |  |  |
| Total   | 10,992.1                 | 1,667.0                    | 2,244.9   | 4,584.8                  | 2,495.4 |  |  |  |  |  |

Source: Národná banka Slovenska.

Note: Exchange rate used (end-of-period): SKK/€41.161.

#### SLOVAKIA

|          |                    |       |                       | Curre | ncy of den             | omination |                    |       |          |      |     |
|----------|--------------------|-------|-----------------------|-------|------------------------|-----------|--------------------|-------|----------|------|-----|
| Short-te | Short-term (t ≤ 1) |       | Long-term (1 < t < 5) |       | Long-term (5 ≤ t < 10) |           | Long-term (t ≥ 10) |       | 0)       |      |     |
| National | Euro               | Other | National              | Euro  | Other                  | National  | Euro               | Other | National | Euro | Oth |
|          |                    |       |                       | in    | percentag              | es (%)    |                    |       |          |      |     |
|          |                    |       |                       |       |                        |           |                    |       |          |      |     |
| 100.0    | 0.0                | 0.0   | 64.9                  | 35.1  | 0.0                    | 86.4      | 13.6               | 0.0   | 77.8     | 22.2 | (   |
| 0.0      | 0.0                | 0.0   | 0.0                   | 0.0   | 0.0                    | 100.0     | 0.0                | 0.0   | 100.0    | 0.0  | (   |
|          |                    |       |                       |       |                        |           |                    |       |          |      |     |
| 100.0    | 0.0                | 0.0   | 99.0                  | 1.0   | 0.0                    | 93.8      | 4.2                | 2.0   | 25.6     | 74.4 | (   |



### Table 2A Primary market activity

#### (yearly total)

| 1. All debt securities                        |         |                  |         |        |                 |       |
|---|---------|------------------|---------|--------|-----------------|-------|
|   | Value   | e of transaction | s       | Number | of transactions |       |
|   | Nominal | value in € mill  | ions    | Num    | ber of issues   |       |
|   | 2001    | 2002             | 2003    | 2001   | 2002            | 2003  |
| Total economy                                 |         |                  |         |        |                 |       |
| Total primary market, of which:               | 4,962.5 | 3,748.9          | 5,274.2 | 106.0  | 121.0           | 107.0 |
| - auction (% of total)                        | 48.7    | 96.4             | 81.1    | 50.0   | 47.1            | 34.6  |
| - syndication (% of total)                    | 0.0     | 0.0              | 0.0     | 0.0    | 0.0             | 0.0   |
| - other (e.g. private placement) (% of total) | 51.3    | 3.6              | 18.9    | 50.0   | 52.9            | 65.4  |
| Central government (S.1311) and other         |         |                  |         |        |                 |       |
| general government (S.1312+S.1313+S.1314)     |         |                  |         |        |                 |       |
| Total primary market, of which:               | 4,870.6 | 3,615.6          | 4,468.2 | 59.0   | 57.0            | 35.0  |
| <ul> <li>auction (% of total)</li> </ul>      | 49.6    | 100.0            | 93.3    | 89.8   | 100.0           | 97.1  |
| <ul> <li>syndication (% of total)</li> </ul>  | 0.0     | 0.0              | 0.0     | 0.0    | 0.0             | 0.0   |
| - other (e.g. private placement) (% of total) | 50.4    | 0.0              | 6.7     | 10.2   | 0.0             | 2.9   |
| Monetary financial institutions               |         |                  |         |        |                 |       |
| (S.121+S.122)                                 |         |                  |         |        |                 |       |
| Total primary market, of which:               | 30.4    | 36.0             | 456.7   | 2.0    | 2.0             | 13.0  |
| <ul> <li>auction (% of total)</li> </ul>      | 0.0     | 0.0              | 13.3    | 0.0    | 0.0             | 23.1  |
| <ul> <li>syndication (% of total)</li> </ul>  | 0.0     | 0.0              | 0.0     | 0.0    | 0.0             | 0.0   |
| - other (e.g. private placement) (% of total) | 100.0   | 100.0            | 86.7    | 100.0  | 100             | 76.9  |
| Non-financial and non-monetary financial      |         |                  |         |        |                 |       |
| corporations (S.123+S.124+S.125+S.11)         |         |                  |         |        |                 |       |
| Total primary market, of which:               | 61.5    | 97.3             | 349.3   | 45.0   | 62.0            | 59.0  |
| - auction (% of total)                        | 0.0     | 0.0              | 0.0     | 0.0    | 0.0             | 0.0   |
| - syndication (% of total)                    | 0.0     | 0.0              | 0.0     | 0.0    | 0.0             | 0.0   |
| - other (e.g. private placement) (% of total) | 100.0   | 100.0            | 100.0   | 100.0  | 100.0           | 100.0 |

#### 2. Long-term debt securities

| 2. Long-term debt securities  |                                     | Value of t                          | ransactions                         |   | Numbe | er of transa | ictions |
|---|-------------------------------------|-------------------------------------|-------------------------------------|---|-------|--------------|---------|
|   |                                     | Nominal valu                        | ie in € millions                    |   | Nur   | nber of iss  | ues     |
|   | 2001                                | 2002                                | 20                                  | 03  | 2001  | 2002         | 2003    |
|   | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | of which: %<br>denominated<br>in national<br>currency |       |              |         |
| Total economy   |                                     |                                     |                                     |   |       |              |         |
| Total primary market, of which:   | 3,310.6                             | 925.1                               | 3,607.9                             | 78.8  | 70.0  | 75.0         | 83.0    |
| - auction (% of total)  | 23.0                                | 85.6                                | 72.4                                | 74.3  | 24.3  | 14.7         | 15.7    |
| <ul> <li>syndication (% of total)</li> </ul>  | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0   | 0.0          | 0.0     |
| - other (e.g. private placement) (% of total)   | 77.0                                | 14.4                                | 27.6                                | 25.7  | 75.7  | 85.3         | 84.3    |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314)<br>Total primary market, of which: | 3,218.7                             | 791.8                               | 2,801.9                             | 73.2  | 23.0  | 11.0         | 11.0    |
| - auction (% of total)  | 23.7                                | 100.0                               | 91.1                                | 100.0   | 73.9  | 100.0        | 90.9    |
| <ul> <li>syndication (% of total)</li> </ul>  | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0   | 0.0          | 0.0     |
| - other (e.g. private placement) (% of total)   | 76.3                                | 0.0                                 | 8.9                                 | 0.0   | 26.1  | 0.0          | 9.1     |
| Monetary financial institutions<br>(S.121+S.122)  |                                     |                                     |                                     |   |       |              |         |
| Total primary market, of which:   | 30.4                                | 36.0                                | 456.7                               | 100.0   | 2.0   | 2.0          | 13.0    |
| - auction (% of total)  | 0.0                                 | 0.0                                 | 13.3                                | 13.3  | 0.0   | 0.0          | 23.1    |
| <ul> <li>syndication (% of total)</li> </ul>  | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0   | 0.0          | 0.0     |
| - other (e.g. private placement) (% of total)   | 100.0                               | 100.0                               | 86.7                                | 86.7  | 100.0 | 100.0        | 76.9    |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)  |                                     |                                     |                                     |   |       |              |         |
| Total primary market, of which:   | 61.5                                | 97.3                                | 349.3                               | 95.6  | 45.0  | 62.0         | 59.0    |
| - auction (% of total)  | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0   | 0.0          | 0.0     |
| <ul> <li>syndication (% of total)</li> </ul>  | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0   | 0.0          | 0.0     |
| - other (e.g. private placement) (% of total)   | 100.0                               | 100.0                               | 100.0                               | 100.0   | 100.0 | 100.0        | 100.0   |

Source: Národná banka Slovenska.

