

FIXED-INCOME MARKETS: ISSUANCE, TRADING, AND FUNDING

SOLUTIONS

1. C is correct. In most countries, the largest issuers of bonds are the national and local governments as well as financial institutions. Thus, the bond market sector with the smallest amount of bonds outstanding is the non-financial corporate sector.
2. B is correct. The distinction between investment grade and non-investment grade debt relates to differences in credit quality, not tax status or maturity dates. Debt markets are classified based on the issuer's creditworthiness as judged by the credit rating agencies. Ratings of Baa3 or above by Moody's Investors Service or BBB- or above by Standard & Poor's and Fitch Ratings are considered investment grade, whereas ratings below these levels are referred to as non-investment grade (also called high yield, speculative, or junk).
3. A is correct. Eurobonds are issued internationally, outside the jurisdiction of any single country. B is incorrect because foreign bonds are considered international bonds, but they are issued in a specific country, in the currency of that country, by an issuer domiciled in another country. C is incorrect because municipal bonds are US domestic bonds issued by a state or local government.
4. B is correct. Asset-backed securities (ABS) are securitized debt instruments created by securitization, a process that involves transferring ownership of assets from the original owners to a special legal entity. The special legal entity then issues securities backed by the transferred assets. The assets' cash flows are used to pay interest and repay the principal owed to the holders of the securities. Assets that are typically used to create securitized debt instruments include loans (such as mortgage loans) and receivables (such as credit card receivables). The structured finance sector includes such securitized debt instruments (also called asset-backed securities).

5. B is correct. Many emerging countries lag developed countries in the areas of political stability, property rights, and contract enforcement. Consequently, emerging market bonds usually exhibit higher risk than developed markets bonds. A is incorrect because emerging markets bonds typically offer higher (not lower) yields than developed markets bonds to compensate investors for the higher risk. C is incorrect because emerging markets bonds usually benefit from higher (not lower) growth prospects than developed markets bonds.
6. B is correct. The coupon rate of a floating-rate bond is expressed as a reference rate plus a spread. Different reference rates are used depending on where the bond is issued and its currency denomination, but one of the most widely used set of reference rates is Libor. A and C are incorrect because a bond's spread and frequency of coupon payments are typically set when the bond is issued and do not change during the bond's life.
7. A is correct. Changes in the coupon rate of interest on a floating-rate bond that uses a Libor reference rate are due to changes in the reference rate (for example, 90-day Libor), which resets periodically. "Therefore, the coupon rate adjusts to the level of market interest rates (plus the spread) each time the reference rate is reset."
8. C is correct. Interbank offered rates are used as reference rates not only for floating-rate bonds, but also for other debt instruments including mortgages, derivatives such as interest rate and currency swaps, and many other financial contracts and products. A and B are incorrect because an interbank offered rate such as Libor or Euribor is a set of reference rates (not a single reference rate) for different borrowing periods of up to one year (not 10 years).
9. A is correct. In an underwritten offering (also called firm commitment offering), the investment bank (called the underwriter) guarantees the sale of the bond issue at an offering price that is negotiated with the issuer. Thus, the underwriter takes the risk of buying the newly issued bonds from the issuer, and then reselling them to investors or to dealers who then sell them to investors. B and C are incorrect because the bond issuing mechanism where an investment bank acts as a broker and receives a commission for selling the bonds to investors, and incurs less risk associated with selling the bonds, is a best effort offering (not an underwritten offering).
10. A is correct. In major developed bond markets, newly issued sovereign bonds are sold to the public via an auction. B and C are incorrect because sovereign bonds are rarely issued via private placements or best effort offerings.
11. A is correct. Private placements are typically non-underwritten, unregistered bond offerings that are sold only to a single investor or a small group of investors.
12. B is correct. A shelf registration allows certain authorized issuers to offer additional bonds to the general public without having to prepare a new and separate offering circular. The issuer can offer multiple bond issuances under the same master prospectus, and only has to prepare a short document when additional bonds are issued. A is incorrect because the grey market is a forward market for bonds about to be issued. C is incorrect because a private placement is a non-underwritten, unregistered offering of bonds that are not sold to the general public but directly to an investor or a small group of investors.
13. B is correct. Secondary bond markets are where bonds are traded between investors. A is incorrect because newly issued bonds (whether from corporate issuers or other types of issuers) are issued in primary (not secondary) bond markets. C is incorrect because the major participants in secondary bond markets globally are large institutional investors and central banks (not retail investors).
14. C is correct. In over-the-counter (OTC) markets, buy and sell orders are initiated from various locations and then matched through a communications network. Most bonds

