This guide is intended for both investors and issuers interested in the Singapore bond market. It focuses on Singapore Dollar (SGD) denominated public and private debt securities issued in Singapore. By delineating the main features of the securities, and highlighting the major characteristics of the market, this guide should be both a useful starting point and reference source.

This guide does not constitute an offer to buy or sell securities, nor does it offer investment advice. While every effort has been made to ensure that the information contained herein is accurate, this guide is not a comprehensive exploration of all the intricacies relating to investment and issuance in SGD denominated debt. As such, the Monetary Authority of Singapore (MAS) does not warrant and hereby disclaims any warranty as to the accuracy or fitness for any purpose of the data.

MAS is not liable for any damage or loss of any kind, howsoever caused as a result (direct or indirect) of the use of any information or data contained in this publication, including but not limited to any damage or loss suffered as a result of reliance on the information or data contained in or available in this publication.

Except where explicitly stated, the guide utilises and provides information accurate as of 31 December 2011. For updated information, the reader should refer to the MAS website (www.mas.gov.sg) and the SGS website (www.sgs.gov.sg).

Several of the images contained in this guide have been reproduced courtesy of the Singapore Tourism Board.
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As an international financial centre, Singapore offers a broad range of financial services including banking, insurance, investment banking and treasury services. Today, financial services account for around 11% of Singapore’s GDP and there are more than 600 major financial institutions operating here.

A key aspect of Singapore’s financial centre is its deep and liquid capital markets. Singapore has also grown to be a major Real Estate Investment Trust (REITs) market in Asia ex-Japan, providing an extensive offering of investments in business trusts of shipping, aviation, and infrastructure assets. With a conducive business environment, an excellent infrastructure, and a highly skilled workforce, Singapore is well placed as one of the key financial hubs for the region.

The development of Singapore’s financial centre began in the late 1960s with the emergence of the Asian Dollar Market (ADM). This allowed Singapore to bridge the gap in market hours between London and New York at a time when funds were flowing strongly into a rapidly industrialising Asia. With a stable political environment that is backed by an established legal system and a competitive tax regime, Singapore became the centre for the ADM. The ADM growth also spurred the development of the foreign exchange market and derivative markets in Singapore. Based on the Bank for International Settlements’ (BIS) Triennial Survey results in 2010, Singapore’s foreign exchange market is now the fourth largest in the world after London, New York, and Tokyo. The fund management industry also flourished, growing from just over SGD150 billion in 1998 to nearly SGD1.4 trillion in assets under management in 2010.

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2 ADM amounted to about USD1.05 trillion as of November 2011.
INTRODUCTION

Financial Sector Growth and Evolution
(2001 - 2011)³
³ Source: Mas

<table>
<thead>
<tr>
<th>2001</th>
<th>2011</th>
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<tr>
<td>SGD 1.2 trillion</td>
<td>SGD 2.2 trillion</td>
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<td>SGD 119 billion</td>
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<td>SGD 449 billion</td>
<td>SGD 713 billion</td>
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<td>SGD 135 billion</td>
<td>SGD 357 billion</td>
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Banking Assets | Life Insurance Assets | FX Average Daily Turnover | Stock Market Capitalization | Total Debt Market

Financial Sector as Proportion of Total GDP
(2011)⁴
⁴ Source: Department of Statistics, MAS

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<tr>
<th>Manufacturing</th>
<th>Wholesale &amp; Retail</th>
<th>Finance &amp; Insurance</th>
<th>Business Services</th>
<th>Others</th>
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<td>20.9%</td>
<td>19.6%</td>
<td>13.3%</td>
<td>16.3%</td>
<td>11.2%</td>
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<tr>
<td>Transportation &amp; Storage</td>
<td>Construction</td>
<td>Information &amp; Communications</td>
<td>Utilities</td>
<td>Accommodation &amp; Food Services</td>
</tr>
</tbody>
</table>
THE
SINGAPORE
BOND
MARKET
AT A GLANCE

Singapore has one of the most developed bond markets in Asia. Based on MAS’ corporate debt market review, the market capitalisation was about SGD357 billion in 2011, of which about two-thirds were in SGD and the rest mostly in US dollars. The SGD bond market is made up of Singapore Government Securities (SGS), quasi-government bonds, corporate bonds, and structured securities.

The SGD bond market is fully accessible to all issuers and investors globally. There are no capital controls, hedging restrictions, or withholding taxes. As a result, the market’s profile is international in nature, with foreign entities accounting for more than a quarter of bond issuance. Regulations were fine-tuned in 2009 to qualify high-grade securities issued by foreign entities as regulatory liquid assets. Since then, there has been an increase in issuances by well-known AAA-rated foreign issuers such as the African Development Bank, KfW Bankengruppe, International Finance Corp (IFC), and International Bank for Reconstruction & Development (IBRD).

SGS is a major component of the SGD bond market. Over the years, SGS has grown steadily from SGD43.2 billion outstanding in 2000 to SGD138.5 billion in 2011. The bond is also included within major bond indices including the Barclays Capital Global Aggregate Index, Citigroup World Government Bond Index, JP Morgan World Government Bond Index, and the HSBC Asian Local Bond Index. In the secondary market, trading of SGS has been active, especially in the inter-bank market. Bond turnover, measured using the ratio of value of bonds traded to average amount of bonds outstanding, was 1.02 in September 2011, placing it among the top developing East Asian economies. Most SGS trading among Primary Dealers takes place on the SGS Electronic Trading Platform on Bloomberg.

The SGS repurchase (repo) market is also relatively deep with a daily volume of about SGD2.0 billion in 2011. To facilitate trading and market-making by Primary Dealers, MAS operates a repo facility that allows Primary Dealers to borrow SGS from MAS on an overnight basis when the SGS are not readily available from other sources.

A short-term interest rate futures contract and a SGS bond futures contract are also tradable on the Singapore Exchange. Institutional participants could also use the SGD interest rate swap (IRS) and cross currency swap (CCS) markets. As of 2010, the Singapore market has one of the highest turnover in FX derivatives for currency pairs other than the SGD, comparable to developed economies such as the United Kingdom or Germany.

Apart from SGS, structured debt made up about 20% of total SGD debt issuance in 2010, and includes a wide range of products, such as asset-backed debt, credit-linked debt, equity-linked debt, convertible debt, and Islamic debt. On the Islamic front, despite having started only in 2009, the Islamic debt market continued to flourish, with a total of SGD1.7 billion of issuances recorded in 2010. This included the single largest, longest-tenured SGD1.5 billion sukuk by Khazanah Nasional, the first SGD issuance out of the Malaysia International Islamic Financial Centre initiative.

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1 The withholding tax exemption applies only to qualifying debt securities (QDS).
2 Banks are permitted to treat AAA-SGD securities from qualifying entities as regulatory liquid assets with the same haircut as SGS.
3 Data extracted from ADB.
4 BIS Quarterly review December 2010, Derivatives in Emerging Markets.
### Size of the Singapore Debt Market (2000 - 2011)\(^9\)

\(^9\) Based on MAS' annual Singapore Corporate Debt Market Review

#### Outstanding Amounts (SGD billion):

- **2011**
  - Treasury Bills: 350
  - SGD Corporate Bonds: 250
  - SGS Bonds: 150
  - Non-SGD Corporate Bonds: 100
  - MAS Bills (since 2011): 50

- **2010**: Similar pattern as 2011
- **2009**: Similar pattern as 2010
- **2008**: Similar pattern as 2009
- **2007**: Similar pattern as 2008
- **2006**: Similar pattern as 2007
- **2005**: Similar pattern as 2006
- **2004**: Similar pattern as 2005
- **2003**: Similar pattern as 2004
- **2002**: Similar pattern as 2003
- **2001**: Similar pattern as 2002
- **2000**: Similar pattern as 2001

#### No of Times:

- **Japan**: 1.29
- **Philippines**: 1.37

#### Overall Debt Growth:

- **Korea**: 1.69
- **Indonesia**: 1.72
- **Singapore**: 1.90
- **Malaysia**: 2.25
- **Thailand**: 2.57
- **China**: 3.04

#### Turnover Ratio:

- **Indonesia**: 0.42
- **China**: 0.73
- **Thailand**: 0.78
- **Philippines**: 0.81

#### Turnover of SGS

- **Singapore**: 1.02
- **Malaysia**: 1.16
- **Japan**: 1.30
- **Korea**: 1.69

---

Bond Market Guide Singapore
ORIGINS AND EVOLUTION OF THE SINGAPORE BOND MARKET

Like most Asian countries, Singapore did not have a well-functioning bond market before 1997. The Singapore Government operated a prudent fiscal policy and consistently ran budget surpluses. Thus, there was no need for debt financing. SGS were then issued mainly to meet financial institutions’ statutory requirements, usually held to maturity, and rarely traded.