#### SLOVAKIA

### Table 2B Secondary market activity

| 1. All debt securities  | Value     | of transactions  |       | Number | of transactions |       |  |
|---|-----------|------------------|-------|--------|-----------------|-------|--|
|   | Nominal v | alue in € millio | ons   | Num    | ber of issues   |       |  |
|   | 2001      | 2002             | 2003  | 2001   | 2002            | 2003  |  |
| Total economy   |           |                  |       |        |                 |       |  |
| Total secondary market, of which:<br>– regulated markets (Stock Exchange(s)   | 31.9      | 55.9             | 102.3 | 7.2    | 9.8             | 13.0  |  |
| and other regulated markets), % of total<br>– non-regulated markets (e.g. over-the-   | 100.0     | 100.0            | 100.0 | 100.0  | 100.0           | 100.0 |  |
| counter market (OTC)), % of total   | 0.0       | 0.0              | 0.0   | 0.0    | 0.0             | 0.0   |  |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314)<br>% of secondary market for total economy | 96.9      | 97.4             | 98.0  | 73.5   | 76.2            | 77.6  |  |
| Monetary financial institutions<br>(S.121+S.122)  |           |                  |       |        |                 |       |  |
| % of secondary market for total economy   | 1.3       | 1.0              | 1.2   | 4.7    | 7.2             | 6.9   |  |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)  |           |                  |       |        |                 |       |  |
| % of secondary market for total economy   | 1.8       | 1.6              | 0.8   | 21.7   | 16.6            | 15.5  |  |

#### 2. Long-term debt securities

|   |                                     | Value of t                          |                                     | Number of transactions                                |       |             |       |
|---|-------------------------------------|-------------------------------------|-------------------------------------|---|-------|-------------|-------|
|   |                                     | Nominal valu                        | ie in € millions                    |   | Nu    | mber of iss | sues  |
|   | 2001                                | 2002                                | 20                                  | 03  | 2001  | 2002        | 2003  |
|   | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | of which: %<br>denominated<br>in national<br>currency |       |             |       |
| Total economy   |                                     |                                     |                                     |   |       |             |       |
| Total secondary market, of which:<br>– regulated markets (Stock Exchange(s)   | 30.5                                | 47.9                                | 95.6                                | 100.0   | 6.9   | 9.0         | 11.4  |
| and other regulated markets), % of total<br>– non-regulated markets (e.g. over-the-   | 100.0                               | 100.0                               | 100.0                               | 100.0   | 100.0 | 100.0       | 100.0 |
| counter market (OTC)), % of total   | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0   | 0.0         | 0.0   |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314)<br>% of secondary market for total economy | 96.8                                | 96.9                                | 97.9                                | 33.4  | 72.5  | 74.0        | 74.5  |
| Monetary financial institutions<br>(S.121+S.122)  |                                     |                                     |                                     |   |       |             |       |
| % of secondary market for total economy   | 1.4                                 | 1.2                                 | 1.3                                 | 33.4  | 4.9   | 7.9         | 7.8   |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)  |                                     |                                     |                                     |   |       |             |       |
| % of secondary market for total economy   | 1.9                                 | 1.9                                 | 0.8                                 | 33.1  | 22.6  | 18.1        | 17.7  |

Source:Burza cenných papierov v Bratislave. Note: Number of business days: 243 in 2001; 243 in 2002; 243 in 2003.

Table | Market size Debt securities by original maturity, sector of the issuer and currency of denomination

(December 2003; end-of-period stocks; nominal value)

| Instrument type/currency  | Total amount outst | Total amount outstanding   |                       |                 |        |  |  |  |  |  |
|---|--------------------|----------------------------|-----------------------|-----------------|--------|--|--|--|--|--|
| of denomination   |                    | Money market<br>Short-term |                       |                 |        |  |  |  |  |  |
| Sector of the issuer  |                    | t ≤ 1                      | $1 \le t \le 5^{(1)}$ | $5 \leq t < 10$ | t ≥ 10 |  |  |  |  |  |
|   |                    |                            | € millions            |                 |        |  |  |  |  |  |
| Central government (S.1311) and other general government (S.1312+S.1313+S.1314) | 127,000.0          | 30,000.0                   | 97,000.0              |                 |        |  |  |  |  |  |
| Monetary financial institutions (S.121+S.122)                                   | 141,000.0          | 41,000.0                   | 100,000.0             |                 |        |  |  |  |  |  |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)  | 19,000.0           | 6,000.0                    | 13,000.0              |                 |        |  |  |  |  |  |
| Total   | 287,000.0          | 77,000.0                   | 210,000.0             |                 |        |  |  |  |  |  |

Source: Sveriges Riksbank.

Notes: Exchange rate used (end-of-period): 9.11.

1) Total amount outstanding for all three sectors refer to debt securities with an original maturity of more than one year (t > 1).

#### SWEDEN

|          |             |       |          | Сигго      | nev of den | omination |               |       |          |           |    |
|----------|-------------|-------|----------|------------|------------|-----------|---------------|-------|----------|-----------|----|
| Short-te | erm (t ≤ 1) |       | Long-te  | erm (1 < t |            |           | term (5 ≤ t · | < 10) | Long-    | term (t≥1 | 0) |
| National | Euro        | Other | National | Euro       | Other      | National  | Euro          | Other | National | Euro      | 0  |
|          |             |       |          | in         | percentag  | ges (%)   |               |       |          |           |    |
|          |             |       |          |            |            |           |               |       |          |           |    |
| 100.0    | 0.0         | 0.0   | 81.0     | 9.0        | 10.0       |           |               |       |          |           |    |
| 43.0     | 26.0        | 31.0  | 70.0     | 8.0        | 22.0       |           |               |       |          |           |    |
|          |             |       |          |            |            |           |               |       |          |           |    |



### Table 2A Primary market activity

#### (yearly total)

| ١. | All  | debt | securities |
|----|------|------|------------|
| π. | 1211 | ucou | sccurities |

|   | Value o   | of transactions  |      | Number | of transactions |      |
|---|-----------|------------------|------|--------|-----------------|------|
|   | Nominal v | alue in € millio | ns   | Numb   | oer of issues   |      |
|   | 2001      | 2002             | 2003 | 2001   | 2002            | 2003 |
| Total economy                                 |           |                  |      |        |                 |      |
| Total primary market, of which:               |           |                  |      |        |                 |      |
| - auction (% of total)                        |           |                  |      |        |                 |      |
| - syndication (% of total)                    |           |                  |      |        |                 |      |
| - other (e.g. private placement) (% of total) |           |                  |      |        |                 |      |
| Central government (S.1311) and other         |           |                  |      |        |                 |      |
| general government (S.1312+S.1313+S.1314)     |           |                  |      |        |                 |      |
| Total primary market, of which:               |           |                  |      |        |                 |      |
| - auction (% of total)                        |           |                  |      |        |                 |      |
| - syndication (% of total)                    | •         |                  | •    |        |                 |      |
| - other (e.g. private placement) (% of total) |           |                  |      |        |                 |      |
| Monetary financial institutions               |           |                  |      |        |                 |      |
| (S.121+S.122)                                 |           |                  |      |        |                 |      |
| Total primary market, of which:               |           |                  |      |        |                 |      |
| - auction (% of total)                        | •         |                  | •    |        |                 |      |
| - syndication (% of total)                    |           |                  |      |        |                 |      |
| - other (e.g. private placement) (% of total) |           |                  |      |        |                 |      |
| Non-financial and non-monetary financial      |           |                  |      |        |                 |      |
| corporations (S.123+S.124+S.125+S.11)         |           |                  |      |        |                 |      |
| Total primary market, of which:               |           |                  |      |        |                 |      |
| - auction (% of total)                        |           |                  | •    |        |                 |      |
| - syndication (% of total)                    |           |                  |      |        |                 |      |
| - other (e.g. private placement) (% of total) |           |                  |      |        |                 |      |

#### 2. Long-term debt securities

| 2. Long-term debt securities   |                                     | Value of t                          | ransactions                         |   | Numbe | r of transa | ctions |
|--|-------------------------------------|-------------------------------------|-------------------------------------|---|-------|-------------|--------|
|  |                                     | Nominal valu                        | ie in € millions                    |   | Nun   | nber of iss | ues    |
|  | 2001                                | 2002                                | 20                                  | 03  | 2001  | 2002        | 2003   |
|  | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | of which: %<br>denominated<br>in national<br>currency |       |             |        |
| Total economy  |                                     |                                     |                                     |   |       |             |        |
| Total primary market, of which:  | 40,938.0                            | 52,134.0                            | 58,899.0                            |   |       |             |        |
| - auction (% of total)   |                                     |                                     |                                     |   |       |             |        |
| - syndication (% of total)   |                                     |                                     |                                     | •   | •     | •           | •      |
| - other (e.g. private placement) (% of total)                                      |                                     |                                     | •                                   | •   |       |             | •      |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314) |                                     |                                     |                                     |   |       |             |        |
| Total primary market, of which:  | 12,068.0                            | 17,428.0                            | 15,482.0                            | 76.0  |       |             |        |
| - auction (% of total)   | 100.0                               | 100.0                               | 100.0                               | 100.0   |       |             |        |
| - syndication (% of total)   | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   |       |             |        |
| - other (e.g. private placement) (% of total)                                      | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   |       |             | •      |
| Monetary financial institutions<br>(S.121+S.122)                                   |                                     |                                     |                                     |   |       |             |        |
| Total primary market, of which:  | 25,698.0                            | 30,077.0                            | 40,704.0                            |   |       |             |        |
| - auction (% of total)   |                                     |                                     |                                     |   |       |             |        |
| - syndication (% of total)   |                                     |                                     |                                     |   | •     | •           | •      |
| - other (e.g. private placement) (% of total)                                      |                                     |                                     |                                     | •   | •     | •           | •      |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)     |                                     |                                     |                                     |   |       |             |        |
| Total primary market, of which:  | 3,172.0                             | 4,629.0                             | 2,713.0                             |   |       |             |        |
| - auction (% of total)   |                                     |                                     |                                     |   |       |             |        |
| - syndication (% of total)   |                                     |                                     |                                     |   |       |             |        |
| - other (e.g. private placement) (% of total)                                      |                                     |                                     |                                     |   |       |             |        |

Source: Sveriges Riksbank.