- are traded in OTC markets. A is incorrect because on organized exchanges, buy and sell orders may come from anywhere, but the transactions must take place at the exchange according to the rules imposed by the exchange. B is incorrect because open market operations refer to central bank activities in secondary bond markets. Central banks buy and sell bonds, usually sovereign bonds issued by the national government, as a means to implement monetary policy.
15. C is correct. Liquidity in secondary bond markets refers to the ability to buy or sell bonds quickly at prices close to their fair market value. A and B are incorrect because a liquid secondary bond market does not guarantee that a bond will sell at the price sought by the investor, or that the investor will not face a loss on his or her investment.
 16. A is correct. The vast majority of corporate bonds are traded in over-the-counter (OTC) markets that use electronic trading platforms through which users submit buy and sell orders. Settlement of trades in the OTC markets occurs by means of a simultaneous exchange of bonds for cash on the books of the clearing system “on a paperless, computerized book-entry basis.”
 17. C is correct. Sovereign bonds are usually unsecured obligations of the national government issuing the bonds; they are not backed by collateral, but by the taxing authority of the national government. A is incorrect because bonds issued by local governments are non-sovereign (not sovereign) bonds. B is incorrect because sovereign bonds are typically unsecured (not secured) obligations of a national government.
 18. C is correct. Bonds issued in the sovereign’s currency and a strong domestic savings base are both favorable sovereign rating factors. It is common to observe a higher credit rating for sovereign bonds issued in local currency because of the sovereign’s ability to tax its citizens and print its own currency. Although there are practical limits to the sovereign’s taxing and currency-printing capacities, each tends to support a sovereign’s ability to repay debt. A strong domestic savings base is advantageous because it supports the sovereign’s ability to issue debt in local currency to domestic investors.
 19. A is correct. Floaters are bonds with a floating rate of interest that resets periodically based on changes in the level of a reference rate, such as Libor. Because changes in the reference rate reflect changes in market interest rates, price changes of floaters are far less pronounced than those of fixed-rate bonds, such as coupon bonds and discount bonds. Thus, investors holding floaters are less exposed to interest rate risk than investors holding fixed-rate discount or coupon bonds.
 20. C is correct. Agency bonds are issued by quasi-government entities. These entities are agencies and organizations usually established by national governments to perform various functions for them. A and B are incorrect because local and national governments issue non-sovereign and sovereign bonds, respectively.
 21. B is correct. The IMF is a multilateral agency that issues supranational bonds. A and C are incorrect because sovereign bonds and quasi-government bonds are issued by national governments and by entities that perform various functions for national governments, respectively.
 22. C is correct. Bonds issued by levels of government below the national level—such as provinces, regions, states, cities, and local government authorities—are classified as non-sovereign government bonds. These bonds are typically not guaranteed by the national government.
 23. C is correct. Companies use commercial paper not only as a source of funding working capital and seasonal demand for cash, but also as a source of interim financing for long-term projects until permanent financing can be arranged. A is incorrect because there is a

secondary market for trading commercial paper, although trading is limited except for the largest issues. B is incorrect because commercial paper is issued by companies across the risk spectrum, although only the strongest, highly rated companies issue *low-cost* commercial paper.

24. A is correct. Commercial paper, whether US commercial paper or Eurocommercial paper, is negotiable—that is, investors can buy and sell commercial paper on secondary markets. B is incorrect because Eurocommercial paper can be denominated in any currency. C is incorrect because Eurocommercial paper may be issued on an interest-bearing (or yield) basis or a discount basis.
25. B is correct. With a serial maturity structure, a stated number of bonds mature and are paid off on a predetermined schedule before final maturity. With a sinking fund arrangement, the issuer is required to set aside funds over time to retire the bond issue. Both result in a predetermined portion of the issue being paid off according to a predetermined schedule.
26. A is correct. A sinking fund arrangement is a way to reduce credit risk by making the issuer set aside funds over time to retire the bond issue. B and C are incorrect because a sinking fund arrangement has no effect on inflation risk or interest rate risk.
27. C is correct. Wholesale funds available for banks include central bank funds, interbank funds, and negotiable certificates of deposit. A and B are incorrect because demand deposits (also known as checking accounts) and money market accounts are retail deposits (not wholesale funds).
28. B is correct. A negotiable certificate of deposit (CD) allows any depositor (initial or subsequent) to sell the CD in the open market prior to maturity. A is incorrect because negotiable CDs are mostly available in large (not small) denominations. Large-denomination negotiable CDs are an important source of wholesale funds for banks, whereas small-denomination CDs are not. C is incorrect because a penalty is imposed if the depositor withdraws funds prior to maturity for non-negotiable (instead of negotiable) CDs.
29. B is correct. A repurchase agreement (repo) can be viewed as a collateralized loan where the security sold and subsequently repurchased represents the collateral posted. A and C are incorrect because interbank deposits and negotiable certificates of deposit are unsecured deposits—that is, there is no collateral backing the deposit.
30. A is correct. Repo margins vary by transaction and are negotiated bilaterally between the counterparties.
31. A is correct. The repo margin (the difference between the market value of the underlying collateral and the value of the loan) is a function of the supply and demand conditions of the collateral. The repo margin is typically lower if the underlying collateral is in short supply or if there is a high demand for it. B and C are incorrect because the repo margin is usually higher (not lower) when the maturity of the repurchase agreement is long and when the credit risk associated with the underlying collateral is high.