The Asian Financial Crisis highlighted the need to develop a domestic bond market (see facing page). In 1998, the MAS spearheaded efforts to develop the SGS market by embarking on a three-pronged plan to:

(a) Build a liquid SGS market to provide a robust government yield curve for the pricing of private debt securities;
(b) Foster the growth of an active secondary market, both for cash transactions and derivatives, to enable efficient risk management, and
(c) Encourage issuers and investors, both domestic and international, to participate in the Singapore bond market.

Building a robust Government benchmark yield curve

To facilitate active trading, a minimum critical amount of securities is required. The Singapore Government raised SGS issuance sharply. Between 1997 and 2011, outstanding SGS market capitalisation grew over six times from SGD21.9 billion to SGD138.5 billion. Longer tenured SGS were also introduced during this period, starting with a 15-year in 2001 followed by a 20-year issuance in March 2007. The Government yield curve was recently extended again in April 2012, following the issuance of a 30-year bond.

The run-up in domestic debt does not suggest a breakdown in fiscal rectitude as the Singapore Government continued to operate on a balanced budget policy. Instead, it is a deliberate strategy to promote a liquid and efficient government bond market. The three main international rating agencies (Moody’s, Standard and Poor’s and Fitch) continue to accord Singapore the highest ‘AAA’ credit rating.

Outstanding SGS: Treasury Bills and Bonds
(1997 - 2011)

<table>
<thead>
<tr>
<th>Year</th>
<th>Outstanding Amounts (SGD billion):</th>
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<td>1997</td>
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Asian Financial Crisis & the Genesis of Asian Bond Markets

The development of the Asian bond markets got on to a late start brought about by the Asian Financial Crisis. Prior to the crisis, Asia’s bond markets were underdeveloped and dominated by government issuance. Given the lack of a vibrant domestic bond market, most private borrowers could not access the market readily and relied primarily on bank loans. This resulted in the concentration of credit risks within the banking sector. Larger institutions could issue foreign currency Eurobonds but this resulted in currency mismatches. An alternative means of intermediation through domestic bond markets was needed.

After the crisis, many Asian countries: Indonesia, Malaysia, Korea, Philippines, Singapore, Taiwan and Thailand started developing their domestic bond markets. There were also regional efforts. In December 2002, the Asian Bond Markets Initiative (ABMI) was launched to facilitate regional cooperation in developing bond markets. ABMI worked on harmonising market conventions, raising transparency and integrating the individual markets. Separately, the Executives’ Meeting of East Asia and Pacific Central Banks (EMEAP) launched the Asian Bond Fund I in 2003 and Asian Bond Fund II in 2005. The latter, in particular, boosted the development of the government bond markets, improving both liquidity and robustness of the yield curves. The fund further resulted in the launch of a number of Exchange Traded Funds (ETFs) which provided convenient points of access for investors in Asian bonds. The impact can be observed from the growth of government debt in these economies, which nearly doubled on average between 2005 and 2011\(^\text{10}\).

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<tr>
<td>China</td>
<td>3.04</td>
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\(^{10}\) Data from ADB in local currencies
With only about 20 securities, the SGS curve\textsuperscript{11} is extremely efficient. Buy-backs and re-openings help concentrate liquidity in key benchmark issues. To improve price transparency, both primary and secondary markets have been enhanced. The SGS Electronic Applications Facility (eApps) is an internet-based platform that provides a one-stop interface for Primary Dealers to submit and view the results of their auction bids online. For the secondary market, an Electronic Trading platform for trading of SGS is available. Most transactions between Primary Dealers are done on the platform, and pre- and post-trade information are available to all participants through Bloomberg.

**Fostering the growth of an active secondary market**

A multi-pronged approach was taken to encourage trading. In the SGS market, Primary Dealers are required to make two-way prices to each other for a standard lot size of SGD5 million, and at bid-ask spreads 5 to 60 cents in price terms (depending on maturity). To strengthen Primary Dealers’ market-making capabilities, Primary Dealers can also tap on the MAS repo facility, which was enhanced in 2010, to borrow securities for market making purposes.

Under this facility, MAS lends specific securities via a reverse repo transaction, and simultaneously transacts a back-to-back general repo for an identical amount of another security. The facility is provided on an overnight basis only to help PDs cover any short position in SGS arising from their market-making activity on any day.

Separately, in consultation with market participants, a code of market conduct was drawn up, stipulating best practices, trading conventions and dispute resolution guidelines. These are published as the “Rules and Market Practices of the SGS Market” and the “SGS Repo Code of Best Practice” on the SGS website.

The settlement system was also improved. Both SGS and SGD corporate bonds are settled real-time on a delivery-versus-payment (DvP) basis. The former is settled through the enhanced MAS Electronic payments Systems (MEPS+), while the latter is settled through the Central Depository of the Singapore Exchange.

**Encouraging issuers and investors, both domestic and international**

Since 1983, the MAS has maintained a policy of discouraging the internationalisation of the Singapore dollar. This policy was encapsulated in MAS Notice 621 (later renamed Notice 757), which restricted offshore borrowings denominated in Singapore dollars to SGD5 million, and prohibited Singapore-based financial institutions from trading SGD derivatives, including IRSs and options, with non-residents. To encourage overseas participation in Singapore’s financial markets, this policy was progressively liberalised after 1998. Today, the notice no longer restricts issuance and investment in the Singapore bond market by foreign entities and the trading of derivatives. MAS Notice 757 has been renamed ”Lending of Singapore Dollar to Non-Resident Financial Institutions”, with only two remaining restrictions. First, lending to non-resident financial institutions is capped at SGD5 million per institution. Second, SGD proceeds raised by non-resident financial institutions are required to be swapped into foreign

\textsuperscript{11} SGS bonds with maturities of at least 1 year.

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**The Singapore Bond Market**
currencies before the funds are repatriated. Both restrictions are targeted at discouraging speculation against the SGD, and not against genuine capital market activities.

Prospectus requirements for issuing bonds in Singapore are also relatively straightforward, with an overall lodgement process of just 7 days. An issuer can also make multiple offers of separate tranches of debentures under a debenture issuance programme, provided that it registers with the MAS a base prospectus that is applicable for the entire programme. For each subsequent offer of debentures under the programme, the issuer will only need to lodge with the MAS a brief pricing statement containing information specific to that particular offer. The base prospectus is valid for 24 months.
**SINGAPORE GOVERNMENT SECURITIES (SGS)**

**Overview**

SGS are marketable debt instruments of the Government of Singapore. As the fiscal agent of the Government, the MAS issues SGS on its behalf. These debt instruments take the form of either Treasury bills or bonds and are backed by the full faith and credit of the Singapore Government. Although SGS cannot be cashed in before their maturity dates, investors can always sell them in the SGS market. SGS Primary Dealers are prepared to buy and sell SGS at any time during normal market trading hours.

**Legislation**

The issuance of Treasury bills and bonds is governed by the Local Treasury Bills Act (LTBA) and the Government Securities Act (GSA) respectively. Separate debt ceilings for Treasury bills and bonds are set by resolutions in Parliament and approved by the President of the Republic of Singapore. These debt ceilings limit the amount that the Minister of Finance is authorised to borrow. As of end 2011, the authorised borrowing limits for Treasury bills and SGS bonds were SGD60 billion and SGD320 billion respectively.

In accordance with the GSA, a Government Securities Fund (GSF) has been established. All proceeds raised from securities issuance, including Treasury bills, and any investment returns derived from the proceeds are paid into the GSF. Payments from this fund are limited to the payment of interest and repayment of principal and are a statutory obligation. This framework ensures that the Government’s borrowings are not used to fund the Government’s expenditures and the interest payment and principal repayment are not subject to parliamentary approval.