#### SWEDEN

### Table 2B Secondary market activity

|  | Value    | of transaction  | s        | Number | of transactions |      |
|--|----------|-----------------|----------|--------|-----------------|------|
|  | Nominal  | value in € mill | ions     | Numb   |                 |      |
|  | 2001     | 2002            | 2003     | 2001   | 2002            | 2003 |
| Total economy  |          |                 |          |        |                 |      |
| Total secondary market, of which:<br>– regulated markets (Stock Exchange(s)  | 4,444.0  | 4,263.0         | 4,729.0  |        |                 |      |
| and other regulated markets), % of total<br>– non-regulated markets (e.g. over-the-<br>counter market (OTC)), % of total | ·        |                 |          | ·      | •               |      |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314)                                       |          | 74.0 (a)        | 70.0 (a) | ·      | ·               |      |
| % of secondary market for total economy<br>Monetary financial institutions<br>(S.121+S.122)                              | 78.0 (e) | 74.0 (e)        | 70.0 (e) | ·      | ·               |      |
| % of secondary market for total economy  | 22.0 (e) | 26.0 (e)        | 30.0 (e) |        |                 |      |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)   |          |                 |          |        |                 |      |
| % of secondary market for total economy  | 0.0 (e)  | 0.0 (e)         | 0.0 (e)  |        |                 |      |

#### 2. Long-term debt securities

|   |                                     | Value of t                          | ransactions                         |   | Numbe | r of transa | ictions |
|---|-------------------------------------|-------------------------------------|-------------------------------------|---|-------|-------------|---------|
|   |                                     | Nominal valu                        | ie in € millions                    |   | Nur   | nber of iss | ues     |
|   | 2001                                | 2002                                | 20                                  | 03  | 2001  | 2002        | 2003    |
|   | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | of which: %<br>denominated<br>in national<br>currency |       |             |         |
| Total economy   |                                     |                                     |                                     |   |       |             |         |
| Total secondary market, of which:<br>– regulated markets (Stock Exchange(s)   | 3,175.0                             | 2,882.0                             | 3,191.0                             |   |       |             |         |
| and other regulated markets), % of total<br>– non-regulated markets (e.g. over-the-<br>counter market (OTC)), % of total      | •                                   |                                     | •                                   | •   | •     | •           | •       |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314)<br>% of secondary market for total economy | 74.0 (e)                            | 75.0 (e)                            | 67.0 (e)                            |   |       |             |         |
| Monetary financial institutions<br>(S.121+S.122)  |                                     |                                     |                                     |   |       |             |         |
| % of secondary market for total economy   | 26.0 (e)                            | 25.0 (e)                            | 33.0 (e)                            | •   |       |             |         |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)  |                                     | 0.0()                               |                                     |   |       |             |         |
| % of secondary market for total economy   | 0.0 (e)                             | 0.0 (e)                             | 0.0 (e)                             | •   | •     | •           |         |

Source: Sveriges Riksbank. Note: "(e)" (estimates): The sector breakdown was estimated.



Table I Market size Debt securities by original maturity, sector of the issuer and currency of denomination

| Instrument type/currency  | Total amount outst | anding                     |                       |                          |           |  |
|---|--------------------|----------------------------|-----------------------|--------------------------|-----------|--|
| of denomination   |                    | Money market<br>Short-term |                       | Bond market<br>Long-term |           |  |
| Sector of the issuer  |                    | t ≤ 1                      | $1 \le t \le 5^{(1)}$ | $5 \leq t < 10$          | t ≥ 10    |  |
|   |                    |                            | € millions            |                          |           |  |
| Central government (S.1311) and other general government (S.1312+S.1313+S.1314) | 468,228.6          | 27,571.4                   | 192,542.9             | 128,500.0                | 119,614.3 |  |
| Monetary financial institutions (S.121+S.122)                                   | 856,346.8          |                            |                       |                          |           |  |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)  | 174,426.2          |                            |                       |                          |           |  |
| Total   | 1,499,001.6        |                            |                       |                          |           |  |

#### UNITED KINGDOM

|          |             |       | -        |           | ency of den |          |                  | 1.02  | -        |                  |     |
|----------|-------------|-------|----------|-----------|-------------|----------|------------------|-------|----------|------------------|-----|
| Short-t  | erm (t ≤ 1) |       | Long-    | term (1 < | t < 5)      | Long-    | term ( $5 \le t$ | < 10) | Long-    | term ( $t \ge 1$ | 10) |
| National | Euro        | Other | National | Euro      | Other       | National | Euro             | Other | National | Euro             | Ot  |
|          |             |       |          | in        | percentag   | es (%)   |                  |       |          |                  |     |
|          |             |       |          |           |             |          |                  |       |          |                  |     |
| 100.0    |             |       | 100.0    |           |             | 100.0    |                  |       | 100.0    |                  |     |
|          |             |       |          |           |             |          |                  |       |          |                  |     |
|          |             |       |          |           |             |          |                  |       |          |                  |     |
|          |             |       |          |           |             |          |                  |       |          |                  |     |



#### Table 2A Primary market activity

#### (yearly total)

| 1. All debt securities   | Valu     | e of transaction  |          | Number | of transactions |       |
|--|----------|-------------------|----------|--------|-----------------|-------|
|  |          | l value in € mill |          |        | of transactions |       |
| _  | 2001     | 2002              | 2003     | 2001   | 2002            | 2003  |
| Total economy  |          |                   |          |        |                 |       |
| Total primary market, of which:  |          |                   |          |        |                 |       |
| - auction (% of total)   |          |                   |          |        |                 |       |
| - syndication (% of total)   |          |                   | •        |        |                 | •     |
| - other (e.g. private placement) (% of total)                                      |          |                   | •        |        | •               |       |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314) |          |                   |          |        |                 |       |
| Total primary market, of which:  | 16,892.9 | 35,214.3          | 68,107.1 | 8.0    | 13.0            | 24.0  |
| - auction (% of total)   | 100.0    | 100.0             | 100.0    | 100.0  | 100.0           | 100.0 |
| <ul> <li>syndication (% of total)</li> </ul>                                       |          |                   |          |        |                 |       |
| - other (e.g. private placement) (% of total)                                      |          |                   |          |        |                 |       |
| Monetary financial institutions<br>(S.121+S.122)                                   |          |                   |          |        |                 |       |
| Total primary market, of which:  |          |                   |          |        |                 |       |
| - auction (% of total)   |          |                   |          |        |                 |       |
| - syndication (% of total)   |          |                   |          |        |                 |       |
| - other (e.g. private placement) (% of total)                                      |          |                   |          |        |                 |       |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)     |          |                   |          |        |                 |       |
| Total primary market, of which:  |          |                   |          |        |                 |       |
| - auction (% of total)   |          |                   |          |        |                 |       |
| - syndication (% of total)   |          |                   |          |        |                 |       |
| - other (e.g. private placement) (% of total)                                      |          |                   |          |        |                 |       |

#### 2. Long-term debt securities

| 2. Long-term debt securities   |                                     | Value of t                          | ransactions                         |   | Numbe        | er of transa  | ictions       |
|--|-------------------------------------|-------------------------------------|-------------------------------------|---|--------------|---------------|---------------|
|  |                                     | Nominal valu                        | ie in € millions                    |   | Nur          | nber of iss   | ues           |
|  | 2001                                | 2002                                | 20                                  | 03  | 2001         | 2002          | 2003          |
|  | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | of which: %<br>denominated<br>in national<br>currency |              |               |               |
| Total economy  |                                     |                                     |                                     |   |              |               |               |
| Total primary market, of which:  | 195,170.0                           | 223,951.4                           | 306,550.0                           |   |              |               |               |
| <ul> <li>– auction (% of total)</li> <li>– syndication (% of total)</li> </ul>   | •                                   | •                                   | •                                   | •   | •            | •             | •             |
| - other (e.g. private placement) (% of total)  | •                                   | •                                   | •                                   | •   | •            | •             | •             |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314)<br>Total primary market, of which:<br>– auction (% of total)<br>– syndication (% of total)<br>– other (e.g. private placement) (% of total) | 16,892.9<br>100.0                   | 35,214.3<br>100.0                   | 68,107.1<br>100.0                   | 100.0<br>100.0  | 8.0<br>100.0 | 13.0<br>100.0 | 24.0<br>100.0 |
| Monetary financial institutions  |                                     |                                     |                                     |   |              |               |               |
| (S.121+S.122)<br>Total primary market, of which:<br>- auction (% of total)<br>- syndication (% of total)<br>- other (e.g. private placement) (% of total)  | 70,037.1                            | 84,738.6                            | 102,890.0                           |   |              |               |               |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)   |                                     |                                     |                                     |   |              |               |               |
| Total primary market, of which:  | 108,240.0                           | 103,998.6                           | 135,552.9                           |   |              |               |               |
| - auction (% of total)   |                                     |                                     |                                     |   |              |               | •             |
| <ul> <li>syndication (% of total)</li> <li>other (e.g. private placement) (% of total)</li> </ul>  | •                                   | •                                   | •                                   | •   | •            | •             | •             |

Source: Bank of England estimates/UK Debt Management Office.