**Types of SGS**

**Treasury Bills**

Treasury bills are short-term marketable Government securities that mature in one year or less from their issue date. They are issued at a discount, i.e. sold at a price less than their face (par) value. At maturity, the Government will pay the holder of the Treasury bill the full face value of the security. Therefore, the interest earned on the Treasury bill is the difference between the purchase price of the security and its face (par) value. Treasury bills are denominated in nominal values of SGD1,000 and traded at a rate of discount basis. The Singapore Government currently issues 3-month and 1-year Treasury bills, with plans for a new 6-month tenor to be introduced.

**Bonds**

SGS bonds are longer-term marketable debt securities of the Government. They pay a fixed rate of interest (coupon) semi-annually for the life of the security and their face (par) value upon redemption at maturity. A
SGS bond is denoted by its coupon rate and maturity date, and each has a unique issue code. The coupon rate of the bond reflects the market interest rate at the time the bond was first issued. As such, there are a variety of coupon rates among bonds in the SGS market, which is reflective of how interest rates have fluctuated over time. The coupon rate, expressed in percentage terms per annum, indicates the interest payable per year for every SGD100 face value of bonds. The coupon interest is paid in two equal semi-annual payments on fixed dates that are six months apart.

SGS bonds are issued with original maturities ranging from 2, 5, 10, 15, 20 and 30 years via auctions according to a pre-announced issuance calendar. The most recently issued SGS bonds in each of these tenors typically form the benchmark securities. In some cases, off-the-run issues could also be reopened as a benchmark security for the purposes of concentrating liquidity. Similar to Treasury Bills, SGS bonds are also denominated in nominal values of SGD1,000.

Non-Marketable SGS Bonds
Non-marketable SGS bonds are floating rate bonds issued specifically for the Central Provident Fund (CPF) Board to meet its interest and other obligations. They do not have quoted market values. Surplus CPF funds are first placed as advance deposits with the Government through the MAS for subscription of future issues of these non-marketable SGS bonds.

The interest rates for these bonds and the advance deposits are pegged to the CPF interest rate. For CPF Ordinary Account balances, this is based on the 12-month fixed deposit and month-end savings deposit rates of the major local banks subject to a minimum of 2.5%. For CPF Special, Medisave and Retirement Account balances, this is based on the 12-month average yield of 10-year Singapore Government Securities plus 1%.

Market Operations Announcement
SGS bonds and Treasury bills are issued to the market via auctions. Treasury bills are issued on a regular basis, while SGS bonds are issued according to an issuance calendar. MAS publishes an advance issuance calendar on the SGS website at the end of each year for the following year. The issuance calendar specifies the issue date and tenor of each SGS auction, and whether the auction is a new SGS issue or a re-opening of an existing issue.

The SGS auction announcement is published on the SGS website and in major local newspapers. Prior to

12 This excludes the 7-year bond, which has ceased to be a benchmark tenor from 28 Jan 2011. Any future issuance will focus on concentrating liquidity in existing securities and across the curve.
the announcement of auction details, MAS consults Primary Dealers to assess market conditions and the expected demand for the upcoming SGS issue. As the Singapore Government does not have any deficit funding requirements, the issuance size for each SGS auction is determined by demand and market conditions. In general, announcements about auction details such as size are made about five business days (except 3-month Treasury bills) before the auction date. Auctions for SGS are typically held three business days before actual issue. When-issued trading usually follows the announcement of auction and is for settlement on the issue date.

**Bidding**

*SGS bonds and Treasury bills are auctioned using a uniform price auction. The auction of the former was changed from the multiple-price format to the uniform-price format in 2003, while the auction of Treasury bills was moved to a uniform-price basis in December 2006.*

For all SGS, successful competitive and non-competitive bids will be allotted at the same uniform yield, which is the highest accepted yield (or the cut-off yield) of successful competitive bids submitted at the auction. At the cut-off yield, allotment of SGS will be pro-rated depending on the total bids submitted at that yield.

**Open Participation**

Auctions are open to all bidders, but all bids must be submitted through the Primary Dealers. Application forms to participate in auctions may be obtained from Primary Dealers or downloaded from the SGS website. Bids are submitted in terms of annual percentage yield. For Treasury bill and SGS bond auctions, an investor may submit either competitive bid(s) or non-competitive bid(s) in multiples of SGD1,000 nominal value. Non-competitive bids will be allotted first, subject to an overall limit of 40% of the issue on offer. If the amount of non-competitive bids exceeds this limit, allotment will be pro-rated.

Primary Dealers are allowed to submit a non-competitive bid of up to 1% of the SGS issue on offer. For non-Primary Dealers, the limits for non-competitive bids are SGD1 million per applicant for Treasury bills and SGD2 million per applicant for bonds. Allocation of competitive bids of each Treasury bill or bond issue on offer is capped at 30% for each Primary Dealer and 15% for each non-Primary Dealer. These limits are subject to revision by MAS. MAS reserves the right not to allot all of the issue on offer, but will only exercise this in exceptional circumstances.

**MAS Participation**

MAS participates in auctions when necessary, on a non-competitive basis to acquire securities, to facilitate the conduct of money market operations. The amount it intends to take up will be pre-announced at the time of each auction announcement. MAS publishes and updates its holdings of SGS on the SGS website whenever there are any changes. MAS’ own limit for non-competitive bidding at auctions is within this overall 40% cap and subject to pro-rating as well.

In 2009, an auction safeguard mechanism was introduced to enhance the resilience of the SGS
primary auction system. The system varies MAS’ subscription amount at auctions in the event of acute unexpected changes in investor demand, with the intent of mitigating the risk of volatility and disorderly adjustments in the bond market.

Results
The results of SGS auctions are announced on the SGS website and, for bonds only, also in the major newspapers in Singapore. The auction results include the amount applied, the coupon rate, the average yield and price of successful bids, the cut-off yield and price, and the percentage allotted at the cut-off yield. The amount of SGS allotted to the MAS at the auction will also be published.

Settlement
Settlement of successful auction bids takes place on the issue date, which is usually three business days following the auction date. Settlement is via MEPS+, which is a Real Time Gross Settlement System (RTGS), on a delivery versus payment (DVP) basis. For non-Primary Dealers without MEPS+ accounts, the book-entry, scripless SGS allotted to them will be held in custody on their behalf by the Primary Dealers with whom they have set up custody accounts.
Market Features

Regulation of the SGS Market

The MAS admits, regulates and supervises banks and other financial institutions in Singapore. More information on the admission, regulation and supervision of banks and financial institutions in Singapore can be obtained from the MAS website.

SGS Primary and Secondary Dealers are banks in Singapore that have been specifically granted approval by the MAS to be market makers and dealers in the SGS market. These SGS dealers are required to comply with the MAS’ Guidelines for Banks whose Business includes Dealing in Government Securities, and to observe the Rules and Market Practices of the SGS market and SGS Sale and Repurchase Agreement Code of Best Practice. These guidelines are available on the MAS and SGS websites.

Primary Dealers

SGS Primary Dealers are appointed by the MAS to play a role as specialist intermediaries in the SGS and SGD markets. They play an important role in the growth and development of the SGS market by undertaking a set of underwriting and market-making obligations. In return, they enjoy certain privileges. The obligations of a SGS Primary Dealer are to:

- Participate actively in the SGS issuance programme and underwrite SGS issues;
- Provide liquidity to the SGS market by quoting effective two-way prices for SGS outright sale and repurchase agreements (repo) transactions to each other under all market conditions;
- Provide market feedback and daily closing prices for all SGS issues to the MAS; and
- Contribute actively to the development of the SGS market and related interest rate markets.

In recognition of its specialist intermediary role, a SGS Primary Dealer enjoys the following privileges:

- Exclusive dealing with the MAS in money market and foreign exchange operations;
- Exclusive access to the MAS Enhanced Repo Facility (ERF) to borrow SGS issues to facilitate its market making;
- Exclusive right to submit applications for SGS auctions and reverse auctions;
- Higher non-competitive tender limit and overall allocation limit at SGS auctions;
- Tax exemption on trading income derived from SGS; and
- Close consultation and dialogue with the MAS on SGS auctions and market-related issues.

More detailed information on the responsibilities, obligations and privileges of SGS Primary Dealers, and guidelines for their participation in SGS auctions and the MAS’ money market operations are provided in “A Guide to SGS Primary Dealer Operations” on the SGS website. As of 31 December 2011, there are 13 Primary Dealers in the SGS market, comprising three local banks and ten foreign banks.
<table>
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<tr>
<th><strong>List of SGS Primary Dealers</strong></th>
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<tbody>
<tr>
<td><strong>AUSTRALIA &amp; NEW ZEALAND BANKING GROUP LIMITED</strong></td>
</tr>
<tr>
<td>10 Collyer Quay</td>
</tr>
<tr>
<td>#30-00, Ocean Financial Centre</td>
</tr>
<tr>
<td>Singapore 049315</td>
</tr>
<tr>
<td><strong>BANK OF AMERICA, NATIONAL ASSOCIATION</strong></td>
</tr>
<tr>
<td>50 Collyer Quay, #14-01</td>
</tr>
<tr>
<td>OUE Bayfront</td>
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<tr>
<td>Singapore 049321</td>
</tr>
<tr>
<td><strong>BARCLAYS BANK PLC</strong></td>
</tr>
<tr>
<td>One Raffles Quay</td>
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<td>South Tower, Level 28</td>
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</tr>
<tr>
<td><strong>BNP PARIBAS</strong></td>
</tr>
<tr>
<td>20 Collyer Quay, #01-01</td>
</tr>
<tr>
<td>Tung Centre</td>
</tr>
<tr>
<td>Singapore 049319</td>
</tr>
<tr>
<td><strong>CITIBANK, NA</strong></td>
</tr>
<tr>
<td>8 Marina View, #21-00</td>
</tr>
<tr>
<td>Asia Square Tower 1</td>
</tr>
<tr>
<td>Singapore 018960</td>
</tr>
<tr>
<td><strong>CREDIT SUISSE AG</strong></td>
</tr>
<tr>
<td>1 Raffles Link, #03/04-01</td>
</tr>
<tr>
<td>South Lobby</td>
</tr>
<tr>
<td>Singapore 039393</td>
</tr>
<tr>
<td><strong>DEUTSCHE BANK AG</strong></td>
</tr>
<tr>
<td>One Raffles Quay</td>
</tr>
<tr>
<td>South Tower, Level 17</td>
</tr>
<tr>
<td>Singapore 048583</td>
</tr>
<tr>
<td><strong>DBS BANK LTD</strong></td>
</tr>
<tr>
<td>6 Shenton Way</td>
</tr>
<tr>
<td>DBS Building Tower One</td>
</tr>
<tr>
<td>Singapore 068809</td>
</tr>
<tr>
<td><strong>THE HONGKONG AND SHANGHAI BANKING CORPORATION LIMITED</strong></td>
</tr>
<tr>
<td>21 Collyer Quay, #14-01</td>
</tr>
<tr>
<td>HSBC Building</td>
</tr>
<tr>
<td>Singapore 049320</td>
</tr>
<tr>
<td><strong>OVERSEA-CHINESE BANKING CORPORATION LTD</strong></td>
</tr>
<tr>
<td>65 Chulia Street, #09-00</td>
</tr>
<tr>
<td>OCBC Centre</td>
</tr>
<tr>
<td>Singapore 049513</td>
</tr>
<tr>
<td><strong>ROYAL BANK OF SCOTLAND PLC</strong></td>
</tr>
<tr>
<td>One Raffles Quay</td>
</tr>
<tr>
<td>South Tower, Level 26</td>
</tr>
<tr>
<td>Singapore 048583</td>
</tr>
<tr>
<td><strong>STANDARD CHARTERED BANK</strong></td>
</tr>
<tr>
<td>8 Marina Boulevard, #27-01</td>
</tr>
<tr>
<td>Marina Bay Financial Centre Tower One</td>
</tr>
<tr>
<td>Singapore 018981</td>
</tr>
<tr>
<td><strong>UNITED OVERSEAS BANK LTD</strong></td>
</tr>
<tr>
<td>80 Raffles Place</td>
</tr>
<tr>
<td>UOB Plaza</td>
</tr>
<tr>
<td>Singapore 048624</td>
</tr>
</tbody>
</table>
Secondary Dealers and Other Participants

Banks, merchant banks and stock broking firms are among the approved Secondary Dealers and participants of the SGS market. These entities are in the business of buying from, or selling to, clients SGS, whether as a principal or agent. In addition to the SGS Primary and Secondary Dealers, inter-dealer brokers such as BGC and Tradition are also active in the SGS market, providing broking services for SGS outright and repo transactions to facilitate secondary trading in the interbank market. Apart from the dealers and brokers, participants in the SGS market also include foreign and local finance companies, insurance companies, fund managers, corporations and individuals.

SGS Trading

The SGS market operates from 0900 to 1630 hours, Monday till Friday. In the inter-dealer market, SGS is typically traded for settlement the next business day, with a standard “market lot” size of SGD5 million. Odd sizes, with a minimum denomination of SGD1,000, and odd settlement dates are also traded, usually with non-dealers. Primary Dealers are obliged to make market to each other for the standard lot size and bid-ask spreads.

Other than the inter-dealer market, trading of SGS bonds in the secondary market is also possible via the Singapore Exchange (SGX) since July 2011 for retail investors. This came on the back of efforts made to enhance retail investors’ access to SGS bonds, starting with the primary market in 2009 when retail investors were first allowed to apply for SGS at ATMs islandwide. With the enhancement made to facilitate trading on the SGX, retail investors can trade through brokers in the secondary market in a manner similar to the way stocks are traded. This provides greater price transparency as they are able to access SGS bond prices on the SGX website or through their brokers.

SGS Sale and Repurchase Agreements (Repo)

There are two main types of SGS repo, corresponding to the two main uses of repo transactions. These are the General Collateral (GC) repo and Specific repo.

A General Collateral repo is a collateralised loan, with the underlying SGS — not specified in advance of the transaction — used as the collateral for the cash received during the first leg of the repo transaction. A GC repo is typically used by market participants as a relatively cheaper means to finance their holdings of SGS, and by cash-rich institutions as a secured means of lending cash. Transactions between Primary Dealers typically use the standard “market lot” transaction for SGS GC repo is SGD25 million for tenors from overnight to one month.

In a Specific repo, one party of the transaction asks for a specific SGS and contracts with the other party holding the specific SGS to repo out the security. A Specific repo is typically used by market participants to cover a short position in SGS. In recent times, Primary Dealers have transacted these through the MAS repo facility. Through the eApps platform, Primary Dealers are also to submit their closing prices and their MAS repo facility bids, streamlining the repo auction process.

<table>
<thead>
<tr>
<th>Length of Period to Maturity</th>
<th>Bid-Ask Spread</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ 2-year</td>
<td>5 cents</td>
</tr>
<tr>
<td>&gt; 2-year, but ≤ 5-year</td>
<td>10 cents</td>
</tr>
<tr>
<td>&gt; 5-year, but ≤ 10-year</td>
<td>20 cents</td>
</tr>
<tr>
<td>&gt; 10-year, but ≤ 15-year</td>
<td>30 cents</td>
</tr>
<tr>
<td>&gt; 15-year, but ≤ 20-year</td>
<td>40 cents</td>
</tr>
<tr>
<td>&gt; 20-year</td>
<td>60 cents</td>
</tr>
</tbody>
</table>
The Singapore Bond Market

CENTRAL BANK (MAS) SECURITIES – MAS BILLS

Overview
At the MAS Annual Report press conference on 29 July 2010, MAS announced that it would be issuing short-term MAS Bills as part of its Money Market Operations (MMO).

Hitherto, MAS used three instruments to inject and withdraw liquidity into and from the banking system at its daily MMO. These are: (i) FX swaps or reverse swaps; (ii) SGS repos or reverse repos; and (iii) clean lending or borrowing. The introduction of MAS Bills thus provided a fourth instrument for the management of banking system liquidity.

MAS Bills are negotiable, so banks needing liquidity may sell or pledge them as collateral in interbank repo market, or enter into repo transactions with MAS at the Intraday Liquidity Facility and the Standing Facility. This will facilitate banks in managing their liquidity against a growing banking system.

The timing and amount of individual MAS Bill issues is decided by MAS, in consultation with Primary Dealers. In deciding on the timing and amount to issue, MAS takes into consideration its sterilisation requirements which are in turn very much affected by exogenous factors such as the trend of capital flows into the region.

MAS issued the first MAS Bill in April 2011. The issuances were phased in gradually, with an initial outstanding issuance of approximately SGD20 billion.