#### UNITED KINGDOM

### Table 2B Secondary market activity

| (daily averages)   |             |                  |             |        |                 |      |
|--|-------------|------------------|-------------|--------|-----------------|------|
| 1. All debt securities   | Val         | ue of transactio |             | Number | of transactions |      |
|  |             | al value in € mi |             |        | ber of issues   |      |
|  | 2001        | 2002             | 2003        | 2001   | 2002            | 2003 |
|  | 2001        | 2002             | 2003        | 2001   | 2002            | 2003 |
| <b>Total economy</b><br>Total secondary market, of which:<br>– regulated markets (Stock Exchange(s)                      | 8,281,758.6 | 7,118,898.6      | 6,262,114.3 |        |                 |      |
| and other regulated markets), % of total<br>– non-regulated markets (e.g. over-the-<br>counter market (OTC)), % of total | 100.0       | 100.0            | 100.0       | •      |                 | •    |
| Central government (S.1311) and other  |             |                  |             |        |                 |      |
| general government (S.1312+S.1313+S.1314)  | 2,899,744.3 | 3,083,561.4      | 3,647,080.0 |        |                 |      |
| % of secondary market for total economy  | 35.0        | 43.3             | 58.2        |        |                 |      |
| Monetary financial institutions<br>(S.121+S.122)<br>% of secondary market for total economy                              |             |                  |             |        |                 |      |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)   |             |                  |             |        |                 |      |
| % of secondary market for total economy  |             |                  |             |        | •               |      |

#### 2. Long-term debt securities

|   |                                     | Value of t                          | ransactions                         |   | Number of transactions |             |      |  |
|---|-------------------------------------|-------------------------------------|-------------------------------------|---|------------------------|-------------|------|--|
|   |                                     | Nominal valu                        | ie in € millions                    |   | Nun                    | ıber of iss | ues  |  |
|   | 2001                                | 2002                                | 20                                  | 03  | 2001                   | 2002        | 2003 |  |
|   | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | of which: %<br>denominated<br>in national<br>currency |                        |             |      |  |
| Total economy   |                                     |                                     |                                     |   |                        |             |      |  |
| Total secondary market, of which:<br>– regulated markets (Stock Exchange(s)   | 8,281,758.6                         | 7,118,898.6                         | 6,262,114.3                         |   | ·                      | ·           | ·    |  |
| and other regulated markets), % of total<br>– non-regulated markets (e.g. over-the-<br>counter market (OTC)), % of total      | 100.0                               | 100.0                               | 100.0                               |   |                        |             | •    |  |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314)<br>% of secondary market for total economy | 2,899,744.3<br>35.0                 | 3,083,561.4<br>43.3                 | 3,647,080.0<br>58.2                 |   |                        |             |      |  |
| Monetary financial institutions<br>(S.121+S.122)<br>% of secondary market for total economy                                   |                                     |                                     |                                     |   |                        |             |      |  |
| Non-financial and non-monetary financial<br>corporations (S.123+S.124+S.125+S.11)<br>% of secondary market for total economy  |                                     |                                     |                                     |   |                        |             |      |  |

Source: London Stock Exchange.



### **2** ACCESSION COUNTRIES

| (December 2003; end-of-period stocks; nominal value | )                  |                            |            |                 |         |
|---|--------------------|----------------------------|------------|-----------------|---------|
| Instrument type/currency                            | Total amount outst | anding                     |            |                 |         |
| of denomination                                     |                    | Money market<br>Short-term |            |                 |         |
| Sector of the issuer                                |                    | t ≤ 1                      | 1 < t < 5  | $5 \leq t < 10$ | t ≥ 10  |
|   |                    |                            | € millions |                 |         |
| Central government (S.1311) and other general       |                    |                            |            |                 |         |
| government (S.1312+S.1313+S.1314)                   | 5,140.7            | 37.9                       | 142.4      | 843.9           | 4,116.5 |
| Monetary financial institutions (S.121+S.122)       | 96.6               | 0.0                        | 81.6       | 15.0            | 0.0     |
| Non-financial and non-monetary financial            |                    |                            |            |                 |         |
| corporations (S.123+S.124+S.125+S.11)               | 31.9               | 0.0                        | 8.9        | 23.0            | 0.0     |
| Total   | 5,269.2            | 37.9                       | 232.9      | 881.9           | 4,116.5 |

Sources: Bulgarian National Bank, Ministry of Finance and Central Depositary. Note: Exchange rate used (end-of-period): €/BGN 1.95583; €/USD 1.2630; USD/BGN 1.548560

#### BULGARIA

|          |                          |       |          | Curren                | icy of den | omination |                                     |       |          |                          |      |  |
|----------|--------------------------|-------|----------|-----------------------|------------|-----------|-------------------------------------|-------|----------|--------------------------|------|--|
| Short-te | Short-term ( $t \le 1$ ) |       |          | Long-term (1 < t < 5) |            |           | <b>Long-term</b> ( $5 \le t < 10$ ) |       |          | Long-term ( $t \ge 10$ ) |      |  |
| National | Euro                     | Other | National | Euro                  | Other      | National  | Euro                                | Other | National | Euro                     | Othe |  |
|          |                          |       |          | in                    | percentag  | es (%)    |                                     |       |          |                          |      |  |
|          |                          |       |          |                       |            |           |                                     |       |          |                          |      |  |
| 100.0    | 0.0                      | 0.0   | 97.9     | 2.1                   | 0.0        | 57.9      | 42.1                                | 0.0   | 2.4      | 24.1                     | 73.  |  |
| 0.0      | 0.0                      | 0.0   | 25.3     | 37.7                  | 37.0       | 0.0       | 100.0                               | 0.0   | 0.0      | 0.0                      | 0    |  |
|          |                          |       |          |                       |            |           |                                     |       |          |                          |      |  |
| 0.0      | 0.0                      | 0.0   | 58.0     | 42.0                  | 0.0        | 78.3      | 21.7                                | 0.0   | 0.0      | 0.0                      | 0    |  |



#### Table 2A Primary market activity

#### (yearly total)

| 1. All deb | t securities |
|------------|--------------|
|------------|--------------|

| 1. All debt securities   | Value   | of transactions   |       | Number | of transactions |       |
|--|---------|-------------------|-------|--------|-----------------|-------|
|  | Nominal | value in € millio | ons   | Numl   | per of issues   |       |
|  | 2001    | 2002              | 2003  | 2001   | 2002            | 2003  |
| Total economy  |         |                   |       |        |                 |       |
| Total primary market, of which:  | 680.0   | 2,557.4           | 556.9 | 68.0   | 64.0            | 62.0  |
| - auction (% of total)   | 96.2    | 98.8              | 78.8  | 55.9   | 45.3            | 37.1  |
| - syndication (% of total)   | 0.0     | 0.0               | 0.0   | 0.0    | 0.0             | 0.0   |
| - other (e.g. private placement) (% of total)                                      | 3.8     | 1.2               | 21.2  | 44.1   | 54.7            | 62.9  |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314) |         |                   |       |        |                 |       |
| Total primary market, of which:  | 661.6   | 2,532.0           | 453.9 | 63.0   | 54.0            | 48.0  |
| - auction (% of total)   | 98.9    | 99.6              | 96.6  | 60.3   | 51.9            | 47.9  |
| - syndication (% of total)   | 0.0     | 0.0               | 0.0   | 0.0    | 0.0             | 0.0   |
| - other (e.g. private placement) (% of total)                                      | 1.1     | 0.4               | 3.4   | 39.7   | 48.2            | 52.1  |
| Monetary financial institutions<br>(S.121+S.122)                                   |         |                   |       |        |                 |       |
| Total primary market, of which:  | 8.2     | 21.0              | 72.3  | 2.0    | 5.0             | 8.0   |
| - auction (% of total)   | 0.0     | 28.5              | 0.0   | 0.0    | 20.0            | 0.0   |
| - syndication (% of total)   | 0.0     | 0.0               | 0.0   | 0.0    | 0.0             | 0.0   |
| - other (e.g. private placement) (% of total)                                      | 100.0   | 71.5              | 100.0 | 100.0  | 80.0            | 100.0 |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11) (e) |         |                   |       |        |                 |       |
| Total primary market, of which:  | 10.2    | 4.4               | 30.7  | 3.0    | 5.0             | 6.0   |
| - auction (% of total)   | 0.0     | 0.0               | 0.0   | 0.0    | 0.0             | 0.0   |
| - syndication (% of total)   | 0.0     | 0.0               | 0.0   | 0.0    | 0.0             | 0.0   |
| - other (e.g. private placement) (% of total)                                      | 100.0   | 100.0             | 100.0 | 100.0  | 100.0           | 100.0 |