Market Operations
To prevent overlapping with Treasury bills, MAS Bills will have maturities up to three months. Similar to Treasury bills, MAS Bills are issued and traded at a discount, i.e. sold at a price less than their face (par) value. MAS Bills are denominated in nominal values of SGD1,000. Upon maturity, MAS will pay the holder of the security its full face value.

MAS Bills are issued on a regular basis, typically weekly, in accordance to an issuance calendar pre-announced around May and November for the following six months. Similar to Treasury bills, MAS Bills are auctioned using a uniform price auction. Only institutional investors are eligible to apply and all applications must be submitted through a Primary Dealer, with bids limited to only competitive bids. MAS Bills are also traded on the secondary market through banks and brokers such as ICAP, BGC and Tradition.
The Singapore Bond Market

CORPORATE DEBT

Overview

Since the Singapore Government started developing the bond market in the 1990s, the corporate debt market has grown significantly. Total outstanding SGD debt more than quadrupled to about SGD94 billion in size as at end 2011. The market features a diverse array of instruments – from plain debentures to complex structured securities – as well as issuers from across the wide credit spectrum. The tenors of corporate debt issued range from 1- to 40-year and include perpetual bonds, with the majority having maturities of between 5- and 10-year. Of note, the SGD bond market has seen benchmark issuances by Temasek Holdings of tenors up to 40-year, which extended the corporate yield curve and provided high-quality pricing references for other SGD corporate bond issuances.

Types of Corporate Debt

Corporate Debentures

Corporate debentures are negotiable, unsecured debt securities that are issued by corporations, financial institutions, supranationals, government agencies and statutory boards. While structures vary, debentures are typically issued at par, with an annual or semi-annual coupon that can be fixed or floating, and a principal repayment on maturity. As at end 2011, debentures made up 71% of outstanding SGD denominated corporate debt. This included Khazanah’s Islamic debt issuance of SGD1.5 billion in 2010.

Hybrid Securities

Hybrid securities are instruments that have both debt and equity features. They can come in the form of preferred stock, perpetuals, convertible bonds, and others. All three local banks – DBS Bank, Overseas Chinese Banking Corporation (OCBC), and United Overseas Bank (UOB) – have issued preferred stock as Tier 1 capital. Convertible bonds are usually used to reduce the cost of debt financing or in instances where there is significant divestment of shareholdings.

The SGD bond market also observed issuances of perpetuals from a diversity of borrowers such as commodities/utilities-related corporations, property developers, logistics providers, and leisure-related companies. Some of these names included Cheung Kong Holdings, Genting, Global Logistic Properties and Hyflux among others.

Medium-Term Notes

Medium-term notes (MTNs) programmes are quite common in the Singapore debt market. An MTN programme, which is often set up for frequent issuers, is established with banks prior to any issuance. Its key purpose is to provide the standard documentation required in any bond issuance. By having a programme in place, MTNs can be offered continuously through agents or dealers on a best effort rather than underwritten basis, allowing issuers to meet investors’ demand as it emerges. Some of the frequent issuers that use MTN programmes to tap the domestic market include Capitaland, General Electric, the Housing Development Board, and Temasek Holdings.

Securitised Debt Securities

Asset-backed securities (ABS) entail pooling assets and issuing securities that are backed by the interests in the pool; while the commercial mortgaged-backed securities (CMBS) stemmed from the Real Estate Investment Trusts (REITs) market, which took off in 2000. Both the ABS and CMBS are popular structures in the domestic securitisation market. Today, Singapore has the largest REITs market in Asia ex-Japan. There are 24 REITs listed on the Singapore Exchange (SGX) with an aggregate market capitalization of about SGD38 billion. In 2011 and 1Q2012, the market saw a total of SGD1.8 billion of debt issuance that originated from REITs.

13 Khazanah’s issuance involved a 5-year SGD600 million tranche and a 10-year SGD800 million tranche.
Breakdown of Outstanding SGD Denominated Debt as at end 2011

- Debentures: 71%
- Securitised Debt Securities: 16%
- Medium-term Notes: 11%
- Hybrids: 2%

**Size of SGD Corporate Bond Market (1998 - 2011)**

Excluding short-term debt issuances. Source: MAS
Types of Issuers of SGD Denominated Corporate Debt

Domestic Entities

Domestic issuers comprise statutory boards, as well as corporations and financial institutions.

Statutory boards – These are quasi-governmental agencies which have been given autonomy and flexibility to perform an operational function. Their activities are overseen by a board of directors, and typically come under a specific government ministry.

Corporations and Financial Institutions – Local corporate issuers can be broadly divided into 3 main groups; property related corporations; other corporations; and financial institutions, comprising mainly banks. Property related corporations, in particular, are a key issuer group in the SGD bond market space.

Foreign Entities

Singapore is one of the most international bond markets in Asia – with over a quarter of total annual issuance from foreign entities. Foreign entity issuers consist mainly of supranational agencies, corporations, and financial institutions. Notable foreign entity issuers include the following, listed on the facing page.

The increasing diversity of issuers is a significant recent trend as the market saw the first-time issuance from a number of Russian, Middle Eastern and Central American entities. Other foreign issuers hail from Africa, Australia, Europe, the United States, and other parts of Asia.

Selected Statutory Board Issuers

<table>
<thead>
<tr>
<th>Description</th>
<th>Total Outstanding (as at end 31 December 2011)</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>HDB</td>
<td>The Housing Development Board is Singapore’s public housing authority, and is tasked with providing affordable and quality housing</td>
<td>SGD 9.1 billion</td>
</tr>
<tr>
<td>LTA</td>
<td>The Land Transport Authority spearheads land transport developments in Singapore</td>
<td>SGD 2.4 billion</td>
</tr>
<tr>
<td>PUB</td>
<td>The Public Utilities Board is the national water agency and aims to secure an adequate supply of water at affordable cost</td>
<td>SGD 2.1 billion</td>
</tr>
</tbody>
</table>
### Selected Foreign Entity Issuers

<table>
<thead>
<tr>
<th>Supranational Agencies</th>
<th>Corporations</th>
<th>Financial Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>African Development Bank</td>
<td>Cheung Kong Holdings</td>
<td>Citigroup</td>
</tr>
<tr>
<td>Asian Development Bank</td>
<td>Emirates Airlines</td>
<td>The Export-Import Bank of Korea</td>
</tr>
<tr>
<td>International Bank for Reconstruction and Development</td>
<td>General Electric Capital Corporation</td>
<td>Macquarie Bank Limited</td>
</tr>
<tr>
<td>International Finance Corporation</td>
<td>Khazanah Nasional Berhad</td>
<td>Malayan Banking Berhad</td>
</tr>
<tr>
<td>Islamic Development Bank</td>
<td>Korea National Oil</td>
<td>Royal Bank of Scotland</td>
</tr>
<tr>
<td>Kreditanstalt für Wiederaufbau (KfW)</td>
<td>The Wharf Holdings</td>
<td>VTB Bank</td>
</tr>
</tbody>
</table>

#### Geographical Distribution of Foreign Entity Issuers (2011)

- Europe: 46%
- Asia: 40%
- Africa: 8%
- United States: 6%
Primary Market

Primary issuance can take the form of a public offering or a private placement. The former is the selling of registered securities to the wider market. Public bond offerings are usually listed on a stock exchange in relatively small denominations, and a prospectus is required to be lodged. A private placement is the selling of unregistered securities directly, where offer is made to not more than 50 investors within a 12 month period. Private bond placements are not listed on a stock exchange, do not have a prospectus, and consequently can cost less than a public offering. The majority of primary issuance is made in the form of private placements.

A liquid swap market is a key ingredient to a well functioning primary debt capital market. While pricing is efficient in the FX and cross currency swap market, the swap markets have a tendency towards asymmetric flows. Foreign bond issuers generally do not have funding needs in SGD and often swap the proceeds into foreign currency, typically US dollars. Looking ahead, MAS will continue deepening the FX swap market in order to further encourage issuance by foreign entities. Concerted efforts will be made to enhance swap market liquidity in the term tenors that will help provide greater certainty in the pricing process for bond issuers.
Secondary Market

Although many SGS Primary Dealers make markets for the larger SGD corporate issues, secondary trading in corporate debt securities remains modest. This is due to the fact that most investors prefer to hold their securities to maturity and manage their duration risk through other hedging instruments such as SGS and interest rate swaps. A number of the more prominent local issuances have been listed in recent years and their prices are available on the Singapore Exchange (SGX).

To foster the growth of an active secondary market, new initiatives are underway to further enhance liquidity in the bond market. For example, a centralised security lending facility could help market makers tap bond lending interest from holders of SGD corporate issuances, strengthening market making capabilities. In addition, the introduction of a SGD corporate bond pricing platform will help provide reliable mark-to-market daily pricing for the industry.
WHY INVEST IN SINGAPORE DOLLAR BONDS?

1. Strong Economic Fundamentals

Singapore enjoys “AAA” sovereign credit ratings, which are underpinned by its stable political environment, strong economic fundamentals and prudent fiscal policy.

Long-term Debt Ratings of the Singapore Government

<table>
<thead>
<tr>
<th>Moody’s</th>
<th>S&amp;P</th>
<th>Fitch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local</td>
<td>Aaa</td>
<td>AAA</td>
</tr>
<tr>
<td>Currency</td>
<td>(stable)</td>
<td>(stable)</td>
</tr>
<tr>
<td>Foreign</td>
<td>Aaa</td>
<td>AAA</td>
</tr>
<tr>
<td>Currency</td>
<td>(stable)</td>
<td>(stable)</td>
</tr>
</tbody>
</table>

The SGD is well-supported with official foreign reserves exceeding SGD300 billion as of 2011. The MAS is committed to ensuring sustained non-inflationary growth through an exchange rate-centered monetary policy, which focuses on the Nominal Effective Exchange Rate.

2. An Asian Asset

Historically, the SGD bond market has tracked the overall Asian bond market, as demonstrated by the remarkable correlation between JPMorgan Emerging Local Markets (ELMI) Asia index and the JPMorgan Emerging Local Markets Singapore sub index. This makes SGD bonds an efficient tool for replicating the Asian bond market.

The MAS manages the SGD against a basket of currencies. As a result, the SGD has tended to be less volatile relative to developed economies and other Asian currencies.

15 Tracks US Dollar total returns for local-currency-denominated money markets instruments in China, Hong Kong, India, Indonesia, Korea, Malaysia, Philippines, Russia, Singapore, Taiwan and Thailand.

16 EUR prices before 1999 were based on implied values. Source: Bloomberg.

SGD performance against other currencies

Developed Economies

- Singapore Dollar
- Japanese Yen
- Euro
- Australian Dollar

Asia

- Singapore Dollar
- New Taiwan Dollar
- Korean Won
- Malaysian Ringgit
**JP Morgan Emerging Local Markets Asia Index vs JP Morgan Emerging Local Markets Singapore sub index**

Volatility of SGD against other currencies

**Developed Economies**
- Singapore Dollar
- Japanese Yen
- Euro
- Australian Dollar

**Asia**
- Singapore Dollar
- New Taiwan Dollar
- Korean Won
- Malaysian Ringgit
3. Open Market

There are no capital and exchange restrictions in Singapore. Global investors are free to buy, sell and hedge SGD and SGD-denominated securities. There are no restrictions on short-selling. Singapore is ranked by the Bank for International Settlement (BIS) as the fourth largest foreign exchange (FX) centre globally and the second largest FX centre in Asia, after Tokyo. According to the BIS Triennial Central Bank Survey in April 2010, average daily FX turnover in Singapore was USD266 billion, while average daily turnover in over-the-counter (OTC) interest rate derivatives was USD78 billion.

4. Depth & Breadth

In January 2005, Singapore became the first Asian nation outside of Japan to be included in the Citigroup World Government Bond Index (WGBI). The SGS is also included in the Barclays Capital Global Aggregate Index, JP Morgan World Government Bond Index, and the HSBC Asian Local Bond Index.

As at December 2011, the Singapore debt market was about SGD357 billion in size, with SGD247 billion of SGD-denominated debt outstanding. This also takes into account SGD138 billion of SGS, and nearly SGD94 billion of SGD corporate debt.

There were over 120 issuers in the domestic corporate bond market, and more than half were domestic entities, including quasi-government agencies, financial institutions, property-related corporations, manufacturers and conglomerates. International issues span a broad credit spectrum – from ‘AAA’ rated debt from supranational agencies to high-yield bonds from corporations and Special Purpose Vehicles (SPVs).
5. Taxation

Capital Gains

There is no capital gains tax in Singapore.

Withholding Tax

Interest income derived from Qualifying Debt Securities (QDS)\(^\text{17}\) for non-residents\(^\text{18}\) is exempted from withholding tax.

Interest Income

Interest income earned on QDS by companies\(^\text{19}\) and bodies of persons\(^\text{20}\) in Singapore is taxed at a concessionary rate of 10%. QDS include SGS, and all debt securities lead-managed by financial institutions awarded the Financial Sector Incentive Scheme - Bond Market (FSI-BM) status\(^\text{21}\).

The QDS Plus (QDS+) allows for income tax exemption on:

i) interest income earned on QDS corporate debt with an original maturity of at least 10 years\(^\text{22}\);

ii) any amount derived from Islamic debt securities\(^\text{23}\); and

iii) interest income derived from qualifying project debt securities (QpDS)\(^\text{24}\).

Trading Income

Income earned by financial institutions in Singapore from trading SGS is taxed at a concessionary rate of 10%. Tax exemption is however granted to SGS Primary Dealers on income earned from trading SGS.

For corporate bonds, income earned by FSI-BM companies from trading QDS/QDS+ is taxed at a concessionary rate of 5%.

### Tax Treatment on Qualifying Debt Securities

<table>
<thead>
<tr>
<th></th>
<th>Residents</th>
<th>Non-Residents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individuals</td>
<td>Exempt from interest income tax</td>
<td>Exempt from withholding tax</td>
</tr>
<tr>
<td>Institutions and corporations</td>
<td>For QDS: Taxed at a concessionary rate of 10%</td>
<td>For QDS: Without permanent establishment: Exempt from interest income tax</td>
</tr>
<tr>
<td></td>
<td>For QDS+: Exempt from interest income tax</td>
<td>For QDS+: Exempt from interest income tax</td>
</tr>
</tbody>
</table>

\(^{17}\) Qualifying Debt Securities (QDS) refers to debt securities which are substantially arranged in Singapore (either lead managed by a Financial Sector Incentive – Bond Market company (FSI-BM); or financial institution in Singapore with Singapore-based staff having a lead and substantial role in origination, structuring and distribution) and include Singapore Government Securities, SGS. Conditions for QDS are set out in the Income Tax Act and Income Tax (Qualifying Debt Securities) Regulations.

\(^{18}\) As provided under S13(1)(a) of the Income Tax Act and Income Tax (Qualifying Debt Securities) Regulations.

\(^{19}\) As provided under S43n of the Income Tax Act.

\(^{20}\) As defined under S2 of the Income Tax Act, “body of persons” means any body politic, corporate or collegiate, any corporation sole and any fraternity, fellowship or society of persons whether corporate or not corporate but does not include a company or a partnership.

\(^{21}\) Provided that the conditions for QDS as set out in the Income Tax Act and Income Tax (Qualifying Debt Securities) Regulations are met.

\(^{22}\) Provided the conditions for QDS as set out in the Income Tax Act are met.

\(^{23}\) Provided the amount payable is not deductible against any income of the issuer that is accruing in or derived from Singapore. Islamic Debt Securities has the same meaning as in Section 43N of the Income Tax Act.

\(^{24}\) Provided the conditions for QpDS as set out in the Income Tax Act and Income Tax (Qualifying Project Debt Securities) Regulations are met.
HOW TO INVEST

In SGS

Primary Market

SGS with maturities of at least one year are issued according to an annual SGS Issuance Calendar. The calendar is published at the end of each year for the following year and contains the issue date, tenor, and whether the auction is a new SGS issue or a reopening of an existing issue. It is available on the SGS webpage (www.sgs.gov.sg).

Tendering Procedure

- All bids must be submitted through an SGS Primary Dealer (see page 17 for list of Primary Dealers).
- Bids are submitted in terms of annual percentage yield and in multiples of SGD1,000 nominal value.
- Retail investors may apply at the ATMs of the three local banks after an auction is announced.

At the cut-off yield, allotment of SGS will be pro-rated depending on the total bids submitted at that yield.