#### 2. Long-term debt securities

| 2. Long-term debt securities  |                                     | Value of t                          | ransactions                         |   | Numbe        | er of transa | ctions       |
|---|-------------------------------------|-------------------------------------|-------------------------------------|---|--------------|--------------|--------------|
|   |                                     | Nominal valu                        | e in € millions                     |   | Nur          | nber of iss  | ues          |
|   | 2001                                | 2002                                | 20                                  | 03  | 2001         | 2002         | 2003         |
|   | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | of which: %<br>denominated<br>in national<br>currency |              |              |              |
| Total economy   |                                     |                                     |                                     |   |              |              |              |
| Total primary market, of which:   | 506.2                               | 2,439.8                             | 463.8                               | 56.7  | 37.0         | 46.0         | 48.0         |
| - auction (% of total)  | 96.9                                | 98.9                                | 74.5                                | 83.9  | 27.0         | 28.3         | 18.8         |
| <ul> <li>syndication (% of total)</li> </ul>  | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0          | 0.0          | 0.0          |
| - other (e.g. private placement) (% of total)   | 3.1                                 | 1.1                                 | 25.5                                | 16.1  | 73.0         | 71.7         | 81.3         |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314)<br>Total primary market, of which: | 498.0                               | 2,417.7                             | 360.8                               | 65.4  | 35.0         | 38.0         | 34.0         |
| - auction (% of total)  | 498.0                               | 2,417.7                             | 360.8<br>95.8                       | 65.4<br>93.5  | 35.0<br>28.6 | 38.0<br>31.6 | 34.0<br>26.5 |
| - syndication (% of total)  | 98.5                                | 99.0                                | 95.8                                | 93.3  | 28.0         | 0.0          | 20.3         |
| - other (e.g. private placement) (% of total)   | 1.5                                 | 0.0                                 | 4.2                                 | 6.5   | 71.4         | 68.4         | 73.5         |
| Monetary financial institutions<br>(S.121+S.122)  | 1.5                                 | 0.4                                 | 7.2                                 | 0.5   | /1.4         | 00.4         | 13.5         |
| Total primary market, of which:   | 8.2                                 | 21.0                                | 72.3                                | 7.1   | 2.0          | 5.0          | 8.0          |
| - auction (% of total)  | 0.0                                 | 28.5                                | 0.0                                 | 0.0   | 0.0          | 20.0         | 0.0          |
| <ul> <li>syndication (% of total)</li> </ul>  | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0          | 0.0          | 0.0          |
| - other (e.g. private placement) (% of total)   | 100.0                               | 71.5                                | 100.0                               | 100.0   | 100.0        | 80.0         | 100.0        |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)  |                                     |                                     |                                     |   |              |              |              |
| Total primary market, of which:   | 0.0                                 | 1.1                                 | 30.7                                | 71.5  | 0.0          | 3.0          | 6.0          |
| - auction (% of total)  | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0          | 0.0          | 0.0          |
| <ul> <li>syndication (% of total)</li> </ul>  | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0          | 0.0          | 0.0          |
| - other (e.g. private placement) (% of total)   | 0.0                                 | 100.0                               | 100.0                               | 100.0   | 0.0          | 100.0        | 100.0        |

Sources: Bulgarian National Bank, Ministry of Finance and Central Depositary.

Notes: "e" (estimates) for value of transactions (nominal value in € millions) 10.2 in 2001; 3.0 in 2002. Estimates for number of transactions (number of issues) 3.0 in 2001; 1.0 in 2002.

#### BULGARIA

#### Table 2B Secondary market activity

|   | Value o   | of transactions  |      | Number | of transactions |      |
|---|-----------|------------------|------|--------|-----------------|------|
|   | Nominal v | alue in € millio | ns   | Numb   |                 |      |
|   | 2001      | 2002             | 2003 | 2001   | 2002            | 2003 |
| Total economy   |           |                  |      |        |                 |      |
| Total secondary market, of which:<br>– regulated markets (Stock Exchange(s)   | 16.5      | 14.4             | 19.0 | 34.2   | 32.6            | 39.5 |
| and other regulated markets), % of total<br>– non-regulated markets (e.g. over-the-   |           | 0.3              | 0.7  | 0.3    | 2.5             | 4.6  |
| counter market (OTC)), % of total   | 100.0     | 99.7             | 99.3 | 99.7   | 97.5            | 95.4 |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314)<br>% of secondary market for total economy | 99.4      | 99.7             | 98.1 | 99.4   | 97.5            | 92.4 |
| Monetary financial institutions<br>(S.121+S.122)  |           |                  |      |        |                 |      |
| % of secondary market for total economy   |           | 0.3              | 1.4  |        | 2.5             | 4.6  |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11 )(e)  |           |                  |      |        |                 |      |
| % of secondary market for total economy   | 0.6       |                  | 0.5  | 0.6    |                 | 3.0  |

#### 2. Long-term debt securities

| 0  |                                     | Value of t                          | ransactions                         |   | Number of transactions |             |      |  |
|--|-------------------------------------|-------------------------------------|-------------------------------------|---|------------------------|-------------|------|--|
|  |                                     | Nominal valu                        | ie in € millions                    |   | Nur                    | nber of iss | ues  |  |
|  | 2001                                | 2002                                | 20                                  | 2003  |                        | 2002        | 2003 |  |
|  | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | of which: %<br>denominated<br>in national<br>currency |                        |             |      |  |
| Total economy  |                                     |                                     |                                     |   |                        |             |      |  |
| Total secondary market, of which:  | 14.7                                | 13.6                                | 18.1                                | 72.1  | 29.3                   | 30.0        | 37.6 |  |
| <ul> <li>regulated markets (Stock Exchange(s)<br/>and other regulated markets), % of total</li> <li>non-regulated markets (e.g. over-the-</li> </ul> |                                     | 0.3                                 | 0.8                                 | 0.6   | 0.3                    | 2.7         | 4.8  |  |
| counter market (OTC)), % of total  | 100.0                               | 99.7                                | 99.3                                | 99.4  | 99.7                   | 97.3        | 95.2 |  |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314)<br>% of secondary market for total economy                        | 100.0                               | 99.7                                | 98.0                                | 99.1  | 99.7                   | 97.3        | 92.0 |  |
| Monetary financial institutions<br>(S.121+S.122)   |                                     | 0.2                                 | 1.5                                 | 0.4   | 0.0                    | 2.7         | 4.0  |  |
| % of secondary market for total economy  |                                     | 0.3                                 | 1.5                                 | 0.4   | 0.0                    | 2.7         | 4.8  |  |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)   |                                     |                                     |                                     |   |                        |             |      |  |
| % of secondary market for total economy  |                                     |                                     | 0.5                                 | 0.5   | 0.3                    |             | 3.1  |  |

Sources: Fiscal Services Department, Bank Policy Directorate – Bulgarian National Bank, Ministry of Finance and Central Depository. Notes: Number of business days: 253 in 2001; 253 in 2002; 252 in 2003. "e" (estimates) for value of transactions (nominal value in € millions): 0.1 in 2001; 0.01 in 2002. Estimates for number of transactions (number of issues): 0.1 in 2001; ... in 2002.

Table | Market size Debt securities by original maturity, sector of the issuer and currency of denomination

| Instrument type/currency  | Total amount outst | tanding                    |            |                 |        |
|---|--------------------|----------------------------|------------|-----------------|--------|
| of denomination   |                    | Money market<br>Short-term |            |                 |        |
| Sector of the issuer  |                    | t ≤ 1                      | 1 < t < 5  | $5 \leq t < 10$ | t ≥ 10 |
|   |                    |                            | € millions |                 |        |
| Central government (S.1311) and other general government (S.1312+S.1313+S.1314) | 4,993.0            | 2,002.0                    | 676.0      | 1,613.0         | 702.0  |
| Monetary financial institutions (S.121+S.122)                                   | 0.0                | 0.0                        | 0.0        | 0.0             | 0.0    |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)  | -                  | -                          | -          | -               | -      |
| Total   | 4,993.0            | 2,002.0                    | 676.0      | 1,613.0         | 702.0  |

Source: Banca Națională a României, Ministerul Finanțelor Publice. Note: Exchange rate used (end-of-period): ROL/€ 40,994.