Auction Results

- Both Treasury bills and SGS bonds are auctioned using the uniform price auction format. Successful competitive and non-competitive bids will be allotted at the same uniform yield, which is the highest accepted yield of successful competitive bids submitted at the auction.
- Auction results are published within the same day from the deadline for submission of bids, and specify the amount applied, coupon rate, average yield, price of successful bids, cut-off yield and price, and percentage allotted at the cut-off yield.
- Notices and results of bond auction are also published on the SGS website and in major newspapers.
- The coupon rate for all newly issued SGS bonds is the cut-off (or highest accepted) yield of successful competitive bids submitted at the auction, rounded down to the nearest 1/8%.
Secondary Market

All SGS primary and secondary dealers will quote prices to investors between 0900 and 1630 hours every business day. The SGS E-Trading Platform provides pre- and post-trade information for transactions between Primary Dealers. This is a good source for indicative prices. The standard settlement is T+1, but odd date settlement can be accommodated.

Retail investors, with their SGS holdings custodised with CDP, can trade SGS bonds in the secondary market on the SGX. Liquidity providers, namely BOA, DBS, Deutsche, HSBC, OCBC, Standard Chartered, RBS and UOB, have committed to provide two-way prices for SGS bonds traded on the SGX.

Settlement & Custody

SGS are settled via the MAS Electronic Payment System (MEPS+), which is a Real Time Gross Settlement System (RTGS) for inter-bank payments. Institutional investors or financial institutions without MEPS+ accounts must open a SGS trading account with either a Primary or Secondary Dealer. Investors can also use their Clearstream and Euroclear accounts to custodise their SGS.

Individual investors who purchase SGS issued after 1 July 2009 will have their holdings custodised with the Central Depository (CDP) instead of the SGS agent banks.

In Corporate Bonds

Primary Market

Public offerings – Notices of bond offerings by statutory boards, domestic and foreign issuers are generally made through the newspapers or the issuer’s website. They outline issuance details such as auction dates, size, and type of issue. General public offerings can be accessed through a prospectus database available at the Monetary Authority of Singapore website under the Offers and Prospectuses Electronic Repository and Access (OPERA) tab. Bids are submitted through managing bank(s) and the results, specifying the amount applied for, coupon rate, average yield, and percentage allotted are also publicly announced. Similar to SGS, individual investors can subscribe to retail corporate bonds at the ATMs of the three local banks.

Private Placements – Most SGD corporate bonds are placed privately at the issuer’s or investor’s (reverse enquiry) initiative.

Secondary Market

SGS Primary Dealers generally maintain an inventory of corporate bonds and are prepared to make markets to investors. Selected corporate bonds are also listed and available for retail trading on the SGX.

Settlement and Custody

Non-SGS SGD securities are usually custodised at the CDP of the SGX. All securities are settled on a DvP basis, usually within T+3 days. Investors may also settle via Euroclear or Clearstream, both of which have links to the CDP.
THE ISSUER
WHY ISSUE IN THE SINGAPORE BOND MARKET?

“Singapore has developed an active corporate debt market by encouraging foreign-based firms to issue locally, compensating for the narrow domestic issuer base… A number of factors encourage issuance by offshore companies. Foremost among them is the relative ease by which borrowers can tap the market. Legal and regulatory impediments are virtually nonexistent. Disclosure documents are quite simple and... Issuance is also encouraged by the tax framework.”


1. Investor Base

Singapore possesses one of the highest savings rates in the world, with gross national savings amounting to almost one-half of GDP in 2011.25 This provides a strong base for potential demand in fixed income products. Singapore is also home to a large and diverse investor base with varied investment objectives and time horizons. There are three main groups of fixed income investors in Singapore.

Institutional Investors – Traditionally, these comprise mainly banks and insurance companies. Increasingly, more corporations and government agencies are also investing a portion of their current assets in bonds.

Since 2009, two measures were implemented in relation to SGD debt securities issued by AAA-rated supranationals, sovereigns and sovereign-guaranteed companies (AAA s/s/s). First, such securities are admitted as eligible collateral to access overnight liquidity via the MAS Standing Facility with the same risk treatment as SGS. Second, these securities were accepted as Tier 2 liquid assets, with the same haircut as SGS, under MAS Notice 613 on Minimum Liquid Assets. The list of issuers was subsequently expanded in 2010 to include AAA-rated and zero risk-weighted public sector entities. Admitting these well-rated SGD denominated securities as regulatory liquid assets created a strong demand for these issuers to tap the Singapore market.

Investment Managers – Singapore is a hub for global investment managers who focus their investments in Asian markets. Total assets under management by institutions out of Singapore reached a record SGD1.4 trillion (approximately USD1.1 trillion) at the end of 2010. Of these funds, about 16% were invested in fixed income.

Retail Investors – Over the years, there has been increasing awareness and demand among retail investors for fixed income securities as an asset class. Retail market access to bonds has also been further enhanced in 2009. Individuals are able to subscribe to SGS or corporate bonds via the ATM network in Singapore; and subsequently trade these bonds in the secondary market on the SGX. The strong demand is evident in the oversubscription of several SGD retail corporate bonds issued since 2010 (e.g. Singapore Airlines, CapitaMalls Asia, Fraser & Neave and CapitaMall Trust). Most retail savings are accumulated in the Central Provident Fund (CPF) (the national pension fund), a defined contribution scheme, where members’ savings are kept in individual accounts. These savings can be invested in a host of assets, including SGD corporate bonds26.

25 Source: Output, Saving and Investment at Current Market Prices, Department of Statistics Singapore.
26 Securities must be listed on the Singapore Exchange, be rated at least ‘A2’ by Moody’s, ‘A’ by Standard and Poor’s, or ‘A’ by Fitch, and be issued by corporate in Singapore.
Instruments Included Under the CPF Investment Scheme

- Fixed Deposits
- Singapore Government Bonds/Treasury Bills
- Statutory Board Bonds
- Bonds Guaranteed by the Singapore Government
- Annuities; Endowment Insurance Policies; Investment-Linked Insurance Products
- Unit Trusts
- Exchange Traded Funds
- Fund Management Accounts
- Shares of Companies; Units of Property Funds or Property Trusts
- Corporate Bonds
- Gold
2. International Profile

The SGD bond market is one of the most international bond markets in Asia, with more than a quarter of its private bonds coming from foreign issuers.

There are no capital and exchange restrictions in Singapore. Non-residents are free to issue SGD securities, to buy and sell SGD, and to carry out hedging transactions. To discourage speculation against the SGD, the remaining restrictions are (i) lending to non-resident financial institutions is capped at SGD5 million per institution; and (ii) non-resident financial institutions are required to swap or convert their SGD proceeds into foreign currencies if they choose to repatriate their funds out of Singapore.

Singapore was also named the largest FX centre in Asia ex-Japan and the fourth largest in the world in BIS’ Triennial Central Bank survey in 2010. This serves as an additional attraction for issuers who are able to efficiently convert their funds raised to their preferred funding currencies.

Prospectus requirements for issuing bonds in Singapore have been streamlined. Financial statements to be provided in the prospectus for listed debentures can be prepared in accordance with the Financial Reporting Standards (FRS), International Financial Reporting Standards (IFRS) or the US Generally Accepted Accounting Principles (US GAAP). For other accounting standards, financial statements must be restated in accordance with one of the acceptable standards and accompanied with an auditor’s opinion that no material adjustments are required.
3. Taxation

Singapore has a conducive tax regime for bond investors and intermediaries, which also translates into cost savings for issuers.

For taxation on investors, please refer to page 33.

For intermediaries, the Financial Sector Incentive – Bond Market (FSI-BM) Scheme allows for:

i) debt securities lead managed by FSI-BMs to be considered as Qualifying Debt Securities (QDS);
ii) fees from arranging, underwriting and distributing QDS to be taxed at a concessionary tax rate of 5%; and
iii) income from trading of QDS and QDS+ to be taxed at a concessionary tax rate of 5%.

As of Dec 2011, 28 institutions qualify as FSI-BMs.

To encourage securitisation, the Approved Special Purpose Vehicle (ASpv) scheme allows for:

i) tax exemption on income derived by an ASPV from asset securitisation transactions;
ii) tax exemption on payment by the ASPV on OTC financial derivatives in connection with securitisation transactions, to a non-resident who does not have a permanent establishment in Singapore;
iii) concessions on stamp duties; and
iv) GST recovery.