#### ROMANIA

|          |            |       |          | Curre    | ncy of den | omination |            |       |          |             |      |
|----------|------------|-------|----------|----------|------------|-----------|------------|-------|----------|-------------|------|
| Short-te | rm (t ≤ 1) |       | Long-t   | erm (1 < | t < 5)     | Long-te   | erm (5 ≤ t | < 10) | Long-    | term (t ≥ 1 | 0)   |
| National | Euro       | Other | National | Euro     | Other      | National  | Euro       | Other | National | Euro        | Othe |
|          |            |       |          | in       | percentag  | es (%)    |            |       |          |             |      |
| 97.0     | 3.0        | 0.0   | 56.0     | 0.0      | 44.0       | 1.0       | 99.0       | 0.0   | 0.3      | 99.7        | 0.   |
| 0.0      | 0.0        | 0.0   | 0.0      | 0.0      | 0.0        | 0.0       | 0.0        | 0.0   | 0.0      | 0.0         | 0.   |
| _        | _          |       | _        |          |            |           |            |       |          | _           |      |



#### Table 2A Primary market activity

#### (yearly total)

| 1. All debt securities   | Value   | of transactions  | s I     | Number | of transactions |       |
|--|---------|------------------|---------|--------|-----------------|-------|
| _  |         | value in € milli |         |        | ber of issues   |       |
|  | 2001    | 2002             | 2003    | 2001   | 2002            | 2003  |
| Total economy  |         |                  |         |        |                 |       |
| Total primary market, of which:  | 3,246.1 | 2,511.5          | 1,683.1 | 119.0  | 114.0           | 113.0 |
| - auction (% of total)   | 86.8    | 84.7             | 99.1    | 85.7   | 89.5            | 89.4  |
| - syndication (% of total)   | 0.0     | 0.0              | 0.0     | 0.0    | 0.0             | 0.0   |
| - other (e.g. private placement) (% of total)                                      | 13.2    | 15.4             | 0.9     | 14.3   | 10.5            | 10.6  |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314) |         |                  |         |        |                 |       |
| Total primary market, of which:  | 3,246.1 | 2,511.5          | 1,683.1 | 119.0  | 114.0           | 113.0 |
| - auction (% of total)   | 86.8    | 84.7             | 99.1    | 85.7   | 89.5            | 89.4  |
| - syndication (% of total)   | 0.0     | 0.0              | 0.0     | 0.0    | 0.0             | 0.0   |
| - other (e.g. private placement) (% of total)                                      | 13.2    | 15.4             | 0.9     | 14.3   | 10.5            | 10.6  |
| Monetary financial institutions<br>(S.121+S.122)                                   |         |                  |         |        |                 |       |
| Total primary market, of which:  | 0.0     | 0.0              | 0.0     | 0.0    | 0.0             | 0.0   |
| - auction (% of total)   | 0.0     | 0.0              | 0.0     | 0.0    | 0.0             | 0.0   |
| - syndication (% of total)   | 0.0     | 0.0              | 0.0     | 0.0    | 0.0             | 0.0   |
| - other (e.g. private placement) (% of total)                                      | 0.0     | 0.0              | 0.0     | 0.0    | 0.0             | 0.0   |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)     |         |                  |         |        |                 |       |
| Total primary market, of which:  | -       | -                | -       | -      | -               | -     |
| - auction (% of total)   | -       | -                | -       | -      | -               | -     |
| - syndication (% of total)   | -       | -                | -       | -      | -               | -     |
| - other (e.g. private placement) (% of total)                                      | -       | -                | -       | -      | -               | -     |

#### 2. Long-term debt securities

| 2. Long-term debt securities  |                                     | Value of t                          | ransactions                         |   | Numbe            | er of transa | actions |
|---|-------------------------------------|-------------------------------------|-------------------------------------|---|------------------|--------------|---------|
|   |                                     | Nominal value in € millions         |                                     |   | Number of issues |              |         |
|   | 2001                                | 2002                                | 20                                  | 03  | 2001             | 2002         | 2003    |
|   | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | of which: %<br>denominated<br>in national<br>currency |                  |              |         |
| Total economy   |                                     |                                     |                                     |   |                  |              |         |
| Total primary market, of which:   | 93.5                                | 513.0                               | 521.9                               | 46.3  | 17.0             | 29.0         | 40.0    |
| - auction (% of total)  | 0.0                                 | 33.9                                | 97.1                                | 98.0  | 0.0              | 51.7         | 70.0    |
| <ul> <li>syndication (% of total)</li> </ul>  | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0              | 0.0          | 0.0     |
| - other (e.g. private placement) (% of total)   | 100.0                               | 66.1                                | 2.9                                 | 2.0   | 100.0            | 48.3         | 30.0    |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314)<br>Total primary market, of which: | 93.5                                | 513.0                               | 521.9                               | 46.3  | 17.0             | 29.0         | 40.0    |
| - auction (% of total)  | 0.0                                 | 33.9                                | 97.1                                | 98.0  | 0.0              | 51.7         | 70.0    |
| - syndication (% of total)  | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0              | 0.0          | 0.0     |
| - other (e.g. private placement) (% of total)   | 100.0                               | 66.1                                | 2.9                                 | 2.0   | 100.0            | 48.3         | 30.0    |
| Monetary financial institutions<br>(S.121+S.122)  |                                     |                                     |                                     |   |                  |              |         |
| Total primary market, of which:   | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0              | 0.0          | 0.0     |
| - auction (% of total)  | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0              | 0.0          | 0.0     |
| <ul> <li>syndication (% of total)</li> </ul>  | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0              | 0.0          | 0.0     |
| - other (e.g. private placement) (% of total)   | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0              | 0.0          | 0.0     |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)  |                                     |                                     |                                     |   |                  |              |         |
| Total primary market, of which:   | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0              | -            | -       |
| - auction (% of total)  | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0              | -            | -       |
| - syndication (% of total)  | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0              | -            | -       |
| - other (e.g. private placement) (% of total)   | 0.0                                 | 0.0                                 | 0.0                                 | 0.0   | 0.0              | -            | -       |

Sources: Banca Națională a României, Ministerul Finanțelor Publice.

Notes: Exchange rate used: average of period ROL/€ 26,027 in 2001; ROL/€ 31,255 in 2002; ROL/€ 40,994 in 2003. Number of business days: 253 in 2001; 254 in 2002; 253 in 2003.

#### ROMANIA

### Table 2B Secondary market activity

|   | Value of transactions       |       |       | Number of transactions |       |       |
|---|-----------------------------|-------|-------|------------------------|-------|-------|
|   | Nominal value in € millions |       |       | Number of issues       |       |       |
|   | 2001                        | 2002  | 2003  | 2001                   | 2002  | 2003  |
| Total economy   |                             |       |       |                        |       |       |
| Total secondary market, of which:<br>– regulated markets (Stock Exchange(s)   | 69.8                        | 65.6  | 37.7  | 113.0                  | 132.0 | 96.0  |
| and other regulated markets), % of total<br>– non-regulated markets (e.g. over-the-   | 0.0                         | 0.0   | 0.0   | 0.0                    | 0.0   | 0.0   |
| counter market (OTC)), % of total   | 100.0                       | 100.0 | 100.0 | 100.0                  | 100.0 | 100.0 |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314)<br>% of secondary market for total economy | 100.0                       | 100.0 | 100.0 | 100.0                  | 100.0 | 100.0 |
| Monetary financial institutions<br>(S.121+S.122)  |                             |       |       |                        |       |       |
| % of secondary market for total economy   | 0.0                         | 0.0   | 0.0   | 0.0                    | 0.0   | 0.0   |
| Non-financial and non-monetary financial corporations (S.123+S.124+S.125+S.11)  |                             |       |       |                        |       |       |
| % of secondary market for total economy   | 0.0                         | 0.0   | 0.0   | 0.0                    | 0.0   | 0.0   |

#### 2. Long-term debt securities

|  | Value of transactions Nominal value in € millions |                                     |                                     | Number of transactions Number of issues               |       |       |       |
|--|---|-------------------------------------|-------------------------------------|---|-------|-------|-------|
|  |   |                                     |                                     |   |       |       |       |
|  | 2001  | 2002 200                            |                                     | 03  | 2001  | 2002  | 2003  |
|  | All long-term<br>debt<br>securities               | All long-term<br>debt<br>securities | All long-term<br>debt<br>securities | of which: %<br>denominated<br>in national<br>currency |       |       |       |
| Total economy  |   |                                     |                                     |   |       |       |       |
| Total secondary market, of which:  | 27.8  | 26.1                                | 10.8                                | 53.1  | 14.0  | 7.0   | 10.0  |
| <ul> <li>regulated markets (Stock Exchange(s)<br/>and other regulated markets), % of total</li> <li>non-regulated markets (e.g. over-the-</li> </ul> | 0.0   | 0.0                                 | 0.0                                 | 0.0   | 0.0   | 0.0   | 0.0   |
| counter market (OTC)), % of total  | 100.0   | 100.0                               | 100.0                               | 100.0   | 100.0 | 100.0 | 100.0 |
| Central government (S.1311) and other<br>general government (S.1312+S.1313+S.1314)<br>% of secondary market for total economy                        | -   | -                                   | -                                   | -   | -     | -     | -     |
| Monetary financial institutions<br>(S.121+S.122)<br>% of secondary market for total economy  |   |                                     |                                     |   |       |       |       |
| Non-financial and non-monetary financial<br>corporations (S.123+S.124+S.125+S.11)  |   |                                     |                                     |   |       |       | -     |
| % of secondary market for total economy  | -   | -                                   | -                                   | -   | -     | -     | -     |

Sources: Banca Națională a României, Ministerul Finanțelor Publice.

PART 3

## ANNEXES



### I CONCEPTS AND DEFINITIONS

The definitions used in this report on bond market and long-term interest rates are divided into four categories, which are: 1) Instruments, 2) Markets, 3) Prices and 4) Sector classification.

#### I INSTRUMENTS

#### DEBT SECURITIES (ESA95 CLASSIFICATION IN BRACKETS)

Debt securities refer to securities other than shares excluding financial derivatives (F.33). They give the holder the unconditional right to a fixed or contractually determined variable money income in the form of coupon payments (interest) and/or a stated fixed sum on a specified date or dates or starting from a date fixed at the time of issue.

The debt securities should cover issues by resident entities (defined in a separate entry below), irrespective of the currency denomination and the market of issuance. Issues by foreign-owned entities located in the resident country are classified as issues by residents. Issues by entities located outside the resident country but owned by residents of resident country are treated as issues by nonresidents of the resident country. The table below illustrates the two main parameters, residency and currency denomination, that characterise debt securities:

|               | National<br>currency | Other<br>currencies |
|---------------|----------------------|---------------------|
| Residents     | Included             | Included            |
| Non-residents | Excluded             | Excluded            |

Debt securities can either be short-term or longterm. Short-term debt securities refer to shortterm securities other than shares, excluding financial derivatives (F.331) with an original maturity of one year or less (in accordance with the ESA 95, exceptional cases two years or less). Long-term debt securities (also known as bonds) refer to long-term securities other than shares, excluding financial derivatives (F.332) with an original maturity over one year (or with optional maturity dates).

#### **RESIDENT (FOLLOWS ESA 95, PARAGRAPH 1.30.)**

An issuing unit is defined as a resident of the reporting country when it has a centre of economic interest on the economic territory of the reporting country – that is, when it engages for an extended period (one year or more) in economic activities on this territory. Non-resident issuers comprise units that are either: (a) located in the economic territory of the reporting country but which do not, or do not intend to, engage in economic activities or transactions for a period of one year or more on the territory of the reporting country; or (b) located outside the economic territory of the reporting country.

Issues by subsidiaries owned by non-residents of the reporting country but which operate in the reporting country's economic territory, are classified as issues by resident units of the reporting country. Issues by head offices located in the reporting country's economic territory which operate internationally are also considered as issues by resident units. Issues by head offices or subsidiaries located outside the reporting country's economic territory but owned by residents of the reporting country are considered as issues by non-residents.

#### **BRADY BONDS**

Brady bonds are debt securities issued by a government and for which principal repayment and interest servicing (for usually 12 to 18 months) are guaranteed by international organisations and/or other governments. They are usually issued in a currency other than the national currency of the issuing government. Brady bonds are credit-enhanced debt securities issued by a sovereign government following the Brady Plan Agreement concluded in March 1989. Issuance involves an exchange of loans granted by monetary financial institutions (for example commercial banks), which may or may



not be in default, into collateralised bonds as part of an effort to restructure and reduce the debt of the issuing countries. Brady bonds should be included as government bonds.

#### **GOVERNMENT-GUARANTEED BONDS**

Government-guaranteed bonds are debt securities issued by corporations or other units outside of the general government sector and guaranteed by the government. Governmentguaranteed bonds should not be included as government bonds.

#### **ORIGINAL MATURITY**

Interval between the issue date and the scheduled maturity date of a bond.

#### BENCHMARK

A benchmark bond is one recognised in the market as highly representative in a given maturity band, based on criteria such as liquidity, issue size and coupon.

#### **FUNGIBLE BONDS**

Fungible bonds are mutually interchangeable bonds. They have the same characteristics (issuer, maturity date, ISIN code, coupon, currency etc.); only the date of issuance is different because they are issued in tranches.

#### **EMBEDDED OPTIONS**

A feature of the security that is inserted in a bond and can be separable from the instrument. Examples are bonds that are convertible into shares and securities with options for repayment of principal in currencies that differ from those in which the securities were issued.

#### **NOMINAL VALUE**

The nominal value is the main principle for reporting statistics on long-term debt securities and therefore Stocks and flows of debt securities are reported at nominal value. An exception to this rule is made in respect of deepdiscounted and zero-coupon bonds (or discount bonds), where the issues are recorded at the effective amount paid, i.e. the discounted price at the time of purchase, and the redemptions at maturity at nominal value. The outstanding amount of deep-discounted and zero-coupon bonds are the effective amount paid plus accrued interest.

#### 2 MARKETS

#### **PRIMARY MARKET**

The primary market is that part of the securities market in which new securities are sold to the investor. Methods used to sell securities in the primary market include auctions, syndications and other methods such as private placements:

- Auction: A method of selling in public by letting intending buyers gather and compete with each other by making bids (offers of money). A common type of auction is where the sale is made to the person (or entity) who makes the highest bid. The seller (i.e. the issuer) may state a price below which he or she will not sell. There are however other forms of auctions.
- Syndication: A temporary association of investment banks (MFIs) formed to sell new or existing securities. Syndicates can be divided or undivided. In the former, the liability of each member of the syndicate is restricted to its extent of participation. After the member has sold its share of the securities, the investment bank is no longer liable even if the other syndicate members have not sold their allocated shares. In the undivided syndicate, the investment bank is responsible for unsold securities up to its participation percentage regardless of how many securities that investment bank has sold.
- Private placements are offerings which are not public placements. Privately issued

bonds are restricted by bilateral agreement to certain investors. They can be at least potentially transferable.

#### **SECONDARY MARKET**

A market in which previously issued securities are traded between investors without the original issuer being concerned. Secondary markets can either be regulated or nonregulated. A regulated market is a market where the activity is controlled by rules set by the body to whom all principal buyers and sellers belong and/or other competent authorities. An example of a regulated market is the stock exchange. The degree of regulation will usually distinguish stock exchange(s) from other regulated markets. An example of a nonregulated market can be the over-the-counter (OTC) market.

In order to distinguish a regulated market from a non-regulated market for the purposes of completing tables 2B.1 and 2B.2, Council Directive 93/22/EEC of 10 May 1993 on investment services in the securities field (ISD) is brought to the attention of national central banks. Article 16 of the ISD sets out the following provisions for a regulated market for transferable securities and other instruments:

- appears on the list provided for in Article 16 drawn up by the Member State which is the home Member State as defined in Article 1 (6) (c),
- functions regularly,
- is characterized by the fact that regulations issued or approved by the competent authorities define the conditions for the operation of the market, the conditions for access to the market and,
- where Directive 79/279/EEC is applicable, the conditions governing admission to listing imposed in that Directive and, where that Directive is not applicable, the

conditions that must be satisfied by a financial instrument before it can effectively be dealt in on the market,

 requires compliance with all the reporting and transparency requirements laid down pursuant to Articles 20 and 21.

If the national meaning of a regulated market deviates from the ISD, national central banks are invited to briefly describe the main differences in order to facilitate cross-country comparisons.

#### **REFERENCE MARKET**

The reference market is the market in which the security is mainly traded. If equally traded in more than one, the resident reference market should be reported.

#### **TURNOVER**

The volume of securities traded in a specific period (e.g. a day) for a market or a specific issuer or bond. Volume traded can be measured by the number and/or value of transactions.

## REPURCHASE AGREEMENT (REPO) AND REVERSE REPO

A repurchase agreement (repo) is an arrangement whereby an asset is sold while the seller simultaneously obtains the right and obligation to repurchase it at a specific price on a future date or on demand. Such an agreement is similar to collateralised borrowing of cash. A reverse repo is similar to the repo but is equivalent to a collateralised borrowing of securities.

Repos and reverse repos should be included in the data for secondary market activity as long as the underlying asset is a debt security, with the exception of transactions with the central bank. They should be valued at the nominal value of the underlying debt security.

#### PART III ANNEXES



#### LIQUIDITY

The ease with which a security can be traded on the market, usually defined by turnover (see separate entry). The liquidity of a bond can also be measured by a bid-offer spread usually expressed in basis points. The higher the liquidity, the lower the bid-offer spread. The factors influencing liquidity are numerous of which the trading frequency is an example.

#### **3 PRICING**

#### **PRICING SOURCE**

The source(s) from which the reported market price of the security is taken.

#### **BID-OFFER SPREAD**

The difference between the bid price (the price at which the holder can sell securities) and the offer price (the price at which the purchaser can buy securities).

#### **YIELD TO MATURITY**

The yield to maturity (also known as redemption yields) is the total internal rate of return on a bond or other fixed income security calculated by factoring in the purchase price, coupon, reinvestment of coupons at the same rate as the original coupon, and maturity date. The formulas used assume in general annual compounding throughout a security's life.

The yields-to-maturity should be calculated according to formula 6.3 recommended by the

International Securities Market Association (ISMA). This formula is considered to have several advantages, amongst other its flexibility and versatility.

$$P = \sum_{i=1}^{n} CF_i * V^{L_i}$$

where

Р

n

L.