In addition, to catalyse the growth of the project finance industry, qualifying income derived by investors from qualifying project debt securities are fully exempted from tax.

27 Provided that the conditions for QDS as set out in the Income Tax Act and Income Tax (Qualifying Debt Securities) Regulations 2001 are met.
HOW TO ISSUE

Through Private Placements

- Many primary issuances are made in the form of private placement offers. Financial institutions in Singapore will be able to provide more information on such offers.

Through Public Offers

Prospectus Registration Process

- A prospectus can consist of a base prospectus (valid for 2 years) and a pricing statement. The base prospectus is valid for all offers under the same programme, and subsequent offers require only that a pricing statement be lodged and registered with the MAS.
- A preliminary prospectus may be distributed to institutional and accredited investors only, to determine the appropriate number and price of the securities to be offered, even before registration of the prospectus itself.
- Upon lodgment of the prospectus, the issuer can conduct roadshow presentations to institutional and accredited investors, as well as commence book-building exercises.
- After lodgment, the prospectus is put up for public viewing and comment on the MAS website, Offers and Prospectuses Electronic Repository and Access (OPERA) portal.
- A regulatory review is conducted by the MAS.
- The MAS will register the prospectus within 7-21 days (previously 14-21 days), unless the period is extended (maximum: 28 days) or the issuer requests a later registration date.
- The issuer can launch the public offer and distribute the registered prospectus after registration.

Listing Requirements

- A listing application, comprising the final form of the prospectus, offering memorandum or introductory document prepared in compliance with Rules 312 to 313 and supporting documents set out in Rule 314, is to be submitted to the Listings Function of the SGX.
- Upon satisfaction of the listing requirements set out in the application, the SGX will issue an eligibility-to-list letter for listing (with or without conditions).²⁸
- The issuer will lodge the prospectus, offering memorandum or introductory document with the MAS and other relevant authorities (if applicable), and submits a copy to the SGX. Should the prospectus, offering memorandum or introductory document be materially different from that on which the eligibility-to-list letter was issued, the issuer must submit a written confirmation to the SGX to this effect.
- The SGX will inform the issuer of any further information that is required to be disclosed prior to commencement of trading. The issuer may include this information in its prospectus, offering memorandum or introductory document, or to make pre-quotation disclosure through an announcement to the SGX. Pre-quotation disclosure must be made not later than the market day before commencement of trading.
- The issuer’s debt security will be listed and quoted on the SGX after the conditions expressed in the eligibility-to-list letter are satisfied.

²⁸ More information on listing requirements can be obtained from the Singapore Exchange, SGX-ST Listing Manual, at www.sgx.com

Timeline

<table>
<thead>
<tr>
<th>DAYS</th>
<th>Lodgment</th>
<th>Registration</th>
<th>Extension by MAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Exemptions from Prospectus Requirements

- Offers that are made to institutional or accredited investors and are not accompanied by public advertisements.
- Private placement offers made to not more than 50 persons are also exempt from prospectus requirements within any period of 12 months.
- An entity whose shares are already listed on the SGX may use an Offer Information Statement (OIS), instead of a prospectus, when issuing new types of securities such as bonds. An OIS has fewer disclosure requirements.
- Institutions offering continuously-issued structured notes do not need to lodge and register a pricing statement with MAS; the base prospectus and a transaction note, setting out the offer details prior to the purchase or subscription and a confirmation receipt thereafter, to the investors at the time of offer are sufficient.
## Debt Market

<table>
<thead>
<tr>
<th></th>
<th>MAS Bills</th>
<th>Treasury Bills</th>
<th>SGS Bonds</th>
<th>Corporate Bonds</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Issuer</strong></td>
<td>MAS</td>
<td>MAS on behalf of the Singapore Government</td>
<td></td>
<td>Corporations; Financial Institutions, Statutory Boards, and Supranationals</td>
</tr>
<tr>
<td><strong>Tenor</strong></td>
<td>Up to 3M</td>
<td>Up to 1Y</td>
<td>2Y, 5Y, 10Y, 15Y, 20Y, and 30Y</td>
<td>1-40Y</td>
</tr>
<tr>
<td><strong>Interest Rate</strong></td>
<td>Discount</td>
<td>Discount</td>
<td>Fixed Coupon</td>
<td>Fixed or Floating rate</td>
</tr>
<tr>
<td><strong>Coupon Payments</strong></td>
<td>N/A</td>
<td>N/A</td>
<td>Semi-annual</td>
<td>Annual, Semi-annual</td>
</tr>
<tr>
<td><strong>Minimum Denomination</strong></td>
<td>SGD1,000</td>
<td>SGD1,000</td>
<td>SGD1,000</td>
<td>SGD1,000- SGD250,000</td>
</tr>
<tr>
<td><strong>Option Availability</strong></td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>Some issues may be callable or convertible to equity</td>
</tr>
<tr>
<td><strong>Trading</strong></td>
<td>OTC</td>
<td>OTC</td>
<td>OTC, SGX</td>
<td>OTC, SGX</td>
</tr>
<tr>
<td><strong>Settlement (via)</strong></td>
<td>MEPS+ on DvP basis</td>
<td>MEPS+ on DvP basis</td>
<td>MEPS+ on DvP basis</td>
<td>Central Depository Pte Ltd</td>
</tr>
<tr>
<td><strong>Business Hours</strong></td>
<td>0900-1630</td>
<td>0900-1630</td>
<td>0900-1630</td>
<td>Not Fixed</td>
</tr>
<tr>
<td><strong>Settlement Period</strong></td>
<td>T+1</td>
<td>T+1</td>
<td>T+1</td>
<td>T+3</td>
</tr>
</tbody>
</table>
### Regulatory and Tax Information

<table>
<thead>
<tr>
<th></th>
<th>MAS Bills</th>
<th>Treasury Bills</th>
<th>SGS Bonds</th>
<th>Corporate Bonds</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Restrictions on</strong></td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td><strong>Foreign Investment</strong></td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td><strong>Capital Gains Tax</strong></td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td><strong>Custodian</strong></td>
<td>MEPS+ Participating Banks, Central Depository Pte Ltd</td>
<td>MEPS+ Participating Banks, Central Depository Pte Ltd</td>
<td>Central Depository Pte Ltd</td>
<td></td>
</tr>
<tr>
<td><strong>Local Investors</strong></td>
<td>MEPS+ Participating Banks</td>
<td>MEPS+ Participating Banks, Central Depository Pte Ltd</td>
<td>Depository Agent</td>
<td></td>
</tr>
<tr>
<td><strong>Foreign Investors</strong></td>
<td>MEPS+ Participating Banks</td>
<td>MEPS+ Participating Banks, Central Depository Pte Ltd</td>
<td>Depository Agent</td>
<td></td>
</tr>
<tr>
<td><strong>Interest Income and Withholding Tax</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>All Retail Investors</strong></td>
<td>N/A</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td><strong>Resident Institutional Investors</strong></td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
<td>10% (for QDS)</td>
</tr>
<tr>
<td><strong>Non-Resident Institutional Investors</strong></td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td><strong>Trading Income Tax</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Financial Institutions</strong></td>
<td>10%; Primary Dealers are exempted</td>
<td>10%; Primary Dealers are exempted</td>
<td>5% (for FSI-BM Companies)</td>
<td></td>
</tr>
<tr>
<td><strong>Interest Rate Swap (IRS)</strong></td>
<td>6M SOR</td>
<td>6M SOR (SGD) vs 6M USD LIBOR</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td><strong>Cross Currency Basis Swap (CCS)</strong></td>
<td>T+2 or T+3 (after 1130)</td>
<td>T+2 or T+3 (after 1130)</td>
<td>T+2</td>
<td></td>
</tr>
<tr>
<td><strong>FX Forwards</strong></td>
<td>Around SGD500 million</td>
<td>Around SGD50 million</td>
<td>Between SGD1 to 1.5 billion</td>
<td></td>
</tr>
<tr>
<td><strong>Average Bid-Off er Spreads</strong></td>
<td>2-3 bps</td>
<td>Around 5 bps</td>
<td>Between 2-15 pips (longer tenors)</td>
<td></td>
</tr>
<tr>
<td><strong>Business Hours</strong></td>
<td>0830-1700</td>
<td>0830-1700</td>
<td>0900-1600</td>
<td></td>
</tr>
</tbody>
</table>