V

= gross price (i.e. clean price plus accrued interest)

= number of future cash flows

- $CF_i = i$ -th cash flow (can be variable)
  - = time in years to the i-th cash flow
  - = annualised discounting factor = 1/(1+y) where y is the annualised yield.

Example: Government X issues a 10-year bond on 1 December 2003, which is scheduled to redeem on 1 December 2013. The bond has a nominal value of 100 and pays an annual fixed coupon of 8%. The bond is initially purchased by investor A. After two years (1 December 2005), investor A sells the bond to investor B at a price of 98. The yield calculation at the time of purchase for investor B is shown here below:

Coupon: 8% (annual cash flow)

Price: 98% of nominal amount (initial investment) Original maturity = 10 years Residual maturity = 8 years

Year 1 2 3 4 5 6 7 8 9 10  
98 = 
$$\frac{8}{(1+y)^1} + \frac{8}{(1+y)^2} + \frac{8}{(1+y)^3} + \frac{8}{(1+y)^4} + \frac{8}{(1+y)^5} + \frac{8}{(1+y)^6} + \frac{8}{(1+y)^7} + \frac{108}{(1+y)^8}$$
  
0 =  $-98 + \frac{8}{(1+y)^1} + \frac{8}{(1+y)^2} + \frac{8}{(1+y)^3} + \frac{8}{(1+y)^4} + \frac{8}{(1+y)^5} + \frac{8}{(1+y)^6} + \frac{8}{(1+y)^7} + \frac{108}{(1+y)^8}$ 

$$Y = 8.35\%$$

#### **4** SECTOR CLASSIFICATION (ESA95)

## GOVERNMENT SECTOR (ESA95 CLASSIFICATION IN BRACKETS)

The government sector refers to the "general government" (S.13) as defined in ESA95. It refers to all institutional units which are other non-market producers whose output is intended for individual and collective consumption, and mainly financed by compulsory payments made by units belonging to other sectors, and/or all institutional units principally engaged in the redistribution of national income and wealth.

The institutional units included in sector S.13 are the following:

- a) general government entities (excluding public producers organised as public corporations or, by virtue of special legislation, recognised as independent legal entities, or quasi-corporations, when any of these are classified in the non-financial or financial sectors) which administer and finance a group of activities, principally providing non-market goods and services, intended for the benefit of the community;
- b) non-profit institutions recognised as independent legal entities which are other non-market producers and which are controlled and mainly financed by general government;
- c) autonomous pension funds if the two requirements of paragraph 2.74. of ESA95 are met.

The general government sector is divided into four sub-sectors:

 a) Central government (S.1311) refers to all administrative departments of the State and other central agencies whose competence extends normally over the whole economic territory, except for the administration of social security funds. Included in sub-sector S.1311 are those non-profit institutions which are controlled and mainly financed by central government and whose competence extends over the whole economic territory.

- b) State government (S.1312) refers to separate institutional units exercising some of the functions of government at a level below that of central government and above that of the governmental institutional units existing at local level, except for the administration of social security funds. Included in State government are those nonprofit institutions which are controlled and mainly financed by state governments and whose competence is restricted to the economic territories of the states.
- c) Local government (S.1313) refers to those types of public administration whose competence extends to only a local part of the economic territory, apart from local agencies of social security funds. Included in sub-sector S.1313 are those non-profit institutions which are controlled and mainly financed by local governments and whose competence is restricted to the economic territories of the local governments.
- d) Social security funds (S.1314) refer to all central, state and local institutional units whose principal activity is to provide social benefits and which fulfil each of the following two criteria:
  - by law or by regulation certain groups of the population are obliged to participate in the scheme or to pay contributions;
  - 2. general government is responsible for the management of the institution in respect of the settlement or approval of the contributions and benefits independently from its role as supervisory body or employer.

There is usually no direct link between the amount of the contribution paid by an individual and the risk to which that individual is exposed.

#### PART III ANNEXES



#### MONETARY FINANCIAL INSTITUTIONS (ESA95 CODES IN BRACKETS)

Monetary Financial Institutions (MFIs) refer to central banks (S.121) and other monetary financial institutions (OMFIs, S.122).

- Central Banks (S.121) are financial corporations and quasi-corporations whose principal function is to issue currency, to maintain the internal and external value of the currency and to hold all or part of the international reserves of the country. The sector central banks includes also the European Central Bank.
- Other monetary financial institutions (OMFIs) (S.122) comprise resident credit institutions as defined in Community Law, and all other resident financial institutions whose business is to receive deposits/or close substitutes for deposits from entities other than MFIs, and, for their own account (at least in economic terms), to grant credits and/or to make investment in securities. This definition is taken from the Regulation ECB/1998/16 of 1 December 1998 concerning the consolidated balance sheet of the monetary financial institutions sector as amended by Regulation ECB/2000/8.

## NON-MONETARY FINANCIAL AND NON-FINANCIAL CORPORATIONS (ESA95 CODES IN BRACKETS)

Non-monetary financial and non-financial corporations groups together a number of sectors other than MFIs, General Government, households and non-profit institutions servicing households:

 Other financial intermediaries (OFIs) (S.123) comprise non-monetary financial corporations and quasi-corporations (excluding insurance corporations and pension funds) principally engaged in financial intermediation by incurring liabilities in forms other than currency, deposits and/or close substitutes for deposits from institutional units other than MFIs. Financial auxiliaries (S.124), which are engaged in activities closely related to financial intermediation but not financial intermediation themselves, are also included.

- Insurance corporations and pension funds (IPFs) (S.125) comprise non-monetary financial corporations and quasicorporations principally engaged in financial intermediation as the consequence of pooling risks.
- Non-financial corporations (NFC) (S.11) comprise corporations and quasicorporations not engaged in financial intermediation but principally in the production of market goods and nonfinancial services.





#### MACROECONOMIC INDICATORS FOR THE 2 **NON-EURO AREA EU MEMBER STATES AND ACCESSION COUNTRIES**

| Table I G |         |           |            |
|-----------|---------|-----------|------------|
|           |         |           | States and |
| accession | countri | ies in 20 | 03         |

(€ millions; total GDP at current prices and exchange rates)

| Country           | 2003        |
|-------------------|-------------|
| Czech Republic    | 80,096.5    |
| Denmark           | 188,183.2   |
| Estonia           | 8,042.1     |
| Cyprus            | 11,324.1    |
| Latvia            | 9,868.1     |
| Lithuania         | 16,142.9    |
| Hungary           | 73,213.0    |
| Malta             | 4,331.4     |
| Poland            | 185,175.5   |
| Slovenia          | 24,576.4    |
| Slovakia          | 28,822.4    |
| Sweden            | 267,296.3   |
| United Kingdom    | 1,589,468.1 |
| Bulgaria          | 17,655.3    |
| Romania           | 50,352.3    |
| Source: Eurostat. |             |

# Table 3 Government deficit (-) or surplus (+) in non-euro area EU Member States and accession countries in 2003

(net borrowing (-) / net lending (+) of general government as a percentage of GDP)

| Country        | 200  |
|----------------|------|
| Czech Republic | -12. |
| Denmark        | 0.   |
| Estonia        | 3.   |
| Cyprus         | -6.  |
| Latvia         | -1.  |
| Lithuania      | -1.  |
| Hungary        | -6.  |
| Malta          | -9.  |
| Poland         | -3.  |
| Slovenia       | -2.  |
| Slovakia       | -3.  |
| Sweden         | 0.   |
| United Kingdom | -3.  |
| Bulgaria       | -0.  |
| Romania        | -2.  |

Source: Eurostat

## Table 2 HICP in non-euro area EU Member States and accession countries in 2003

| (annual average percentages) |      |
|------------------------------|------|
| Country                      | 2003 |
| Czech Republic               | -0.1 |
| Denmark                      | 2.0  |
| Estonia                      | 1.4  |
| Cyprus                       | 4.0  |
| Latvia                       | 2.9  |
| Lithuania                    | -1.1 |
| Hungary                      | 4.7  |
| Malta                        | 1.9  |
| Poland                       | 0.7  |
| Slovenia                     | 5.7  |
| Slovakia                     | 8.5  |
| Sweden                       | 2.3  |
| United Kingdom               | 1.4  |
| Bulgaria                     | 2.3  |
| Romania                      | 15.3 |
| Source: Eurostat.            |      |

# Table 4 Consolidated gross general government debt in non-euro area EU Member States and accession countries in 2003

(percentage of GDP; end of period; nominal value)

| Country        | 2003 |
|----------------|------|
| Czech Republic | 37.8 |
| Denmark        | 45.9 |
| Estonia        | 5.3  |
| Cyprus         | 70.9 |
| Latvia         | 14.4 |
| Lithuania      | 21.0 |
| Hungary        | 59.  |
| Malta          | 71.1 |
| Poland         | 45.4 |
| Slovenia       | 29.5 |
| Slovakia       | 42.0 |
| Sweden         | 52.0 |
| United Kingdom | 39.8 |
| Bulgaria       | 46.2 |
| Romania        | 21.8 |



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### PART III ANNEXES

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